ILLINOIS STATE MUSEUM | Research eSeries, No. 1, Part 1

A Study of the Birds of Sangamon County, Illinois 1970–2010

H. David Bohlen



ILLINOIS STATE MUSEUM SPRINGFIELD, ILLINOIS 2013

On the cover:

Hooded Warbler April 27, 2008 Adams Wildlife Sanctuary Springfield, Illinois A Study of the Birds of Sangamon County, Illinois 1970–2010

> H. David Bohlen Illinois State Museum

ILLINOIS STATE MUSEUM Research eSeries, No. 1, Part 1 2013

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FOREWORD

The Illinois State Museum is pleased to launch it's new *Research eSeries* with this two part compendium on the birds of Sangamon County, Illinois. Based on an unprecedented 40 years of personal observations of birds in the county, Assistant Curator of Zoology H. David Bohlen has documented dramatic changes in the presence and populations sizes of bird species related to climate and environmental change and habitat destruction and degradation by humans. In Part 1, he presents his methods, conclusions, and recommendations for conservation of birds, as well as species accounts. The species accounts present David's observations and thoughts as recorded in his extensive field notes. Part 2 presents images of many of the species referenced in the study. David's passionate concern for birds and preservation of biodiversity underlie his presentation and will hopefully inspire others to become advocates and stewards of birds and the habitats they need to survive.

The new *Research eSeries* will allow us to share our research in a timely and cost effective manner. This format will allow us to easily update findings and present new versions as new discoveries are made.

Bonnie Styles Museum Director Illinois State Museum November 2013

ABSTRACT

In a 40 year study of the birds of Sangamon County, Illinois from 1970 to 2010, there were 355 species recorded. These species included 95% migrants and only 5% permanent residents. Breeding species and wintering species were each 38% of the total species. Of the regularly occurring species, 75 increased, 111 decreased, and 64 had populations that remained stable. The decreasing species included 15 that were extirpated, or nearly so, as breeding species. Another 15 species could be considered invaders during the study, of which 13 were not previously recorded, although 12 are still occasional or rare. The study also shows that the phenology of many species is changing presumably due to rapid climate change. Survival in the near future of bird species is contingent on adapting to humans and the changing climate, and more losses can be expected in marsh, grassland, and forest bird species. The County needs to consider biodiversity a priority and especially for the Carpenter Park Nature Preserve (and area). Most of the vagrant species observed in the study came from western North America.

This study is dedicated to the native species of birds that have survived in Sangamon County, in spite of the overwhelming human population, which aggressively or unwittingly continues to destroy them.

ACKNOWLEDGMENTS

I suppose that many people might think that keeping track of all the species of birds in a given area is an easy matter. In fact, it is impossible. Birds are everywhere, and they migrate every month of the year. The numbers of species of native birds are most concentrated in the remaining natural habitats. It took much time and effort to determine the status of birds in Sangamon County, which meant I had to spend a lot of my time in the field alone. However, three people come immediately to mind who greatly assisted with this project: Beckie Dyer for field observation, keeping notes, and many other office related issues; my brother Ken Bohlen for field work especially at Carpenter Park; and Dennis Oehmke for field work and his excellent photography, which helped document many species. Other individuals supported this project, especially colleagues at the Illinois State Museum: Dr. Everett 'Tim' Cashatt for encouragement, computer help, and identifications of gizzard contents of birds (which can be very difficult when they are ground up!); Dr. Meredith Mahoney especially for her computer skills and the production of the graphs; Dr. Erich Schroeder for production of the maps; Beckie Dyer for manuscript preparation; both Museum Directors Dr. Bonnie Styles and Dr. Bruce McMillan for encouraging my study; and many other members of the staff, especially the librarians Orvetta Robinson, Ron Sauberli, and Pat Burg. Also, helpful editing and suggestions were provided by Dr. George Godfrey and Dr. Bonnie Styles. Special thanks are given to Andy Hanson for technical editing and laying out the final publication.

Several private landowners allowed me to count birds on their property, and this was much appreciated because most public places were often crowded, and the birds were chased away. These people, and I am sure there are other landowners, have helped maintain bird populations in this county. These landowners include Albert and Dale Jefferies of Cantrall (Jefferies Orchard); Rick Alexander of Rochester; Truman Flatt and son of Buckhart Sand & Gravel; James Harp of Berry; Richard & Ann Ramsey of Rochester; George Smith of New City; David Hendrickson of Rochester; Dr. Joseph Bohlen of Pleasant Plains; John Scully near Dawson; and William Tucker northwest of Springfield.

I checked most of the sewer ponds in the county since they had limited access, and birds tended to stay in these areas when chased out of others. I wish to thank the Springfield Sanitary District, and the Buffalo, Rochester, Berlin, Pawnee, and Auburn districts for permission to observe birds in those areas.

The public utility of City, Water, Light, and Power (CWLP) was extremely helpful about letting me check areas that were off limits, such as the Cinder Flats and the Sediment Retention Facility (both of which produced many of the most interesting birds of the study!). Workers at the Cinder Flats Facility for several years have let the Bank Swallow colony thrive, which kept the numbers higher for that species. I want to especially thank Tom Skelly for his advice and support. The Lake Security went out of their way to assist me on several occasions, and I appreciated that very much. Lake Springfield is notoriously difficult to view because of all the private holdings, and I am grateful for being allowed to observe the lake at the Disabled American Veterans area, the Island Bay Yacht Club, and Lincoln Greens Golf Course. I was disturbed by noise nearly every time I tried to use Springfield parks, but alternatives were the "weed patch" on the golf course of the Illini Club and Pasfield Golf Course, which attracted many birds that had been chased out of Washington Park.

Other individuals who participated in the field and/or brought in specimens to the Illinois State Museum were: Kay and John Watt, Mark Harris, Tedd Teeter, Vernon Kleen, Clark Olson,

Patrick Ward, Tony Ward, Robert Randall, Chris Young, William O'Brien, Dr. Richard Allyn, Myrna Deaton, Richard Palmer, Bill & Edith Sausaman, Ralph Mudd, Mike Bauer, Brent Bohlen, Rhetta Jack, Ron Goetz, Mary Yutema, Edward Jordan, William Hammel, Dr. Al Koelling (also for identifying plants), Dr. Eric Grimm, Betty Norton, Bob Larson, Molly Becker, Betsy Neuman, Dr. Richard Leary, Kevin Veara, Ken Lockart, George Rose, John and Barbara Hays, Dr. Sally Robinson, Tracy Evans, Sue Dees, Dave Hood, Nick Klobuchar, Judy McDaniel, Chris McDonald, William Furry, Steve Boll and Mrs. Stuart Anderson.

I would especially like to thank Phyllis Brissenden for her observations and a donation that paid for a digital camera, so that I could better document some of the sightings.

I also need to thank people with bird feeders who allowed me to observe the birds at their feeders, and the residents near Marine Point for their interest in the birds.

Several study skins of Sangamon County birds were prepared by Bill Webb, Dennis Oehmke, Jim McGregor, Joe Brackhan, Mike Mason, Ashir Wahab, and Mark Sloan. A special thanks to Chris Musser for the bird skins and mounts she prepared for the Illinois State Museum.

Also, I wish to commend the Conservation Police Officers of the Illinois Department of Natural Resources and the agents of the US Fish and Wildlife Service for helping to maintain a balance between the public and the natural populations of plants and animals. They are the thin green line that protects biodiversity.

Shannon Hawthorne and Nicole Roscetti, my two daughters, and their husbands Gary Hawthorne and Garry Roscetti were always inquisitive and enthusiastic about birds and nature. Hopefully, my two grandchildren Claire and Trey Roscetti will inherit a diverse environment with all the species intact, so that they, all the other children, and all the citizens of Sangamon County will have richer lives.

H. David Bohlen Illinois State Museum

"Erected in honor of the pioneers who cleared away the forests and destroyed the abiding places of the wild beasts so that civilization might occupy the ground"

—from a headstone in Central Illinois

INTRODUCTION AND HISTORY

Before Europeans arrived in Illinois in the late 1600s, the area that was to become Sangamon County was a mosaic of woodland and prairie bisected by the Sangamon River and its tributaries and sloughs. All the land and water was habitat for birds and other wildlife. Even the Native Americans who had been present in Illinois for 10,000–12,000 years did not live in the county to any extent, mostly using the area as a hunting ground. There is no record of French settlement in the county, and the first European settlers arrived in Sangamon County in 1816.

Sangamon County is located approximately in the center of the state of Illinois along the Sangamon River. The word Sangamon comes from Sain-guee-mon of the Pottawatomie language meaning "land where there is plenty to eat." The county now consists of 877 square miles (561,431 acres), nine of which are water. It extends 41 miles east-west and 31 miles north-south. The county is essentially flat, with the highest point being 720 feet above sea level in the southwest corner and the lowest point being 490 feet where the Sangamon River leaves the county in the northwest corner. Sandstone, shale and limestone are the only rocks that outcrop in the county.

The Illinois glaciation (ended 130,000 ybp) was the last to cover Sangamon County, and it flattened the topography. While the ice sheet from the Wisconsin glaciation (71,000–11,700 ybp) did not reach Sangamon County, its melt waters brought sands and gravel to the Sangamon River areas, and winds deposited silt (loess) and sand in the upland areas of the county. The river system after it was created by the draining of Lake Williams during the late Illinois Episode, has remained little changed in the last 17,000 years (Miller, 1973).

Originally the county was 70 percent tallgrass prairie and 30 percent oak-hickory forest (King & Johnson, 1977). Since the European settlement of the county (1819) habitats have changed drastically. The prairie was virtually destroyed, and agriculture now occupies 83 percent of the land. Forest is now only 4.6 percent, while urban built up areas are 8 percent of the county.

The climate in the county is continental with hot summers (average 86.5° F in July) and cold winters (average 33.1° F in January). During the study, the highest temperature was 102° F in 1995, and the lowest was a minus 20° F in 1977, 1985, and 1989. This provides a temperature range of 122° F. Dry continental air extends from the western plains into Sangamon County, and in summer this air mass is pushed west by Gulf air moving north, which produces summer precipitation. If the Gulf air fails to come north, then the dry western air remains causing drought and higher temperatures (King & Johnson, 1977). The yearly average rainfall is 35.56 inches, with the most in May (4.06 inches) and the least in January (1.62 inches). The years during the study with the most precipitation were 1973 and 1995, and the driest year was 1971. The annual prevailing winds are southerly at 12 mph. See also temperature (Fig. 1) and precipitation (Fig. 2) graphs for the study period (figures from Weather Underground).

Soon after European settlement, nearly all of the natural habitats in Sangamon County were modified or destroyed over a relatively short time. The prairie was ploughed; the sloughs, marshes and ponds were drained; and the woodland was cut down. The only birds present now (or those that were introduced, reintroduced or recently invaded) were those that survived that first onslaught by European and other peoples. Unfortunately, this process continues to accelerate today. It is essentially a simplification process of making habitat for humans and eliminating wildlife (including birds). The first bird species to be lost in the county were the Carolina Parakeet and Passenger Pigeon. The only mention of the Carolina Parakeet in the county was from Shirreff (1835) who visited Springfield in 1833 and while along the Sangamon River, saw "The forests abounded with green coloured paroquets, which fluttered about with disagreeable noise, in flocks of six or seven." There is a specimen of an immature Passenger Pigeon from near Buffalo Hart (northeast Sangamon County) from about 1867 (in the possession of J. Leka) that I viewed. Another common bird that disappeared from the county was the Greater Prairie-Chicken, and there is a specimen from Springfield that is dated January 3, 1889 in the Southern Illinois University ornithology collection. Other birds that were extirpated early on include Ruffed Grouse (extirpated about 1899?-many references to "grouse" could not be qualified to species) and Wild Turkey. The only evidence of their occurrence in Sangamon County comes from historic writings. Birds that would have been expected in the county, but lack any solid documentation, were Eskimo Curlew, Long-billed Curlew, Whooping Crane, Trumpeter Swan, Swallow-tailed Kite, and Common Raven. A few of these birds could still occur in modern times as extremely rare migrants such as Whooping Crane, Swallow-tailed Kite, and Long-billed Curlew. Others such as Wild Turkey and Trumpeter Swan were reintroduced, but I wonder if they are genetically the "same birds" as the originals. Many others were eliminated as breeders even though they persisted as migrants. In addition to habitat destruction, was the introduction of non-indigenous species including a multitude of plants and animals such as dogs, cats, House Sparrows, European Starlings, Ring-necked Pheasants, and many others. These introductions occurred early after the arrival of Europeans and unfortunately continue today. These introductions had an untold negative effect on the native species and changed their composition and distribution in Illinois and Sangamon County. For example note this paragraph by Westemeier and Edwards (1987) concerning the demise of the Greater Prairie-Chicken, "prairie-chickens persisted in 92 of Illinois' 102 counties as late as 1912, well after most of the native grasslands had been destroyed. [Greater Prairie] Chicken populations, however, rapidly declined shortly thereafter in Illinois and much of the Midwest coincident with large-scale releases and establishment of ring-necked pheasants." For more information on habitat change in Illinois as a whole consult Graber & Graber, 1963 and Musselman, 1921.

The destruction of the natural environment in Sangamon County continues. and consequently there are very few wild places remaining, and some species have dropped out. Fortunately, individual property owners, the city of Springfield through the park system, cemeteries such as Oak Ridge and others, and park areas around and including Lake Springfield, especially Lincoln Memorial Gardens provide habitat where some natural bird populations can survive. Areas also still exist along the Sangamon River since they periodically flood, and some landowners have recently let these areas revert to woodland. The Conservation Reserve Program (under the US Department of Agriculture) has helped many grassland species persist. New habitats have been created such as Nipper Prairie, Centennial Park, and Adams Wildlife Sanctuary. Everything continues to change, with a constant flux and resettlement in the bird populations with each new gadget or machine, road, or way of doing things, and with the increasing human population, it is now an adjustment for the birds to live with humans, because the birds can no longer get away from 222 humans per square mile in the county (see Table 1). The human population in the county increased dramatically from 15 people per square mile in 1830 to 222 in 2008. However, because 83 percent of the land in 2008 was in agriculture (essentially non-habitat for birds as well as humans) only 149 square miles (instead of 877 square miles) were available with the adjusted human population being 1308 humans per square mile. This high population of humans and the naturally occurring species plus domestic animals and pets would then be relegated to compete for available space. Most bird species, but apparently not all, can adapt to humans, but they must be given time to do so.

Very little had been written about birds in the county, but from old catalogues, names such as P. Springer (1863), A.C. Herre (1884–1891), A.R. Booth (1894), and A.D. DuBois (1893–1923) are listed as donors of bird eggs from Sangamon County to the Illinois State Museum (ISM) collection and other institutions. In 1932, an organization called the Springfield Nature League was formed, and it lasted until about 1960 when it became the Springfield Audubon Society. The members of the Springfield Nature League provided a working list of birds (mostly compiled by Virginia Eifert and Bill Robertson) to which I added known records of extinct or rare birds until and including 1969. Most of the rare or unusual birds were not documented in those times, but there were a few brief descriptions for example of Black-legged Kittiwake and Kirtland's Warbler (by Richard Allyn and Bill O'Brien). This earlier list (Sangamon County List before 1970) included a total of 272 species, plus six that had no details and are hypothetical (see Appendix B).

My study (1970–2010) added another 88 species to the Sangamon County List, some of which were splits such as Alder Flycatcher and Spotted Towhee. *A Study of the Birds of Sangamon County Illinois 1970–2010* includes a total of 355 species plus four hypotheticals (see species accounts for subspecies). The old and new Sangamon County lists combined now includes a total of 361 species (see A Complete List of the Birds of Sangamon County, Appendix A).



Figure 1. Temperatures (F) During Study (data from Weather Underground)

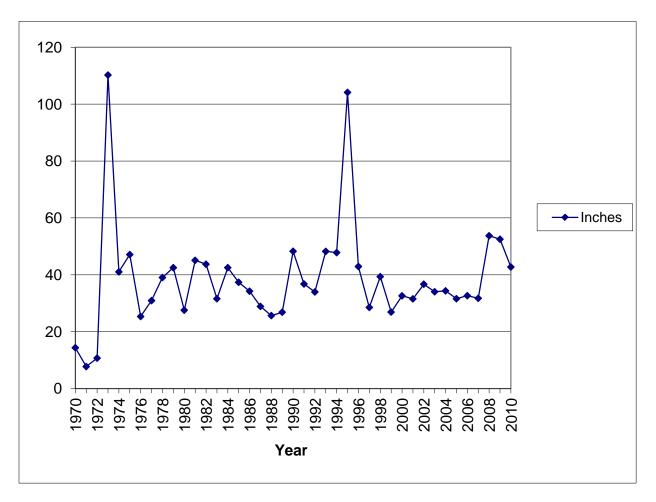


Figure 2. Precipitation per Year During Study (data from Weather Underground)

YEAR	POPULATION	PER SQUARE MILE (877 square miles)
1830	12,960	15
1840	14,716	17
1850	19,228	22
1860	32,274	37
1870	46,352	53
1880	52,802	60
1890	61,195	70
1900	71,593	82
1910	91,024	104
1920	100,262	114
1930	111,733	127
1940	117,912	134
1950	131,484	150
1960	146,539	167
1970	161,335	184
1980	176,089	201
1990	178,386	203
2000	188,951	215
2008	194,925	222

Table 1.	Sangamon County Human Population Figures (data from Wallace, 1904
	and Wikipedia)

Col. Kurtz: "Are my methods unsound?" Capt. Willard: "I don't see any method at all sir." *Apocalypse Now*

METHODS

I initiated this study in 1970 when I joined the staff of the Zoology Department at the Illinois State Museum. It grew out of my fieldwork to define the parameters of bird migrants in Sangamon County and therefore, it was an individual effort. Occasionally, I had other observers with me, but we observed as one party and all the bird species and their numbers were either seen (including dead specimens) or heard by me. That means, I am ultimately responsible for all identifications and counting of numbers in this study. The study was confined to Sangamon County, Illinois and counting of birds started on March 25, 1970 and ended on February 28, 2007. Plus, there was an addendum from March 1, 2007 to February 20, 2010 from which I cited some records, but the numbers were not used in the totals. Most of the addendum records are still on daily lists only because I have not had the time to write all of them into seasonal summaries.

Although this study is not repeatable because I did not cover the habitats in a systematic fashion or timetable, I did make a constant effort to try to check all habitats every day I was in the field. I used the blanket coverage method, and was in the field at every opportunity possible (see number of days, Table 2 and Fig. 3 and number of hours Table 3). Also, some of the places where I made observations do not exist now, or were altered drastically, such as the Sediment Retention Facility, Center Park and the Rail Golf Course.

Each day of the study, counting the species and numbers started anew; this practice caused some problems with rare birds (Mottled Duck) or birds that stayed in noticeable areas (Ring-billed Gulls at Lake Springfield) and may have inflated those numbers or distorted the status. I covered some areas of the county much more than others, such as Lake Springfield, where birds changed constantly as opposed to flat places with row crops with few birds. It should be obvious that thousands (maybe millions) of birds were in the county at any given time, and one observer could cover only a very small percentage of 877 square miles in a day. So I was getting only a cross section of the birds potentially present each day. Besides observing, I banded birds from 1971–1993 (Banding Effort, Appendix L), picked up television tower kills (TV Tower Kill Data, Appendix M) and road kills, ran the Breeding Bird Survey 1972–2003 (Appendix I), did a Sangamon River Summer Survey in 1976 and 1991 (Appendix H), and photographed birds in the latter part of the study.

Early in the study, I collected a few birds to confirm them for the county (in some cases for the state). Today, I probably would not do any active collecting, but much has changed since I began. The internet (where a multitude of images of any species is available) and easy-to-use digital cameras did not exist. Still, specimens are the most accurate and most useful resource to ornithologists. I learned that I could obtain most specimens by means other than active collecting, such as salvaging dead birds from road kills, window kills, television tower kills, wire kills, and net kills (from two banders). Of the 3,212 specimens used in this study, only 46 were actively collected, which is 1.4 percent. This percentage is no more than the bird mortality that occurs in normal bird-banding operations. Also, preparing specimens is tedious, time consuming, and difficult work. A passerine specimen took an hour, and some of the larger birds took half a day to prepare.

Most of the effort in the study was devoted to the daily counting and keeping tract of the results in my notes (on file at ISM). I did not spend a great deal of time specifically searching for nests because this effort would have been very time consuming, and the results would have been limited. Most studies of nesting involve many observers. The notes I do have on nesting are incomplete and can be improved upon with much more data. I did take notes on all kinds of bird phenomena including nests and contents, dates of fledged young, singing dates, nest building dates, copulation dates, molt, food, odd plumage, habitat, and habits.

I estimated numbers for some of the very common species, which was difficult especially when keeping track of all species. There were three introduced species, Rock Pigeon, European Starling, and House Sparrow, for which I did not keep numbers, because of the problems with counting their large populations. I recorded each bird that I saw or heard on a daily field list. Compared with some other observers, I was probably rather conservative in my counting. I did not extrapolate unless I could see the whole flock, then using my telescope or binoculars, I estimated numbers by projecting the amount in one view, and multiplying it by the number of "scopefulls." I had to do a certain amount of observing and listening at night for owls and Caprimulgids, but this task became more and more difficult because of increased noise and fewer places to look because of rampant rural development and the paranoia that accompanied that phenomenon, especially after September 11, 2001.

From the daily bird lists, I made monthly tabulations for each species, which I wrote into "Seasonal Summaries." There are 148 summaries (on file at ISM) in which each species seen was given a fraction (# of birds / # of days observed). Then for each species all 37 years of numbers and days were added together (see Birds Arranged by Numbers, Appendix O and Birds Arranged by Number of Days, Appendix P). Based on these sheets on each species and the notebooks, I wrote the species accounts. Most of the text in the accounts was written in past tense, except for the distribution and taxonomy, because it is now in the past. All graphs and tables present whole numbers, even though the days were not equal through the 37 years (see days, Table 2 and hours, Table 3). The study was not undertaken to provide a field guide, but hopefully it will elucidate the status of birds in Sangamon County.

Observing migration in the county was usually concentrated at Lake Springfield, Carpenter Park Nature Preserve/Riverside Park, Washington Park, Sangchris Lake State Park, Buckhart Sand & Gravel, and Oak Ridge Cemetery. Some other wooded areas were also used such as Jefferies Orchard, Adams Wildlife Sanctuary, Lick Creek, the Hunter Lake area, and many other places, especially along the Sangamon River and its tributaries. Besides the lakes already mentioned, many ponds, flooded fields, sewer ponds, sod fields, and especially the Cinder Flats and the Sediment Retention Facility were frequently checked for water birds. Marsh and grassland birds were searched for along the roadsides and fields especially at Berry, north of New City, in Lake Springfield areas, and more recently at Nipper Prairie (see Gazetteer, Appendix Q and Maps, Appendix R). I made spring and fall lists of approximate arrival times for each species, and every effort was made to find all the species every spring and fall. Some species such as Whip-poor-will, American Woodcock, and Smith's Longspur presented special problems with where and when to find them. Birds in spring usually moved during "good weather" with southerly winds. In fall, birds usually moved either before (shorebirds), during (passerines), or after (raptors) cold fronts. As a general rule many birds migrate at night such as warblers and thrushes, but others migrate crepuscularly (herons and shorebirds), while raptors, swallows, and others migrate in the day. However, at times, under certain conditions, birds will migrate any time.

In Sangamon County, most of the woodland is clustered along the Sangamon River, which cuts through the county from the east to northwest. Some birds probably follow the river, but it is not directly a north/south path. In spring, most of the land to the south of Lake Springfield is farmland, and this may serve as a barrier to some spring migrants heading north. However, birds arriving via Sangchris and going northwest through the Hunter Lake area to Lake Springfield have wooded habitat until they enter the city of Springfield. Some birds, especially migrating raptors, take the South Fork north to avoid Springfield. I am sure that many birds in spring fly through and/or over Springfield and find the Sangamon River to the northwest. Most of the birds found in areas within the city such as in Washington Park and Adams Wildlife Sanctuary probably arrive by night, and to some extent seem to be temporarily trapped there. Fall migration is much the same, but in reverse order, and the northwest segment of the Sangamon River provides an avenue into the county. In fall, many birds, to some extent, use more open habitat and forage somewhat lower. My strategy during both seasons was to search in early morning on the sunny edges and out of the wind, especially if the night had been cool. Passerines that find themselves over Lake Springfield at dawn quickly fly to the nearest shore producing the "lake effect." Some species such as Blackpoll, Yellow Warbler and Cape May Warbler have a tendency to stay along the lake edges to forage. This is why areas like Center Park, the shoreline at Lincoln Memorial Gardens, and Marine Point are important places not only for water birds, but also for songbirds. At times when the conditions seemed right, I set up a hawk watch usually at Lake Springfield, the South Fork, Sangchris, or northwest along the Sangamon River.

Although there was some migration in winter and summer, bird populations were more static during these seasons. I checked basically the same areas as in spring and fall migration, but in addition, I tried to census a particular area such as Carpenter Park. I also ran roadside surveys in all parts of the county, as this was a good way to incorporate areas that I did not usually examine.

I continue to monitor.

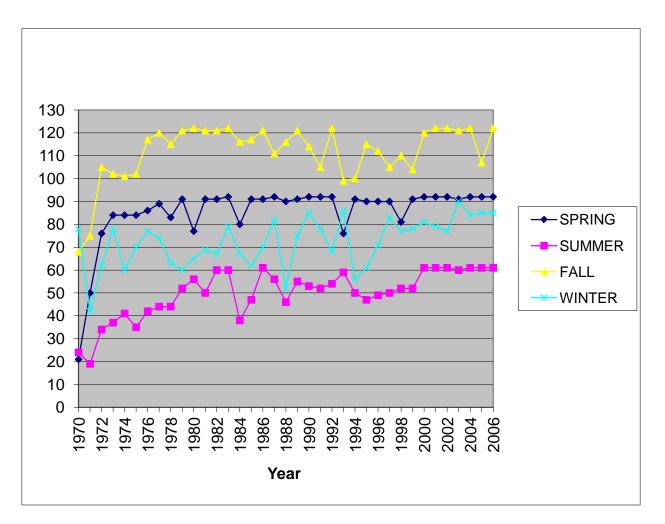


Figure 3. Field Days 1970–2006

	SPRING	dev	SUMMER	dev	FALL	dev	WINTER	dev	TOTAL DAYS	TOTAL DEVIATION
1970	21	71	24	37	68	54	55	35	168	197
1971	73	19	19	42	75	47	42	48	209	156
1972	76	16	34	27	105	17	62	29	277	89
1973	84	8	37	24	102	20	78	12	301	64
1974	84	8	41	20	101	21	60	30	286	79
1975	84	8	35	26	102	20	70	20	291	74
1976	86	6	42	19	117	5	77	14	322	44
1977	89	3	44	17	120	2	74	16	327	38
1978	83	9	44	17	115	7	63	27	305	60
1979	91	1	52	9	121	1	60	30	324	41
1980	77	15	56	5	122	0	65	26	320	46
1981	91	1	50	11	121	1	69	21	331	34
1982	91	1	60	1	121	1	67	23	339	26
1983	92	0	60	1	122	0	79	11	353	12
1984	80	12	38	23	116	6	67	24	301	65
1985	91	1	47	14	117	5	62	28	317	48
1986	91	1	61	0	121	1	70	20	343	22
1987	92	0	56	5	111	11	82	8	341	24
1988	90	2	46	15	116	6	52	39	304	62
1989	91	1	55	6	121	1	75	15	342	23
1990	92	0	53	8	114	8	85	5	344	21
1991	92	0	52	9	105	17	78	12	327	38
1992	92	0	54	7	122	0	68	23	336	30
1993	76	16	59	2	99	23	86	4	320	45
1994	91	1	50	11	100	22	56	34	297	68
1995	90	2	47	14	115	7	61	29	313	52
1996	90	2	49	12	112	10	71	20	322	44
1997	90	2	50	11	105	17	83	7	328	37
1998	81	11	52	9	110	12	77	13	320	45
1999	91	1	52	9	104	18	78	12	325	40
2000	92	0	61	0	120	2	81	10	354	12
2001	92	0	61	0	122	0	79	11	354	11
2002	92	0	61	0	122	0	77	13	352	13
2003	91	1	60	1	121	1	90	0	362	3
2004	92	0	61	0	122	0	84	7	359	7
2005	92	0	61	0	107	15	85	5	345	20
2006	92	0	61	0	122	0	85	5	360	5
totals	3185		1845		4136		2653		11819	1695
average	85.46		49.86		111.78		72.32		319.43	45.81

Table 2. Days of Field Observations. Deviation is the difference from all days possible.

YEAR	SPRING	dev	SUMMER	dev	FALL	dev	WINTER	dev	HOURS/YR	DEVIATION/YEAR
1970	66	795	54	358	157	841	153	407	430	2401
1971	176	685	25	387	187	811	99	461	487	2344
1972	153	708	49	363	196	802	88	472	486	2345
1973	222	639	42	370	220	778	127	433	611	2220
1974	343	518	79	333	313	685	126	434	861	1970
1975	267	594	63	349	349	649	149	411	828	2003
1976	372	489	106	306	615	383	213	347	1306	1525
1977	502	359	96	316	682	316	202	358	1482	1349
1978	469	392	116	296	590	408	153	407	1328	1503
1979	491	370	177	235	647	351	151	409	1466	1365
1980	384	477	153	259	677	321	219	341	1433	1398
1981	491	370	144	268	651	347	200	360	1486	1345
1982	505	356	193	219	698	300	211	349	1607	1224
1983	514	347	164	248	679	319	270	290	1627	1204
1984	451	410	125	287	587	411	256	304	1419	1412
1985	561	300	161	251	671	327	232	328	1625	1206
1986	558	303	211	201	754	244	241	319	1764	1067
1987	518	343	191	221	450	548	202	358	1361	1470
1988	359	502	82	330	314	684	107	453	862	1969
1989	421	440	155	257	602	396	266	294	1444	1387
1990	557	304	180	232	637	361	370	190	1744	1087
1991	603	258	175	237	628	370	367	193	1773	1058
1992	670	191	229	183	686	312	344	216	1929	902
1993	532	329	229	183	572	426	455	105	1788	1043
1994	707	154	131	281	527	471	267	293	1632	1199
1995	644	217	172	240	704	294	294	266	1814	1017
1996	663	198	211	201	649	349	336	224	1859	972
1997	776	85	215	197	776	222	560	0	2327	504
1998	755	106	353	59	922	76	510	50	2540	291
1999	837	24	283	129	829	169	512	48	2461	370
2000	861	0	412	0	893	105	555	5	2721	110
2001	822	39	352	60	982	16	488	72	2644	187
2002	829	32	406	6	998	0	451	109	2684	147
2003	796	65	303	109	820	178	509	51	2428	403
2004	761	100	322	90	885	113	441	119	2409	422
2005	729	132	303	109	807	191	488	72	2327	504
2006	807	54	351	61	987	11	488	72	2633	198
totals	20172	11685	7013	8231	23341	13585	11062	9658	61626	43121

 Table 3. Hours of effort 1970-2006. Deviation is difference from year with highest hours of effort (calculated for each season)

Minutes trudge, Hours run, Years fly, Decades stun. Spring seduces, Summer thrills, Autumn sates, Winter kills. —The Keeners' Manual

SPECIES ACCOUNTS

The results of the 37 year (1970–2007) study of the birds of Sangamon County are contained in the species accounts, see conclusions (next section) for a summary. There was an addendum from 2007–2010, which enlarged the study to 40 years.

The total number of individuals and total number of species for 1970–2006 were graphed to present a snapshot of the results of the main study (see Figures 4 and 5).One needs to keep in mind that there were many fewer hours (or field days) of observation earlier (up to the late 1970s) in the study. Also, the total number of individuals would be somewhat higher if Rock Pigeon, European Starling, and House Sparrow numbers were added. The graph of individuals (Fig. 5) is distorted because of the large flocks of blackbirds during migration (in fact, the numbers were over 4 million, but were reduced by half to facilitate graphing). However, the graph does show more bird numbers in migration and fewer in summer and winter. By 1997, winter numbers show increases because more waterfowl, gulls, and blackbirds were utilizing this season for late fall and early spring migration. The species graph (Figure 4) shows almost double the number of species during migrations than during most winters. Even though summer species numbers were higher than winter numbers, they were still almost a hundred species lower than migrational species numbers.

The common and scientific names used in this study are from *The American Ornithologist's Union Check-list*, seventh edition (1998). However, the sequence used is not completely in accordance with the current check-list order and especially with subsequent supplements. In the boxes in the following species accounts, the number of birds observed was listed by season irregardless of status. Note, for example, some spring migrants may be contained in the summer box. Spring was March, April and May; Summer was June and July; Fall was August, September, October, and November; and Winter was December, January, and February. Note that number of days refers to those days that the species was observed, not the total number of field days. The average per day is thus, the number of a particular species recorded divided by the number of days that it was seen. The average per season is the number of birds recorded in that season divided by the number of years it was observed in that season.

The status may vary among different families of birds and was not necessarily based on numbers (but see ranking by numbers or by days). There were seven ranks of status from highest to lowest:

Very Common Common Fairly Common Uncommon Occasional Rare Very Rare

Dates reflect migrational timing and were expressed, if known, for spring and fall. Birds that were mainly winter residents had spring and fall in reverse order. The dates provide earliest arrivals and latest departures, and averages with number of years used to achieve these averages and the range of dates used. Sometimes the arrivals and departures were ambiguous (residents were indistinguishable from migrants), and such cases were indicated.

The text contains clarifications and additional data on arrival and departures with migrational notes; high (maximum) counts usually per season; habitat notes; summer and winter status clarifications; breeding records with notes on nests, eggs, and young; singing dates; molt; areas where birds were found in Sangamon County; odd plumages; notes on taxonomy; and breeding and winter range. If the species was geographically variable with named subspecies, I tried to assess them for the county using the specimens in the ISM collection or through the literature. Most of these assessments were tentative, because the collection lacked the necessary specimens for comparisons. Most species in nature are more complex than they first seem and trying to pigeonhole a single migrant specimen to subspecies is a near impossible task. I used the term immature to denote non-adults and juvenile for known hatching year birds.

The documentation was from: (1) specimens, which was the best evidence (all were from the ISM collection); some specimens were listed with all data, while others were combined by sex and age classes when there were more specimens; (2) photographs, nearly as good as a specimen if clear and identifiable; most were by D. Oehmke or myself H. David Bohlen (HDB) with a few by others; and (3) written description of sight records (by HDB), usually with drawings. The latter was sometimes problematical, but obtaining a photograph (especially early in the study) was not always possible.

The total of 359 species from this study (includes four hypothetical species) is based on the following: 241 specimens; 96 photographs; and 22 sight records.

The highest numbers of days and birds with years given was presented to help identify the times of most abundance.

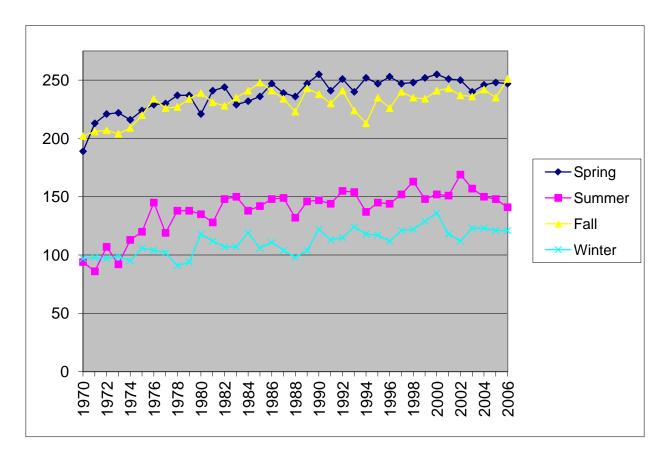


Figure 4. Number of Bird Species per Season

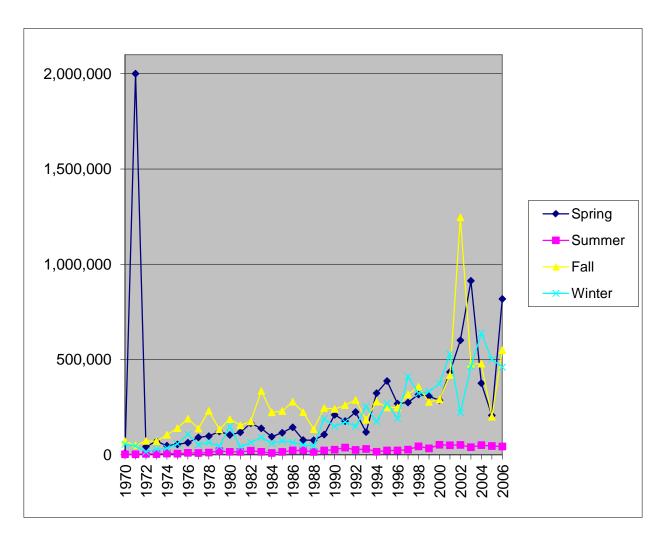


Figure 5. Number of Individuals per Season

"The researches of many commentators have already thrown much darkness on this subject, and it is probable that, if they continue, we shall soon know nothing at all about it."

-Mark Twain

CONCLUSIONS

A total of 359 bird species consisting of 29,568,184 individuals were encountered in Sangamon County in 37 years from 1970–2007. The monitoring of birds was accomplished in 11,819 field days (or 61,626 hours). Plus, there were an additional three years of observations in the addendum from 2007–2010 for which the numbers were not added, but some noteworthy records were included. Of the 359 species, there were 280 regularly occurring species (214 were seen nearly every year), 75 non-regular species, and four hypothetical species (probably correctly identified, but not enough information to confirm them for the Sangamon County List). There were also other possible species and a few exotic species seen that were not listed. Fully 340 species of the 359 were migratory (95 percent), and only 19 species (5 percent) were classified as permanent residents, and they probably dispersed to some degree. Thirty-eight percent of the species recorded bred in the County (135 species of which 27 were very rare or no longer nested by the end of the study). There were another six species present in the breeding season and suspected of breeding but not confirmed (see Breeding Species in Sangamon County, Appendix G). In the winter, 138 species (38 percent) were considered winter residents even though some were very rare in the county, so 221 species (62 percent) did not stay through midwestern winters. Another 68 species have been rarely recorded in winter, and are not principally wintering birds, but migrants (Winter List, Appendix J). It was interesting that the breeding numbers of species and wintering numbers were about equal (see List of Birds by Season, Appendix F). However, these numbers are represented by many more waterfowl species in winter versus more land birds especially neotropical migrants in summer.

The 75 non-regular species represents 21 percent of the total species. Of these, 18 had only one record in the study. Most non-regular species could be considered rare migrants or winter residents with some having the potential to establish wintering, migratorial, or even breeding populations in the county. Several species, for example, the Barn Owl and Loggerhead Shrike show remnants of once regular populations. Selected, mostly non-regular, vagrant, or invasive species and identifiable subspecies were categorized by geographic origins. The western United States produced the most with 48 (plus 8 subspecies); while the southern U.S. had 21 species; northern North America had 12; the eastern US potentially had six species (plus one subspecies); the Old World (Palearctic) accounted for 13 (6 were introduced, some are now very common); and 10 species were pelagic (see Appendix K).

Sometimes it was difficult to assign a specific status to a species because it changed over time. Many changes occurred during the study, and these were usually addressed in the species accounts. However, note the Species Status Change List (Appendix D) where 250 of the more prevalent (regular) species seasonal numbers were examined to reveal that 64 were static, 75 increased, and 111 decreased. Many increases were observed for species (usually raptors and piscivors) recovering from the effects of DDT; or for geese, some ducks, gulls, cavity nesting

species, or blackbirds. Plus, several species (Blue Grosbeak, Summer Tanager, White-eyed Vireo, and Black-necked Stilt) were moving northward, and there were several expanding species (e.g., Ross's Goose, Eurasian Collared-Dove, and House Finch) that were not present at the beginning of the study in 1970, which have invaded the county (see list of Invading Species, Appendix E). Some birds expanded from populations from the Great Plains including several species of geese, Franklin's Gulls, and Western Kingbird (still rare). Although many grassland and woodland species suffered declines because of urbanization, some species increased dramatically such as Canada Goose, Wood Duck, Red-tailed Hawk, American Kestrel, Killdeer, American Robin, Cedar Waxwing, Chipping Sparrow, Common Grackle, European Starlings, House Sparrows, and others because they could take advantage of these conditions. The decreasing species inhabited shrinking habitats such as marsh, grassland, and forest, or they were forest interior species (usually neotropical migrants). Some were dependent on mudflats (shorebirds), birds affected by West Nile Virus, or they were cuckoos and winter finches. Also, many decreasing species were birds that tended to nest low or on the ground, even if the nesting took place other than in Sangamon County and indicated presence of a plethora of nest predators both native and exotic. For grassland species, timing of mowing could also be critical. The set aside program did mitigate losses in some grassland species, but this may be only temporary. Many times, it was difficult to determine if an increase or decrease was widespread especially for strictly migratorial species, but these conclusions were limited to Sangamon County. It is greatly lamented that the following interesting and unique species seemingly disappeared or were extirpated as breeders as well as migrants (in many cases). Most had low populations even at the beginning of the study. They include the following species:

Pied-billed Grebe Least Bittern Yellow-crowned Night-Heron King Rail Virginia Rail Sora Common Moorhen Upland Sandpiper Black-billed Cuckoo Whip-poor-will Brown Creeper Bewick's Wren Loggerhead Shrike Cerulean Warbler Western Meadowlark

Many of the above species need marsh habitat or have other special requirements (Species Status Change List, Appendix D). Some populations could recover because there are still migrants in Illinois, though most are rare. There seemed to be no plans for recovery at least in this County.

Climate change has affected and will probably significantly change the status of many species and especially the migrational timing (phenology) observed in this study, hopefully the data will serve as a baseline for later comparison.

As I monitored bird populations, I noted those that were disintegrating showed several steps leading to extirpation. These steps were the following: (1) the species became difficult to find, and this could be shown not only by fewer individuals, but by later arrivals and earlier departures and gaps in migration; (2) the species was reduced to a preferred habitat, so that the observer had to specifically search for it; (3) then, the species was even difficult to find in the preferred habitat; and (4) years passed and none were found.

With higher and higher human populations, and more and more land converted to human use, more bird species can be expected to decrease and become extirpated such as those above. Only by providing the correct habitats in which birds can live and reproduce in sustainable numbers will these species survive. Monitoring their numbers will tell us how well they are doing.

Postscript: It has taken several years to write this report, and if I have learned anything it is that I can summarize it in two words "things change." And this change was not always for the better. Toward the end of the study, when I was compiling the addendum, and after, it seemed to me that there was a decrease in birds, especially for the songbirds, but also for others such as rails and Northern Bobwhite. Numbers began to disintegrate for some species, and there were gaps in migration that I had not noted before, and later those gaps became longer in duration. Also, the hacking on the trees and the destruction of the natural habitat became more accelerated and prominent—everything was for humans. We were homogenizing everything. Again, making the world over—taking from the natural habitats—making habitat for humans and their commensals—a sterilizing process. Even during the glaciations, there were areas called refugia in which plants and animals survived, that could not only repopulate areas, but also further speciate when conditions became more favorable. Today we have set aside nature preserves, because we recognize that we are now the destructive glaciers (all seven billion of us). That is why preserves are so important and should not be disrupted by mechanization, encroachment, or relaxing of the rules.

"Preserving biodiversity is a lost cause without human population reduction" —Anonymous

RECOMMENDATIONS FOR CONSERVATION

Nature, natural habitat, biodiversity, whatever one wishes to name it, is one of those inalienable rights that everyone should be able to enjoy. It is one of the best things in life that is free. This is an era when we humans need to see our place in nature as its protectors. As long as we think we are above nature, we are doomed to destroy it rather than enjoy it. Who is responsible for maintaining biodiversity? I would say the easy answer is everyone, but surely the welfare of wild areas and the wildlife they support should be the business of the federal, state, county, and city governments that help maintain the quality of life for their citizens. Why have an impoverished and uninteresting biota, when we can have a diverse and fascinating one? If we could go to another planet the most exciting things we could find would be other life forms. Yet, there are over one million species of plants and animals on Earth, probably the only planet we will ever see, and we do not take care of them.

I know several private landowners that maintain wildlife areas at their own expense, and these areas benefit everyone in the long run because they maintain the natural systems. I often hear "oh, it won't hurt anything" when humans wish to usurp the little habitat that birds have remaining. It is my contention that everything humans do to the natural environment does matter. Every year there is less and less habitat for native plants and animals in Sangamon County simply because there is less area that has not been converted to human use. Over the 40 years of the study, I saw many areas for natural plants and animals destroyed or maligned, sometimes for no apparent reasons. The county has plenty backyard type of habitat, it needs more marsh, and undisturbed grassland, and woodland—all of which can support a different set of species.

Most of the public land in Sangamon County is administered by City Water Light & Power and the Springfield Park District. Both of these agencies have generously "set aside" land for preserving biodiversity, but management practices often don't contribute to that goal. I would like to recommend changes in management practices for maintaining biodiversity especially of birds. **Biodiversity is, in the long run, the most important thing on this planet**. Habitats for wildlife and places where humans feel comfortable are sometimes at odds. To successfully manage habitat to promote biodiversity requires the knowledge to predict the consequences of management practices in the short term and the long run.

Some general guidelines to keep in mind for supporting bird biodiversity are: (1) no birds nest in constantly mowed grass; (2) contrary to popular opinion 'weeds' attract birds—lots of them; (3) different bird species use different portions of a tree, so that cutting off the lower limbs eliminates some species; (4) the more different plants in an area, the more species of birds there will be; (5) dead or dying trees provide nesting and roosting cavities for many birds (see Appendix N); (6) brush and brush piles are excellent places for protection and nesting; (7) when planting trees, consider whether they produce berries or other food for birds; (8) mowing grasslands too early (before September) destroys nests and chases young flightless birds out of the nest; (9) in appropriate places, plant cedar, spruce, and hemlock because they attract northern migrant species and offer cover, food, and roosting places especially in winter; (10) do not spray or use chemicals in natural areas, (11) do not cut brush or extensively trim trees except from

October to early March because these actions destroy birds' nests or the young; and (12) the best option many times in natural places is simply to do nothing (leave it alone!).

In nature ambience counts. In nature, time slows down to its natural state, and humans can get away from noise and the hyper pace of the present insane society. In my opinion, ambience was diminished at Carpenter Park when numerous houses were built on the adjacent golf course. At the time, I (and others) protested this development and warned of the impacts on the park. All of the things we warned the community about came true and more. Carpenter Park was designated as a Nature Preserve (1979), but this designation was diminished by the placement of the busy road on the north side of the park and allowance of water access for the golf course along the railroad (where two sloughs were permanently cut in half). I recommend that the forests at Carpenter Park Nature Preserve, Riverside Park, and Gurgens Park be considered as one area, and all open (mowed) lands there be allowed to revert to forest (to link the forest fragments) so that the minimum requirement of at least 500 acres be met for suitable habitat for nesting. Areas of lower acreage are subject to nest predation and parasitism (Bailey and Robinson, 2001). Some prairie could also be maintained there, especially in the sand areas. These three parks could all be designated as one larger Nature Preserve. Other changes could be made, such as closing (and eventually removing) the road into the Rail Golf Course on north side of the Nature Preserve and reroute traffic to enter on the north access road of the golf course. A change of this type would reduce negative impacts on the Nature Preserve. (I have seen drivers going 60 mph on this road). People using the preserve could then park in the cul-de-sac created and *walk* into the preserve. The gate to the park could be locked permanently. A program should be implemented to reduce the numbers of Brown-headed Cowbirds in the preserve by trapping, so that vulnerable species could maintain and perhaps build back their populations. All parts of the enlarged preserve would need to be free from pets (dogs and cats) to protect ground nesting birds because they already have numerous predators. Addition of an ecologist to the Springfield Park District staff would contribute to monitoring and further improvements to management of these natural areas.

Sangamon County has only one small corner of state-owned natural habitat and no federal land. The Illinois Department of Natural Resources has primary concern for the native plants and animals, while other state agencies are concerned with humans. The state parks and nature preserves in Illinois (and Sangamon County) should be linked by using the dendritic river systems as corridors, so that the biota and natural habitats are not fragmented. These systems will become more and more important as the human population expands, and the rules in these areas should not be relaxed. The one small part of Sangchris State Park in Sangamon County is nearly half farmed land. The farmland on the north side of the main road should be allowed to revert to woodland or brush to mitigate the fragmentation of the forest. Farmland on the southwestern part could be made into marsh habitat. The county has virtually no marsh habitat, and many endangered and threatened birds need marsh habitat [This was partially done in 2010 with excellent results!]. Also, the waterfowl refuge at Sangchris Lake should be reinstated year around. Management of non-hunted species at Sangchris would be beneficial. If the sunflower fields that are used for dove hunting were left standing rather than plowed under, then they could provide food most of the winter for songbirds as well as Northern Bobwhite and many other species.

Completed in 1935, Lake Springfield was created by damming Sugar Creek. The early lake must have been a wonderful place for birds (see Eifert, 1949). However, during this study, the city of Springfield engulfed Lake Springfield like an amoeba and put the lake in a sea of

mechanized humanity. Never ending construction seems to be rule at the lake now. Many of the lessees at the lake have built more than one house on one lot, adding to the congestion. Even areas originally set aside for nature have been usurped for other things. The old refrain, "Oh, nobody is using that area" is heard, when the other 99 percent of the species are actually trying to survive there. Just think of the habitat that was drowned by the lake, and of the land around the lake that could be serving to mitigate that impact. Now, with all the bedroom towns commuting, plus, college students every hour, the once tranquil lake area is becoming similar to every other place, and the road-killed animals litter the streets. As a result, I think that Lake Springfield should have designated areas for waterfowl that boaters cannot use and that jet skis should be seasonally restricted. As it is now, the users of watercraft bear no responsibility when they chase off or harass birds. This is especially true during some fishing tournaments, which leave waterfowl no place to go. Such tournaments should be confined to the warm months of the year to protect the migrating waterfowl. Also, the boat ramp at the dam, a relatively recent construction, should be closed in very cold weather. Because most of the lake is frozen, one boater can chase off all waterfowl, and the majority of ducks have no other source of open water. As Lake Springfield is cut off more and more from the natural environment, it will run the risk of becoming a huge tub full of herbicide and motor oil. It has been over 10 years since I have seen an emergence of Mayflies at the lake—a bad sign for water quality. Developers cut down the last woods in Center Park, and CWLP has had major impacts on the remaining woodlands in Center Park, Marine Point. and other areas. Clearing of woodlands has led to the loss of woodland feeding flocks in the park area. As of 2010, there are hardly any songbirds in the park (what good is a park without songbirds?). The only way to counter the loss is to replant many trees and shrubs and insure the plants are left alone. Excessive trimming and removal of limbs makes trees useless to wildlife.

I think the Hunter Lake area should be retained as a preserve, because building the new lake would destroy nine percent of the woodland in the county with no room left for mitigation of this impact. This is especially true if tree cutting is going to be a routine procedure. I have to admit that I liked seeing the houses disappear and the wildness reappear (the Germans have a word for it "Dorfwustungen") in the Hunter Lake area, because it was the opposite of what was happening everywhere else. Since the original study for the development of the lake in 2000, the natural habitats of the Hunter Lake area have improved especially the forested parts. If the lake is built, marsh areas should be established, which are off limits to fishermen and boats.

The Lick Creek Nature Preserve should revert to its original use as the name implies. There are now numerous bike trails in the county. It should be noted that these areas are not that great for nature, especially when they are maintained with heavy duty leaf blowers. With all of the disruptions, such areas only provide for the same subset of birds as rural backyards.

Lincoln Memorial Gardens should consider restricting incompatible activities such as jogging and noisy events that reduce the chances of bird nesting and survival in this beautiful setting. Also, the noise from the busy road along Lincoln Memorial Gardens and excessively high speed limit (it should 30 mph) should be addressed.

There are many other smaller public areas that also have habitat problems. Washington Park, in the early years of the study was the best area in Central Illinois for migrating warblers. It is not now. Recently, the Springfield Park District made some progress allowing some areas in Washington Park to grow without excessive mowing. However, one of the wooded hills was spoiled by the construction of buildings and many trees have been cut. Other ideas should be considered to improve wildlife habitat in the county. Also, it should be noted that people go to parks to get away from the noise made by lawn mowers, leaf blowers, wood chippers, weed whackers, chainsaws, loud motorcycles, and trucks. This county should enforce federal and state noise laws already on the books. Peace and relative quiet are important to birds trying to communicate in this human-dominated society, and hearing and sanity should be a priority to humans as well.

The taller television transmitting towers in the county should have the stationary lights changed to strobe lights. The flashing lights kill fewer birds (see TV Tower Kills in Sangamon County, Appendix M), and funding should be made available to replace the lights on these towers.

Because humans have pushed the remaining wildlife into a few corners in Sangamon County, these areas should be considered as precious and held in high esteem. They contain the remnants of our remaining forests and prairies. Activities incompatible with maintaining biodiversity should be limited. Our few natural areas are the only places left where other species, such as the birds described in this study, can try to survive in this rapidly changing world.

Red-throated Loon

Gavia stellata

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	37/34 (5)	0/0	64/59 (12)	11/11 (1)	112/104
Average/day	1.09		1.08	1.0	1.08
Average/season	7.40		5.33	11.0	

Status: Rare Migrant and Very Rare in Winter

Dates:

- Spring: Earliest arrival = March 24, 2005 Lake Springfield Average arrival (5 years) w/range March 24 –April 26 = April 10 Average departure (2 years) w/range April 25 – May 5 = April 30 Latest departure = May 5, 2000 Lake Springfield
- Fall: Earliest arrival = October 22, 1976 &1998 Lake Springfield
 Average arrival (12 years) w/range October 22 November 26 = November 8
 Average departure (11 years) w/range October 28 December 19 = November 17
 Latest departure = January 14, 2010 Lake Springfield

Of 19 records of this loon, 18 were from Lake Springfield and one (2006) was from Sangchris, plus there were five addendum records (2007-2010) all from Lake Springfield. This small loon usually migrated to and from the east coast through the Great Lakes, and as a consequence I encountered only stragglers in this county. The first spring record was an adult on April 13,1989. Spring migration was based on two March and three April dates. The maximum spring count was only two, April 10-12, 2000. Of the 6 birds that were seen in spring, five were in basic plumage and only one was in alternate plumage. They stayed from one to three days, except the alternate plumaged bird, which was present March 26-May 5, 2000 and was recorded 29 times. It was observed lifting off the lake and migrating on May 5, 2000. This loon breeds in coastal Alaska and northern Canada. All fall birds were singles except for three on October 26, 1984-the maximum fall count. The first fall record was October 22, 1976. Fall loons were generally present longer than spring birds and one adult in 1993 stayed from November 4-December 19 being recorded 28 times. There were four October and eight November arrival dates. Field marks that helped identify this species were small size, small up-turned bill, pale gray head, triangular head shape with flat crown, dark area on throat, which was sometimes reddish, gray back with white spotting, white flank patch, and more active diving. On November 12, 1983 one consumed a six inch fish at Lake Springfield. The immature at Sangchris November 21 –23, 2006 was unusual in that it was in shallow water and had a rather thick neck band (photograph on file at ISM). Other late fall migrants (some that went into winter) were adult, December 19, 1993 and juvenile, December 13, 2007. Addendum records, all at Lake Springfield, were: juvenile, December 9–13, 2007; juvenile, October 29 & November 12, 2008; one in non-breeding plumage, March 31, 2009; juvenile, November 5–26, 2009; and the very late record above. This loon mainly winters on both coasts.

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Documentation: Photographic: IL. Sangamon Co., HDB, plus drawings and notes - on file at ISM.

Pacific Loon

Gavia pacifica

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	0/0	0/0	59/55 (8)	24/24 (3)	83/79
Average/day			1.07	1.0	1.05
Average/season			7.38	8.0	

Status: Rare Fall Migrant and Very Rare into Winter

Dates:

Fall: Earliest arrival = October 23, 1997 Lake Springfield
Average arrival (9 years) w/range October 23 –December 4 = November 9
Average departure (6 years) w/range November 1 – December 17 = November 25
Latest departure = December 17, 2003 Lake Springfield

This small loon, which usually had an obvious gray nape, went unnoticed for many years in Illinois. On November 3, 1974 the first one was identified at Lake Springfield (Bohlen, 1975a), and recently it had proven to be fairly regular, but rare. All birds observed were juveniles or adults in non-breeding plumage and usually occurred alone or with Common Loons on Lake Springfield. However, the three observed on November 16, 1980 at Lake Springfield was a maximum count. The numbers above represent nine records all in fall with a few staying into December (see Table 4). Some stayed many days, in 1992 one was present 41 days (recorded 28 times), others were seen only one day. Three birds occurred into winter in December (1980, 1992, and 2003). They seemed to dive more often than Common Loons and may have swum lower in the water, appearing almost grebe-like. The best field marks were small size, small straight bill, gray nape, cobra-like head, dark area between the eye and bill, a black line along the edge of gray on the neck, lack of eye spots and sometimes the presence a chinstrap. Even though I checked on a daily basis, I never saw this loon in spring. As noted in the addendum (see Table 4), two loons were seen in 2007, both juveniles at Lake Springfield on October 25 & 26 and November 8–22. This loon breeds in the western Arctic and winters principally along the Pacific coast.

Documentation: Photographic: IL. Sangamon Co., HDB, plus drawings and written descriptions - on file ISM.

1974	juvenile	November 3
1980	one	November 15, then three (two adults & one juvenile) November 16, then two November 17, then one November 18 – December 9
1985	adult	November 9
1992	juvenile	November 6 – December 16
1997	adult	October 23 – November 5
2002	juvenile	November 2 – 10
2003	juvenile	November 4 – 17
2005	adult	November 25
2006	juvenile	October 28 – November 1

Table 4. Records of Pacific Loons in Sangamon County (all at Lake Springfield)

Addendum:

2007	juvenile	October 25 – 26 and juvenile, November 8 – 22
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Common Loon

Gavia immer

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	3081/982 (36)	21/21 (10)	12700/1285 (37)	783/295 (37)	16585/2583
Average/day	3.14	1.0	9.88	2.65	6.42
Average/season	85.58	2.10	343.24	21.16	

Status: Uncommon Spring Migrant, Common Fall Migrant and Rare Summer (nonbreeding) and Winter Resident

Dates:

- Spring: Earliest arrival = March 5, 1999 immature Sangchris Average arrival (36 years) w/ range March 5 –April 14 = March 21 Average departure (36 years) w/ range April 17 –June 9 =May 17 Latest departure = June 9, 1982 Cinder Flats
- Fall: Earliest arrival = September 20, 2005 basic plumage Lake Springfield Average arrival (37 years) w/ range September 20 –October 28 =October 12 Average departure (37 years) w/ range December 1- January 7= December 13 Latest departure = January 7, 2007 Lake Springfield

Loons occurred on deep water areas in Sangamon County such as Lake Springfield, Sangchris (near the dam), and Buckhart. Occasionally, they were found on more shallow water such as ponds, but they were limited by the need for space to take-off. One was trapped below the dam at Sangchris May 13, 1996. There were only three April arrival dates for this loon, all the rest were in March. It was not unusual to see these large loons flying in diurnal migration like one at Sangchris March 29, 1993. Most of the spring loons arrived in breeding (alternate) plumage and sexes were similar. For example on March 27, 1991, nine loons were in breeding plumage (some still had scaly heads) and on April 10, 2002, there were 19 loons on Lake Springfield, all of which were in breeding plumage except one. Also, some appeared in changing plumage, which I noted March 25, 1991, March 25, 1995, March 14, 2000, April 14, 2003 and May 12, 2004. The weird calls of this loon were commonly heard in spring, with calling between March 23 to April 13. High counts in spring were less than fall counts (1 to 4.1) and were usually under 20 and occurred in early April, but sometimes in late March. Examples were: 12, April 4, 1983; 15, April 14, 1989; 17, April 11, 1994; 20, April 3, 1997; 19, March 30, 2001; 24, March 31 & 26, April 5, 2002; 20, April 6, 2006; and 37, April 13, 2009. Most loons still present in late May or June were immature or non-breeding adults, and a few stayed most of the summer. These included: an adult, Lake Springfield until June 27, 1993; one, Lake Springfield June 29, 1995; one injured, below the dam at Sangchris until July 1, 1996; one, Sangchris June 18, 1999 (this loon was calling); adult, Buckhart June 12, 2001 and one, Lake Springfield June 15, 2009. Recently speed boat traffic on the lakes had become horrendous putting loons at risk and boaters should be aware of loons as they race around! All fall arrival dates were for October except two September dates (1990 & 2005). Although most migration occurred nocturnally, on October 29, 1984 I saw diurnal migrants arriving at Lake Springfield, first a flock of 8 and then a flock of 12. Nearly all loons in fall were in basic plumage, but I noted adult alternate plumage characters

November 19, 1976 and October 18, 1982. Also, two adults were showing molt on October 25, 1995. Loons in fall many times seemed to be in family groups. During the day, they spread out on the lake and fed in coves or near the edges. At this time they were more difficult to observe plus they were frequently diving. As evening approached the loons gathered in the middle of the lake and dived less, making this the best time to get an accurate count. Grouping in the evening may prepare the loons for migration if conditions were favorable or it may put them in the middle of the lake to avoid ice that could form. On November 8, 1981, there was a tightly packed flotilla of 24 loons on Lake Springfield, one of which was calling. There seems to be less calling in fall, but they were occasionally heard, such as one at first light October 17, 1978. Loons did not usually associate with other waterfowl and were sometimes aggressive towards ducks. I watched a loon dive under some Red-breasted Mergansers, which caused them to fly on November 22, 1978, and this happened again with other ducks on November 8, 1996. Some loons appeared to stay for several days and may have remained in the same spot on the lake. High fall counts usually were tallied in late October to mid-November: 67, November 12, 1972; 26, October 29, 1980; 85, November 9, 1986; 125, November 10, 1997; and 160, November 6, 2003. Two loons were killed in the fall of 1974 when they presumably collided with wires over Lake Springfield. On November 11, 2000 loons could be seen leaving Lake Springfield due to increased boat activity. When the lake water turned very cold and ice started to form, most loons left, but a few always lingered into December. Even then most were gone by early to mid-December. The maximum count for this month was 19, December 19, 1998. Other than the one mentioned above the only winter records were one at Sangchris January 14, 1983 and one (status uncertain = early spring migrant?) at Lake Springfield February 7 -10, 2002. Most Common Loons winter along the coasts.

Documentation: Specimens = 4) IL. Sangamon Co., ISM# 600524 alternate 3, 2 mi east Loami, May 13, 1891, coll. by W. Greenwood; ISM# 605928 basic 9, Lake Springfield, October 24, 1974, coll. by HDB, wt. = 7 lbs 2 oz, ovary = 12 mm; ISM# 606071 basic sex?, Lake Springfield, November 13, 1974, coll. by R. McCormack, wt. = 5 lbs 13oz ; ISM# 606432 basic 9, Sangchris State Park, April 30, 1975, coll. by W. Anderson, ovary 27 mm, caught in gill net, gizzard contained gravel and fish bones.

Highest # Days/Season

Spring61 (1999)Summer9 (1993)Fall48 (1985, 1990, 1992)Winter28 (2001)

Highest # Birds/Season

Spring277 (2002)Summer9 (1993)Fall923 (1997)Winter126 (2001)

Pied-billed Grebe

Podilymbus podiceps

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	13782/1938 (37)	359/215 (35)	34020/2831 (37)	20347/1530 (37)	68508/6514
Average/day	7.11	1.67	12.02	13.30	10.52
Average/season	372.49	10.26	919.46	549.92	

Status: Fairly Common Spring Migrant, Common Fall Migrant and Winter Resident and Occasional Summer Resident

Dates:

- Spring: Earliest arrival = January 26, 1990 Sangchris (arbitrary due to WR) Average arrival (24 years) w/range January 26 – March 18 = February 28 Average departure (37 years) w/range April 21 – May 31 = May 14 Latest departure = May 31, 1988 Cinder Flats (arbitrary due to SR)
- Fall: Earliest arrival = June 28, 1986 Woodside Bridge
 Average arrival (37 years) w/range June 28 August 29 = July 25
 Average departure (6 years) w/range November 15 December 7 = November 24
 Latest departure = December 7, 1994 with 30 LSpfld (arbitrary due to WR)

As soon as there was open water this small brown grebe returned in **spring.** It was found on large lakes, ponds, overflow areas and even rivers. The Pied-billed Grebe was an Illinois Endangered Species due to loss of wetland habitat, which still continues. High counts for spring were: 54, April 3, 1978; 55, April 8, 1995; 67, April 7, 1996; 58, March 28, 1999; 73, April 1, 2000; 64, April 6, 2002; and 50, March 20, 2006. There was not much calling in spring in this area, but the dates noted were March 20-27. Most, if not all birds, left in late spring to nest elsewhere. In summer, nesting habitat almost always had a lot of emergent aquatic vegetation. This grebe had nested in the county at: 1) Sangchris, off and on since 1970; 2) Buffalo Sewer Pond, 1979, nest with 3 eggs June 4 and juvenile July 1 & 8 and 2005 juvenile July 3; 3) Cinder Flats [habitat now destroyed] 1983, adults seen June 18–20 and juvenile July 31, and 1987, two young July 4, and 1988, adults fighting over territory April 1 and adults seen with two young June 26; 4) Williamsville [habitat now destroyed] 1985, two pair and adult with 8 young June 29, and 1986, adult with 7 young June 14 - 25, and 1987, floating nest with 5 eggs April 18 and two young July 4; 5) Sediment Retention [habitat now destroyed] 1990, one young July 21; 6) Buckhart 1998, two adults and two young June 30. Some other summer wanderers occurred in late May, June and July, but fall migrants could be found away from the breeding areas as early as late June, usually on Lake Springfield. It could be that nesting areas dried, forcing the birds to seek other habitat. These migrants arrived with cold fronts and were seen on the lake in small to medium size flocks with high fall counts: 560, October 1, 1975; 155, September 23, 1976; 120, October 12, 1978; 102, September 17, 1980; 161, October 19, 1987; 165, September 24, 1996; 119, September 20, 1997; 335, September 21, 1998; 288, October 17, 1999; 130, September 12, 2000; and 101, October 9, 2006. Fall numbers were two and a half times more than spring numbers. The juveniles in late summer and fall had marks on the face, which I had noted until at least November 14. Grebes were seen taking fish for food, and sometimes the fish was too large,

as was the sunfish a grebe had on November 7, 1982. Other food was a crawfish (April 30, May 14, September 17), a frog (April 17), and a fluffy feather (October 8). About 1984, this grebe became a **winter** resident to the degree that fall departures and spring arrivals were obscured. Winter numbers had increased and there was a cove at Lake Springfield I referred to as grebe cove, because they often lounged there. However, icing in winter forced them to the warm water ditch at the lake. Fast moving boats and jet skis were a danger to this species because it preferred to dive instead of flying to escape. On January 5, 1999 two grebes were caught in a small open area in the ice and two Bald Eagles were hunting them, but the grebes kept diving and the eagles eventually gave up. High counts for winter were low (less than 20) until 1991 when numbers showed an increase. These numbers were: 60, February 14, 1998; 108 December 19, 1999; 92, January 19, 2000; 78, February 28, 2000; 86, December 9, 2000; and 57, December 6, 2003. Some grebes winter as far south as Panama. The population in the county was the nominate subspecies.

Documentation: Specimens = 8) IL. Sangamon Co., ISM# 661050 adult \Diamond , LSpfld, no date % spring?; ISM# 605300 adult \heartsuit (some black on throat), tv tower, September 27, 1972, coll. by HDB, wt. = 302.9 gms, ovary = 8 mm; ISM# 604874 adult \heartsuit (some black on throat), tv tower, September 17, 1971, coll.by HDB, ovary = 13.5 mm; ISM# 606846 adult \heartsuit , tv tower, October 13, 1978, coll.by DO, wt. = 274.2 gms, ovary = 14 mm; ISM# 606880 adult \heartsuit , Spfld, November 2, 1975; ISM# 603335 juvenile sex?(a few marks on face), Sangamon Co., October 20, 1929, coll.by F.McKelvey; ISM# 606061 juvenile \heartsuit (marks on throat), tv tower, September 29, 1974, coll.by HDB, wt. = 277.3 gms, ovary = 11 mm, gizzard with feathers; ISM# 661926 juvenile (some marks on face), Cinder Flats, August 20, 2009, coll.by HDB, wt. = 296.5 gms.

Highest # Days/Season

 Spring
 81 (1987)

 Summer
 24 (1988 & 1998)

 Fall
 100 (1998)

 Winter
 78 (2000)

Highest # Birds/Season

Spring1475 (2000)Summer55 (1988)Fall2699 (1997)Winter2521 (1999)

Horned Grebe

Podiceps auritus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	8308/1081 (36)	0/0 (see June 08)	16071/1209 (37)	2688/535 (35)	27067/2825
Average/day	7.69		13.29	5.02	9.58
Average/season	230.78		434.35	76.80	

Status: Fairly Common Spring Migrant, Common Fall Migrant and Occasional Winter Resident

Dates:

- Spring: Earliest arrival = January 3, 1990 Lake Springfield Average arrival (37 years) w/range January 3 – March 15 = February 22 Average departure (37 years) w/range March 28 – May 25 = April 25 Latest departure = May 25, 1988 adult Sediment Retention (see SR below)
- Fall: Earliest arrival = September 8, 1994 Lake Springfield
 Average arrival (37 years) w/range September 8 November 3 = October 8
 Average departure (36 years) w/range November 22 January 21 = December 18
 Latest departure = January 21, 2001 two Lake Springfield (arbitrary due to WR)

Sometimes, it was not possible to distinguish between winter residents and spring migrants; and false springs occasionally caused Horned Grebes to come north. The arrival dates were in February and March from 1971 – 1989 and January and February (two in March) from 1990 – 2008, indicating earlier arrivals the last half of the study. When these grebes arrived most were in basic (black and white) plumage; but they soon began to obtain alternate (breeding) plumage and some were obviously in transition. Although the timing of obtaining alternate plumage seemed variable, most were in basic plumage in February and early March and by early to mid-April most were in alternate plumage. Also, males might have obtained alternate plumage sooner than females. At Lake Springfield these grebes frequently gave a rather piercing croaking call in both spring and fall. In the spring, I had seen the males (?) aggressively displaying in which they went chest to chest against each other. Also, I watched one brightly colored grebe that was displaying to a basic plumaged grebe by repeatedly diving under it and coming up on the other side on March 24, 1998. On March 23, 1992, one was offering another a leaf. High counts for spring were 75, March 19 & 58, April 1, 1991; 95, March 14 & 74, March 23, 1992; 59, April 2, 1998; 100, March 27, 2001 and 78, March 15, 2006. A Horned Grebe was trapped below the dam at Sangchris on March 23, 1999 (it must have gone over the dam). I tried to catch the bird to put it back on the lake, but it was much too quick – several times swimming between my legs. By late April to early May most had left or had been driven off by boaters. Late birds were: May 18, 1975; May 19, 1978; May 25, 1988; and May 17, 1997. One in breeding plumage lingered at Lake Springfield dam from June 8 - 13, 2008 (in the addendum) constituting the only summer record (photograph). All of these grebes arrived in **fall** in basic plumage. It should be noted that this grebe was almost always found on deep water, mainly at Lake Springfield, but on occasions at Sangchris and Buckhart and to a much lesser extent on ponds. The only foods I have seen them take were small fish. A few arrived in fall in September; see one above, September 12,

1978, and September 17, 1981. The majority of arrivals were in October, and migration usually continued at least into early **winter**. Most departures were in December, but in three years it was in January. High counts for fall were: 61, November 17, 1991; 122, November 18, 1996; 133, November 8, 1997; 121, November 27 & 43, December 6, 1999; 170, November 12, 2002; 63, December 2, 2004 and 102, October 25, 2006. Nearly all of these grebes recorded in the winter months were either late fall or early spring migrants. Once in a while they wintered since Lake Springfield never completely froze over. I recorded the following wintering birds: January 27 - February 7, 1992-93, 1-2, December 31 – January 31, 1999-00, and January 19 – February 1, 2003-04. Most Horned Grebes winter on the coasts of North America. The subspecies in North America is *P. a. cornutus*.

Documentation: Photographic: IL. Sangamon Co., several photos at Lake Springfield, HDB – on file ISM.

Highest # Days/Season

Spring46 (1999)Fall52 (1983 & 2006)Winter52 (1998)

Highest # Birds/Season

Spring794 (1998)Fall1828 (1996)Winter392 (1999)

Red-necked Grebe

Podiceps grisegena

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	17/17 (5)	0/0	33/28 (6)	21/21 (6)	71/66
Average/day	1.0		1.18	1.0	1.08
Average/season	3.40		5.50	3.50	

Status: Rare Fall Migrant and Very Rare Spring Migrant and Winter Resident

Dates:

- Spring: Earliest arrival = February 10, 1978 adult North side Sewer Pond Average arrival (7 years) w/range February 10 – April 16 = March 19 Average departure (4 years) w/range April 8 – 26 = April 15 Latest departure = April 26, 1996 adult Lake Springfield
- Fall:Earliest arrival = October 14, 2009 juvenile Lake Springfield
Average arrival (6 years) w/range October 19 November 21 = November 4
Average departure (7 years) w/range October 20 December 26 = November 25
Latest departure = December 26, 1974 juvenile Lake Springfield (also see WR)

With approximately 21 records, eight in spring, eight in fall, and five in winter, this large grebe was difficult to find in the county (see Table 5). This was probably due to the major flight paths being to the north along the Great Lakes. Also human-related disturbances on Lake Springfield might cause these divers to move on sooner, which makes them less likely to be seen. The first record occurred December 19 - 26, 1974, a juvenile at Lake Springfield. This grebe was observed less (about half the numbers) in spring than fall, which probably had to do with length of stay. Another early **spring** arrival was February 22, 1986. There were no high counts for spring. Late spring departures included April 16, 1979. It breeds west and northwest of the Great Lakes in Canada, the northern US and Alaska. Other early arrivals in fall were October 19, 1987 and October 22, 1976. Records of multiple grebes in fall were: two juveniles, October 24, 1976 and three juveniles, November 14 & 16, 2006 at Lake Springfield. Some winter records were: the 1974 record (above); adult, Lake Springfield, December 23, 1984; immature, Lake Springfield, January 5 – 10, 1986; adult, Sangchris, January 16 – 24, 1999; adult, Lake Springfield, December 29, 2007 – January 2, 2008. Some of these could be late fall migrants. This grebe was also seen at ponds such as the north side sewer pond February 10 - 15, 1978; Cinder Flats February 22, 1986; and Lick Creek marsh April 16 – 26, 1996. Several of the grebes were seen taking fish; otherwise they rested on the water or dived. Occasionally they were seen in flight showing two white patches in the wings. In the addendum, one adult was at Lake Springfield December 29, 2007 – January 2, 2008; a juvenile was at Lake Springfield November 22 – 27, 2008; and another juvenile was at Lake Springfield October 14 – November 1, 2009. The subspecies in the US is P. g. holboellii. The main wintering areas are the Pacific and Atlantic Coasts of North America.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

<u>Highest # Days/Season</u>		Highest # Birds/Seas	<u>on</u>
Spring	8 (1976)	Spring	8 (1976)
Fall	10 (2006)	Fall	14 (2006)
Winter	7 (1999)	Winter	7 (1999)

Table 5. Records of Red-necked Grebes in Sangamon County

1974	juvenile at Lake Springfield, December 19 – 26
1975	alternate plumage adult at Lake Springfield, April 4 – 8
1976	adult in non-breeding plumage, Lake Springfield, March 19 – April 9, juvenile, October 22, then two juveniles October 24 & one juvenile October 30, all at Lake Springfield
1977	adult, Lake Springfield, March 14
1978	adult, north sewer pond, February 10 - 15
1979	adult, Lake Springfield, April 15-16
1984	first winter, Lake Springfield, December 23
1986	immature, Lake Springfield, January 5 – 10 immature, Cinder Flats, February 22
1987	juvenile, Lake Springfield, October 19 – 20
1993	juvenile, Lake Springfield, November 2 – 6
1996	adult, Lick Creek Marsh, April 16 – 26
1999	adult, Sangchris, January 16 – 24 adult, Lake Springfield, November 21 – 29
2003	adult, Lake Springfield, November 10
2006	juvenile, November 12 & three November 14 & 16, & one December 10, all at Lake Springfield
2007-08	adult, Lake Springfield, December 29 – January 2
2008	first winter, Lake Springfield, November 22 – 27
2009	juvenile, Lake Springfield, October 14

Eared Grebe

Podiceps nigricollis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	80/34 (14)	0/0	274/166 (31)	123/88 (10)	477/288
Average/day	2.35		1.65	1.40	1.66
Average/season	5.71		8.84	12.30	

Status: Occasional Fall Migrant and Rare Spring Migrant and Winter Resident

Dates:

- Spring: Earliest arrival = March 4, 2005 Buckhart Average arrival (12 years) w/range March 4 – May 19 = April 17 Average departure (11 years) w/range March 27 – May 29 = April 30 Latest departure = May 29, 1978 Cinder Flats
- Fall: Earliest arrival = August 5, 1988 adult Sediment Retention Average arrival (32 years) w/range August 5 – December 5 = September 26 Average departure (28 years) w/range October 12 –December 18 = November 17 Latest departure = December 18, 1975 & 2000 one & three Lake Springfield (note: also see winter records)

A small grebe from the western US that had a peaked crown, thin upturned bill, and thin neck. I first recorded it November 12, 1972, and it was fairly regularly seen in fall (33 years) through the study. The Eared Grebe was much less regular in **spring**, occurring in only 14 years, and seen first May 19, 1978 on an overflow of the South Fork. Other early spring arrivals were March 19, 2001 and March 16, 2006. Many of the higher counts, however, have been found in spring: 10, May 12, 1981; 8, April 16, 1993; 10, April 24, 2002; and 6, April 23, 2006; all at Lake Springfield and all in breeding (alternate) plumage except one April 16, 1993. Some of the earlier birds in March and April were still in basic plumage. A few of the wintering birds were seen into spring usually until March. These grebes sat on the water in tight flocks and in late spring boats and jet skis going at high speed could kill them because they did not fly easily. In early spring when this grebe and the Horned Grebes were in transitional plumage, they could be confusing and identification should be based on shape of bill, head and neck. Another late spring departure was May 14, 1980. None were recorded in summer. Eared Grebes breed in western North America, although there was one breeding record from northern Illinois. Fall migrants were usually young of the year or adults in basic plumage, but two were in alternate plumage on August 28, 1979 and August 5, 1988. Occasionally, they flocked with coots as one did November 6, 1976. Other areas where I had seen these grebes were sewer ponds, Sangchris, Buckhart, Sediment Retention, and Cinder Flats. They sometimes vocalized, and were heard in October and November. Arrival dates in fall were scattered from August to December, with 3 in August, 19 in September, 6 in October, 3 in November, and 1 in December. High counts for fall were: 6, November 24, 1992; 5, November 30, 2000; 5, September 9, 2001; and 5, October 2, 2003. This did not seem like a **winter** bird, but rarely they stayed into December – February, and usually hid in the warm water ditch at Lake Springfield under boat houses. Four wintered at Lake Springfield: December 3, 1991 – February 21, 1992; December 4, 1992 – February 6, 1993;

December 16, 1997 – February 22, 1998; December 12, 1998 – February 18, 1999. The high count for winter was 5, December 6 -9, 2000. This grebe regularly winters from British Columbia south to Guatemala. The subspecies in North America is P. n. californicus.

Documentation: Photographic: IL. Sangamon Co., HDB - on file ISM.

Highest # Days/Season Spring 6 (1992 & 2006) Fall 22 (1992) Winter 25 (1992)

Highest # Birds/Season Spring 17 (1993) 50 (1992) Fall Winter 35 (2000)

Western Grebe

Aechmophorus occidentalis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	33/29 (7)	2/2 (1)	32/28 (7)	3/3 (2)	70/62
Average/day	1.14	1.0	1.14	1.0	1.13
Average/season	4.71	2.0	4.57	1.50	

Status: Rare Migrant

Dates:

- Spring: Earliest arrival = March 25, 1991 Lake Springfield Average arrival (7 years) w/range March 25 – May 23 = April 30 Average departure (5 years) w/range April 22 – June 4 = May 16 Latest departure = June 4, 2000 Lake Springfield
- Fall: Earliest arrival = October 13, 2000 two Lake Springfield
 Average arrival (8 years) w/range October 13 December 5 = October 30
 Average departure (7 years) w/range October 18 December 9 = November 8
 Latest departure = December 9, 1984 Lake Springfield

This large grebe had a long swan-like neck and a greenish-yellow bill. There were 18 records; seven in spring, one in summer, nine in fall, and one into winter (see Table 6). All were from Lake Springfield except the latest record was from Sangchris on April 9, 2006. Spring birds were probably overmigrants from the west coast, which migrated east to the Great Plains to breed. On two occasions in spring two Western Grebes were present. In 1977, two preformed a nuptial display in which they paddled upright together around the main basin of Lake Springfield on May 6 – 7 (see Bohlen, 1977); and in 2000 there were two May 22 - 24. Some grebes stayed several days, but one in 1991 was present for 29 days (March 25 – April 22). On May 13, 1994 one was seen to catch three fish in 10 minutes. One grebe was seen into **summer** on June 3 & 4. 2000 and may have been a lingering bird from spring. Fall grebes were more difficult to explain, but were probably migrants moving toward to the Gulf Coast. There were two birds October 13 -17, 2000, but all of the other fall records were of single birds. Almost all of the fall records were of multiple days with most birds being seen in October and November. There were two into winter: December 5 - 9, 1984 and December 2, 2000. Sometimes, these grebes were with other birds e.g. Ruddy Ducks on October 18, 1983 or coots on October 21, 1976. After 2001 this species was not found at Lake Springfield probably due to increased boat traffic, fishing tournaments, and jet skis. Also, there were no addendum records from 2007-2010. Most of these grebes winter along the Pacific Coast.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

<u>Highest # Days/Season</u>	Highest # Birds/Season
Spring 18 (1991)	Spring 18 (1991)
Summer 2 (2000)	Summer 2 (2000)
Fall 8 (2000)	Fall 12 (2000)
Winter 2 (1984)	Winter 2 (1984)

Table 6. Records of Western Grebes in Sangamon County 1970–2006 (all at Lake Springfield unless otherwise noted)

1973	One	November 3 – 12
1974	One	April 22
1976	One	October 18 – 21 and one, October 27 – 28
1977	Two	May 6 – 7
1978	One	October 25 – 26
1983	One	October 18 – 25
1984	One	December 5 – 9
1985	One	November 16
1991	One	March 25 – April 22
1994	One	May 13 – 19
2000	Two	May $22 - 24$ and one, June $3 - 4$, and two, October $13 - 17$, and one, November 23 – December 2
2001	One	May 23 – 25, and one, October 16 – 18
2006	One	April 9 Sangchris

Clark's Grebe Aechmophorus clarkii

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	2/2 (1)	0/0	0/0	0/0	2/2
Average/day	1.0				1.0
Average/season	2.0				

Status: Very Rare Spring Migrant

Dates: One Record: April 22 & 23, 1998 Lake Springfield.

I first saw this grebe from a long distance and thought it could be a hybrid. The next day, I had a much better and closer view from the backyard of a lake resident (this points out the difficulty of viewing Lake Springfield, which was mostly surrounded by private property). This large grebe had an obvious orange bill and some white above the eye and more contrast between the black cap and lighter gray back and flanks. It was probably in non-breeding plumage making the eye character less noticeable, when first seen. In contrast a Western Grebe would have a yellowish-green bill. This grebe swam and dived on Lake Springfield for at least two days. It was first seen by M. Deaton. This was the only record for this species in the study, while in comparison there were 18 records for the Western Grebe. Clark's Grebe breeds as close as South Dakota and winters along the Pacific coast.

Documentation: Drawing & written description : IL. Sangamon Co., HDB – on file ISM.

American White Pelican

Pelecanus erythrorhynchos

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	3570/80 (11)	136/10 (3)	483/53 (11)	2/2 (2)	4191/145
Average/day	44.63	13.60	9.11	1.0	28.90
Average/season	324.55	45.33	43.91	1.0	

Status: Uncommon Migrant, Occasional Summer Resident and Very Rare in Winter

Dates:

- Spring: Earliest arrival = February 5, 2008 Lake Springfield Average arrival (10 years) w/range March 8 – April 20 = March 23 Average departure (11 years) w/range March 13 – May 31 = April 25 Latest departure = May 31, 2003 eighty Lake Springfield
- Fall: Earliest arrival = June 6, 2004 thirteen Cinder Flats (or SR?)
 Average arrival (11 years) w/range June 6 November 3 = September 9
 Average departure (12 years)w/range September 25–December 22 = November 2
 Latest departure = December 22, 2001 south end Lake Springfield

This very large white bird with black wing tips and huge bill did not look like it belonged here, but dramatically increased in the county during the study. My first record of American White Pelican was October 26, 1980 off Marine Pt. Up to 1990 all records were in fall, and numbers were one's and two's. In 1990 spring records started with an adult at Sangchris April 20 and one was seen at Lake Springfield on October 19. Numbers were low and intermittent through the 1990's, but a flock of eleven was at Lake Springfield from September 13 - October 4, 1993 and 14 were at Lick Creek, March 30 - 31, 1998. Some of the higher numbers occurred in the addendum. Higher numbers did not occur until spring 2000 with 40, March 17. Other high spring counts were: 50, March 20, 2001; 80, May 31, 2003; 70, April15, 2004; 220, April 5, 2006; and 170, May 16, 2007. These birds sat on the water in very tight groups and usually tried to get close to land at the islands or the warm water ditch at Lake Springfield. By 2001, there were pelicans in summer with records: 52, July 9, 2001; 13, June 6, 2004; 5, June 26, 2005; and 12, June 28, 2007. These birds were very early fall migrants or non-breeding wanderers. Pelicans breed in the northern Great Plains [and northwestern Illinois by 2009]. Birds in alternate plumage had a knob on the bill and the earliest I had noted it was March 30 but birds by June 26 did not show it. What had started as a fall phenomena became more regular and more numerous in spring, with spring numbers higher than fall (7.4 to 1). When migrating, pelicans use thermals much like raptors, and their soaring was quite spectacular. High counts for fall were 40, September 28, 2003 and 80, October 4, 2003. Other late fall records were 2, November 20, 1984 and 1, November 30, 2004. The winter occurrences were actually late fall migrants, though pelicans had the capacity to stay the winter. The other late record was December 17, 2002 at Lake Springfield. These birds continued with high numbers into the addendum (2007 - 2010), and arrived earlier in spring, note the earliest arrival above. American White Pelicans usually winter along the Gulf Coast and Mexico.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 607234 \bigcirc , 1 mi west Illiopolis, November 5, 1980, wt. = 2200 gms, ovary = 23 mm.

Highest # Days/Season

 Spring
 33 (2006)

 Summer
 5 (2001)

 Fall
 17 (1993)

 Winter
 1 (2001 & 2002)

Highest # Birds/Season

Spring2433 (2006)Summer103 (2001)Fall145 (1993)Winter1 (2001 & 2002)

Neotropic Cormorant

Phalacrocorax brasilianus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	0/0	0/0	1/1 (1)	0/0	1/1
Average/day			1.0		1.0
Average/season			1.0		

Status: Very Rare Fall Migrant

Dates: One Record: subadult? Lake Springfield, September 2, 2005.

Since the original Illinois record in 1878, several of these cormorants from the western Gulf Coast were recorded in the state, but this was the only Sangamon County record. Noted were small size, longish tail, white mark on back edge of bill, dark lores, and no orange around the eye or on the throat. After viewing and taking some initial photographs of this bird, I was maneuvering to get in better light, but the bird was chased off by a fisherman. The subspecies is presumedly the northern *P. b. mexicanus*. It apparently moves north with flocks of Double-crested Cormorants in the spring.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

Double-crested Cormorant

Phalacrocorax auritus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	69826/1035 (34)	536/209 (19)	29999/1672 (32)	775/339 (24)	101136/3255
Average/day	67.46	2.56	17.94	2.29	31.07
Average/season	2053.71	28.21	937.47	32.29	

Status: Very Common Migrant and Occasional Winter and Summer Resident

Dates:

- Spring: Earliest arrival = February 9, 1991 Sangchris (arbitrary due to WR) Average arrival (34 years) w/range February 9 – May 10 = March 23 Average departure (27 years) w/range April 28 – June 12 = May 21 Latest departure = June 12, 1992 Sangchris (arbitrary due to SR)
- Fall: Earliest arrival = July 5, 1991 Sediment Retention Average arrival (32 years) w/range July 5 – October 25 = August 21 Average departure (32 years) w/range October 28 – January 16 = December 3 Latest departure = January 16, 1998 Lake Springfield (arbitrary due to WR)

At the start of this study, the Double-crested Cormorant was present in very low numbers, and in fact, it went unrecorded in 1971 and 1973. The scarcity of this species, as well as most piscivores, was due to pesticide use, especially DDT. Slowly, the cormorant numbers came back about 1980. Spring arrival dates became earlier toward the last half (after 1981) of the study. Other early arrivals were February 14, 2004 and February 15, 2005. Cormorants migrated mostly diurnally, and flocks could be seen moving north in spring on good weather. The early flocks (March to mid-April) were almost all males, and later flocks were females and immatures. Unlike geese, the flocks were more unruly and silent, though they usually had a V-formation. Spring numbers were 2.3 times fall numbers for unknown reasons. On May 16, 2002 an aberrant all tan pale bird was at Lake Springfield. High counts for spring were: 155, April 16, 1991; 400, April 21, 1995; 600, April 18, 1999; 950, April 7, 2001; 800, April 7, 2006 and 1300, April 13, 2007. These birds roost in the trees on the islands off Marine Pt. Close views of breeding males reveal green eyes, blue eye-ring and bright blue gape making it a handsome bird. After 1988 most spring departures were in late May. It was not until 1984 that an immature occurred in summer on June 17 at the Cinder Flats, but another three years lapsed before they became regular in summer. Numbers jumped in 1998, but as of 2010 they still had not bred in the county, although they nest nearby in Illinois. The high count for summer was 21, June 18, 1998 at Sangchris. Birds at Lake Springfield at this season were chased off by boats and jet skis. Arrival in fall had become earlier and was usually in July by the end of the study (in 12 of 18 years after 1988). High counts for fall were: 75, October 17, 1983; 100, September 23, 1993; 245, September 30, 1997; 340, October 4, 2000; and 500, October 31, 2003. A usual sight in fall were cormorants in a dense flock fishing off Marine Pt. with gulls flying over them hoping to steal a fish. As early as 1975 cormorants were seen in early December, but none occurred in mid-winter until 1992 when they became regular in small numbers at Lake Springfield. Still, most years they were forced out by the weather later in the winter. High counts for winter were 12, December 12,

2001 and December 5, 2006. The nominate subspecies is found in the county, which mostly winters from Tennessee south to the Gulf Coast.

Documentation: Specimen = 2) IL. Sangamon Co., ISM# 661893 adult 3° , April 26, 2007, coll. by HDB, wt. = 6.5 lbs, testes = 28 mm, gizzard with 4 gizzard shad 10 – 14 centimeters; ISM# 603333 immature, Sangamon River, October 14, 1928, coll.by H. S. Bernett.

Highest # Days/Season

Spring83 (2001)Summer43 (2006)Fall116 (2006)Winter63 (2006)

Highest # Birds/Season

Spring10010 (2006)Summer175 (2001)Fall3204 (2006)Winter218 (2006)

American Bittern

Botaurus lentiginosus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	89/83 (33)	0/0	22/22 (17)	1/1 (1)	112/106
Average/day	1.07		1.0	1.0	1.06
Average/season	2.70		1.29	1.0	

Status: Occasional Spring Migrant, Rare Fall Migrant and Very Rare in Winter

Dates:

- Spring: Earliest arrival = March 29, 1977 Sangchris & 2007 Buckhart Average arrival (33 years) w/range March 29 – May 8 = April 15 Average departure (24 years) w/range April 15 – May 22 = May 4 Latest departure = May 22, 1973 Springfield
- Fall: Earliest arrival = August 31, 1991 Sediment Retention
 Average arrival (13 years) w/range August 31 October 24 = October 1
 Average departure (7 years) w/range October 23 December 17 = November 9
 Latest departure = December 17, 1973 Sangamon Co.

Now an Endangered Species, this was once a common heron in this area and probably nested in Sangamon County. I felt lucky to see one a year during the study, and this reflected the lack of marsh habitat in Sangamon County. It was recorded usually in April and May in spring, but there was one March 31, 1990 at the Sediment Retention as well as the March record above. It was not recorded in four springs (1970, 1988, 1993, 2005). Three migrating at dusk on April 10, 1995 at the Cinder Flats was the spring high count. I rarely startled this shy bird at Washington Park, the latest was April 12, 2006. On April 11, 2001, one was perched in the top of a tall tree at Adams Sanctuary, which had no water. On April 16, 1985, I watched a bittern for over one hour at the Cinder Flats, it caught a large frog, which it swallowed whole—head first. Other late spring departures all at Sangchris were: May 16, 1976; May 17, 1978; and May 15, 1989. Though the American Bittern breeds in Illinois, most migrants seen here breed further north, as far as central Canada. This heron was more difficult to find in **fall**, being seen in half the years (17) as spring (33). The August record at the Sediment Retention was unique, and this area had potential as a nesting place, except that the local dogs were allowed to run through the marsh. There were no high counts for fall, as I rarely saw more than one per year at this season. Most fall records were in September and October. Apparently, bitterns hit electric wires, since one was found north of Sangchris, November 1, 1980, standing in the road with a broken wing. Other late fall records were November 11, 1982 at the Berlin sewer pond and November 3, 1990 at the Sediment Retention. They can also get caught in traps set for mammals as the only winter record shows (see below). This species usually winters from the southern US to Central America.

Documentation: Specimens = 3) IL. Sangamon Co., ISM# 606057 \Diamond , December 17, 1973 coll.by T. Poludniak, caught in trap, testes = 6 mm; ISM# 606451 \Diamond , near Springfield, April 21, 1976 coll.by H. Holten: ISM# 607169 \heartsuit , Lake Springfield, April 6, 1980 coll.by M.George, wt. = 347 gms, ovary = 11 mm.

Highest # Days/Season

Spring	6 (1990)
Fall	4 (1970)
Winter	1 (1973)

Highest # Birds/Season

Spring	6 (1990 & 1995)
Fall	4 (1970)
Winter	1 (1973)

Least Bittern

Ixobrychus exilis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	37/33 (15)	30/23 (13)	18/16 (8)	0/0	85/72
Average/day	1.12	1.30	1.13		1.18
Average/season	2.47	2.31	2.25		

Status: Rare Migrant and Summer Resident (now extirpated?)

Dates:

- Spring: Earliest arrival = April 23, 1995 Cinder Flats Average arrival (15 years) w/range April 23 – May 26 = May 14 Average departure (7 years) w/range May 15- 29 = May 22 Latest departure = May 29, 1991 two Cinder Flats (also see SR)
- Fall: Earliest arrival = August 10, 1987 Cinder Flats (arbitrary due to SR) Average arrival (4 years) w/range August 10 – September 2 = August 20 Average departure (8 years) w/range August 10 – October 1 = September 8 Latest departure = October 1, 1973 ♀ tv tower kill east Springfield

Sadly, this small heron was last recorded in Sangamon County on April 23, 1995, but it could possibly still occur during migration. This bittern was probably common before the marsh areas and sloughs in the county were drained, which was mostly done prior to the study. The main reason for this Illinois Endangered Species demise in this county was additional disturbance of remaining marsh habitat. The breeding habitat of this bittern could have been provided at the shallow ends of either Sangchris or Lake Springfield. The species was quite secretive, usually seen in cattails where it "froze" when found. However, one was in the open at the Cinder Flats May 20, 1981. The only other early record was April 29, 1985 at the Cinder Flats. High counts for spring were only two: May 9, 1987 at Williamsville; May 10 & 14, 1991 at Sangchris; and May 29, 1991 at the Cinder Flats. Most spring migration tended to be late and arrival was usually at the breeding areas. I remember one cool morning at Sangchris, I knew the timing was correct (May 19, 1993) and waited with my scope trained where the sun hit the cattails and there appeared the bittern. High counts for summer were 3, July 20 & 27, 1985. Breeding locations during the study were Sangchris (1971-1992), Lick Creek (1978 – 1982), South end of Lake Springfield (1985 –1987), Cinder Flats (1984-1994), Williamsville (1985), and Sediment Retention (1990). Now, none of these areas have bitterns, mostly due to disturbance of humans with boats and pet/ predator disturbances. The only real evidence of nesting was young noted between July 20 and August 16. Fall migration was very difficult to detect, but one was feeding with Mallards at a shallow slough near Riverton on September 20, 1981. Also note below they were victims at tv tower kills. The only high count for fall was two on August 21, 1993 at Sangchris. In fall, they sometimes landed in standing cornfields and of course were difficult to find. They winter from the extreme southern US to Columbia. The subspecies is the eastern nominate form.

Documentation: Specimens = 3) IL. Sangamon Co., ISM# 605767 \bigcirc , tv tower, October 1, 1973, coll. by HDB, wt. = 76.9 gms, ovary = 7 mm, gizzard with aquatic plants; ISM# 607326 \bigcirc , tv tower, September 3, 1981, coll. by HDB, wt. = 91.5 gms, ovary = 6 mm; ISM# 608011 \bigcirc southwest Spfld, June 5, 1985, coll.by VK, wt. = 49.7 gms, testes = 12 mm, gizzard with small minnow (the \bigcirc has a glossy greenish-black crown and back, while the $\bigcirc \bigcirc$ have a reddish-tawny brown crown and back).

Highest # Days/Season

 Spring
 5 (1984 & 1985)

 Summer
 6 (1985)

 Fall
 5 (1993)

Highest # Birds/Season

Spring6 (1991)Summer11 (1985)Fall6 (1993)

Great Blue Heron

Ardea herodias

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	12397/1754 (37)	12122/1013 (35)	25639/2950 (37)	7172/899 (280	57330/6616
Average/day	7.07	11.97	8.69	7.98	8.67
Average/season	335.05	346.34	692.95	256.14	

Status: Common Migrant and Summer Resident and Uncommon Winter Resident

Dates:

Spring: Earliest arrival = February 17, 1977 Lake Springfield Average arrival (29 years) w/range February 17 – April 20 = March 12

Fall:Average departure (25 years) w/range October 23 – January 31 = November 28Latest departure = January 31, 1996 Lake Springfield

Since the start of this study, this heron had undergone a dramatic change in status (see Figure 6). In the early 1970's it was a sparse migrant with modest post-breeding dispersal and rare in winter. Pivotal dates for change of status were 1983 – first indications of breeding, 1987 – numbers staying all winter, 1989 – 1990 - dramatic increases in numbers in all seasons. These changes in status were accompanied by changes in behavior such as the herons allowing close approach by humans, which facilitated feeding at crowded areas such as Lake Springfield, and fishing by landing on deep water, which was first noted on May 17, 1999. Though first arriving spring migrants had been obscured by wintering birds since around 1990, migrants could still be seen flying high over Lake Springfield usually in March and April and mostly at dusk. Also, some were seen migrating at Sangchris, March 12, 2003. High counts for spring were 36, May 25, 1989; 26 April 4, 1992; 37, May 23, 1999; 73, April 29, 2000; 41, March 30, 2002; and 52, May 31, 2003. When migration was discernable, spring departure was usually in late May. Even though Eifert (1940) wrote of this heron "nests in river woods", by 1970 when I arrived, there was not any nesting in the county. This made me believe that they were recovering from the pesticide DDT. The BBS (31 years) showed numbers increasing. I saw the first one in 1982 on that survey and recorded them in 13 years, with the most 15 in 1999. Summer herons occurred as early as 1976 in this study, but I did not suspect breeding until there was a pair east of Rochester in summer 1983. Summer numbers escalated in 1986, plus an immature was seen at the south end of Lake Springfield on June 15, 1987. In 1996, nests were noted north of Sangchris (but just in Christian Co.) and possible nesting northwest of Carpenter Park. By 1997, I was seeing Great Blue Herons in all sections of the county. In 1998-99, I confirmed a colony along the South Fork. The Vigal Road (Horse creek) colony and the Sandbar (Mechanicsburg Road) colony were found in 2000 and Reyhan colony 2005 (see Figure 7). Another area on private land northwest along the Sangamon River had a reported colony. [They were nesting in Carpenter Park by 2010]. Almost all platform nests were placed near the top of large sycamore trees, and viewing was best early in the season since the thick vegetation concealed them in summer. Great Blues returned to their nests very early: February 25, 2000; February 20, 2002; February 19, 2003; February 4, 2005; and January 29, 2006. They were sitting on the nests by March 28, 2004, but some continued sitting at least until April 14, 2002. Young were noted in the nest June

8, 2001, May 23, 2002, and July 8, 2005. I usually saw fledged young at Lake Springfield in early June. Many adults came to the lake to feed and turf battles were frequently seen for favorite fishing spots. The commute of these adults between the lake and the nesting colony became a common sight. Occasionally, this heron's long neck got tangled in monofilament fishing line, and I had seen 3-4 hanging dead in this manner. Also, one hit a tower south of Springfield and dangled there for months until it rotted away. Numbers were boosted in late summer by young and post-breeding dispersal with high counts: 66, July 24, 1989; 103, July 18, 1998; 93, June 16, 2002; and 67, June 4, 2006. The numbers in fall were 2.1 times more than spring. The high counts in fall were: 43, August 22, 1981; 65, September 5, 1988; 98, August 1, 1998; and 119, August 14, 2002. Numbers diminished by October and November, although I had counts of 50, October 18, 1990 and 39, November 25, 1999. Some crepuscular migration could be observed in fall and there was a flock of eight at noon over Lake Springfield September 24, 1991. Old records (one each in 1946 and 1948) and my early records (only 8 herons from 1970-1984) show that this heron formerly was quite rare in winter. Then, it became fairly numerous with high counts: 30, December 13, 1990; 33, February 5, 1999; 40, January 31, 2003; 60, December 18, 2005; 64, February 5, 2005; and 43, January 28, 2006. In very cold weather, many herons stayed below the dam or near the warm water discharge at Lake Springfield. In the winter of 1995-96, they were seen standing on the ice with the gulls. When the temperatures were mild, they could be found along the Sangamon River and other wet areas. Odd plumaged Great Blue Herons seen were one with much white in the neck (wurdemann's ?), July 8, 1991 at the Sediment Retention; one of 60 that was darker and larger July 15, 1998 at Buckhart; one mostly white (photograph on file ISM) June 30 and July 2 – 4, 2003 at the Cinder Flats; one mostly white bird April18, 2005 at Buckhart; and one with a much larger bill that was all orange (photograph on file ISM) April 24, 2005 at Cinder Flats. The subspecies in the county is probably A. h. herodias, but some that appear larger and darker could be A. h. wardi, and the dividing line between the two subspecies apparently runs through Central Illinois. More specimens need to be analyzed to determine the breeding subspecies in the county.

Documentation: Specimens = 7) IL. Sangamon Co., $\bigcirc \bigcirc \bigcirc = 2$, northeast Spfld & Lick Creek, April 29 – October 6, wts. = 2097.9 – 2479.9 gms, testes = 10.5 – 28 mm; $\bigcirc \bigcirc = 4$, Spfld & south Spfld & 5 mi north Spfld & Salisbury, March 12 – December 30, wts. = 1542.5 – 1973.1 gms, ovaries = 13 – 24 mm; unsexed = 1, LSpfld, August 30, wt. = 1912.0 gms.

Highest # Days/Season

Spring92 (2000, 2004, 2006) maxSummer61 (6 years 2000 – 2006) maxFall122 (2001, 2004, 2006) maxWinter83 (2003)

Highest # Birds/Season

Spring	1547 (2000)
Summer	1627 (2002)
Fall	2319 (1990)
Winter	1054 (2005)

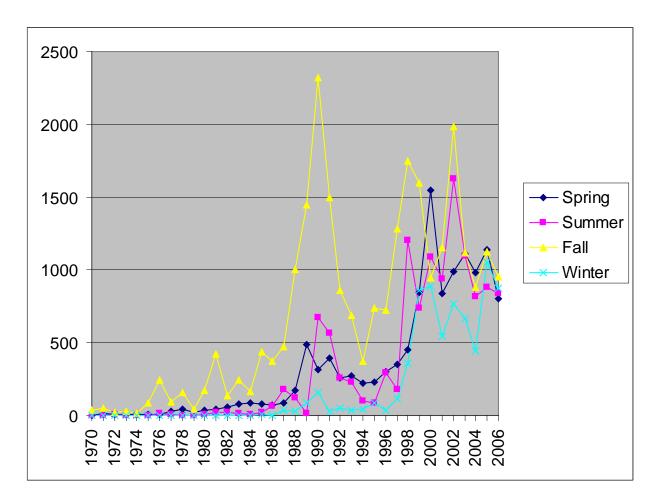


Figure 6. Great Blue Heron Numbers by Season.

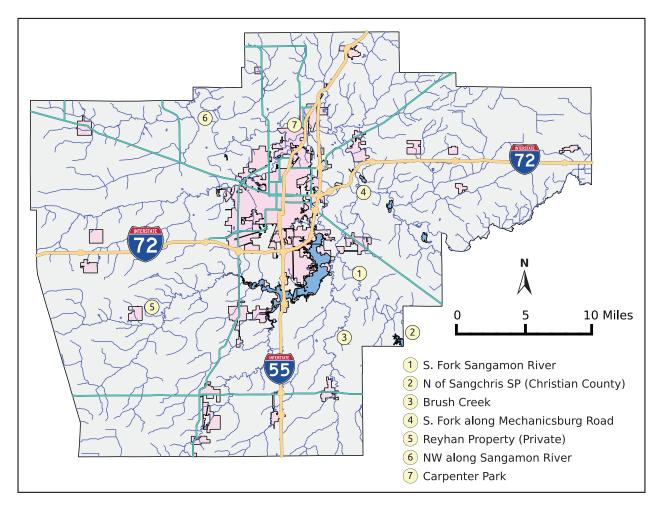


Figure 7. Map of Great Blue Heron Breeding Colonies

Great Egret

Ardea alba

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1760/574 (37)	1195/277 (25)	7273/973 (33)	3/3 (2)	10231/1827
Average/day	3.07	4.31	7.47	1.0	5.60
Average/season	47.57	47.80	220.39	1.50	

Status: Uncommon Spring Migrant, Common Fall Migrant, Occasional Summer Resident and Very Rare Winter Resident

Dates:

- Spring: Earliest arrival = March 26, 1994 & 2003 Lake Springfield Average arrival (34 years) w/range March 26 – April 27 = April 5 Average departure (35 years) w/range April 23 – June 21 = May 20 Latest departure = June 21, 2000 ten LSpfld (arbitrary due to SR)
- Fall: Earliest arrival = June 20, 1992 Cinder Flats (arbitrary due to SR) Average arrival (32 years) w/range June 20 – September 8 = July 22 Average departure (33 years) w/range September 1 – December 12 = October 25 Latest departure = December 12, 1997 south end Lake Springfield

This large white heron had made a remarkable comeback in Sangamon County that closely paralleled the Great Blue Heron recovery (most herons probably had to overcome the effects of DDT), but was somewhat later and less dramatic (see Figure 8). Most spring arrivals were in April, but in 10 years it was in March, with March 28, 1971 & 2000 other early arrivals. In the early 1970's, because Great Egrets were much more scarce, there were two years the arrival was in May. High counts in spring were: 14, April19, 1989; 16, April 9, 1994; and 21, May 23, 2000. Numbers in spring were low until 1989 and in fall until 1988, while summer numbers did not double until 1993. Summer occurrences of this egret started in 1972, but these were postbreeding migrants in July. The first June record was June 2, 1984 at Marsh Road. In subsequent years, most summer numbers were post-breeding birds. Plus, spring migration was by then extending into June i.e. 2-5, June 12 – 19, 1989 and 9, June 5, 1990. By 1998, I suspected breeding, as a few birds were staying all summer. Then in 2002 an adult was seen on a nest at the heron colony along the South Fork, even though no young were seen because the thick vegetation concealed most of the activity at this colony. An adult was carrying nest material May 28, 2006. Numbers continued to increase during the breeding season with 17, June 20, 2000 and 25, June 25, 2005. Fall numbers were higher than spring (4.1 to 1), plus most summer numbers could be added to fall. This heron formed roosts near feeding areas such as near Marine Pt. (1997 and 2005 - 2006) and Sangchris (2003). There were 122 roosting at Marine Pt. on August 30, 2006. Occasionally, flooding at Illinois Rt. 29 bridge (north) produced a good feeding area, and as a consequence 169 were seen there August 11, 2002. Also, drying ponds and sloughs provided dying fish, which attracted egrets, like at Riverside Park when 84 were seen July 25, 2006. I noted an egret landing on deep water to catch a fish at Lake Springfield July 3, 2006. There were two late records into December, one at Sangchris December 1& 2, 1989 and one at the south end of Lake Springfield December 12, 1997. However, one wintered for the first time at Lake

Springfield, mostly at the dam and warm water ditch, December – February, 2008-09 and another (possibly the same bird) was present December 16 – January 7, 2009-10. The Great Egret regularly winters from the Gulf Coasts south to South America. The subspecies in the eastern US is *A. a. egretta*.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

Highest # Days/Season	Highest # Birds/Season		
Spring 53 (2000)	Spring 459 (2000)		
Summer 49 (2006)	Summer 364 (2006)		
Fall 90 (2006)	Fall 1971 (2002)		
Winter 2 (1989)	Winter 2 (1989)		

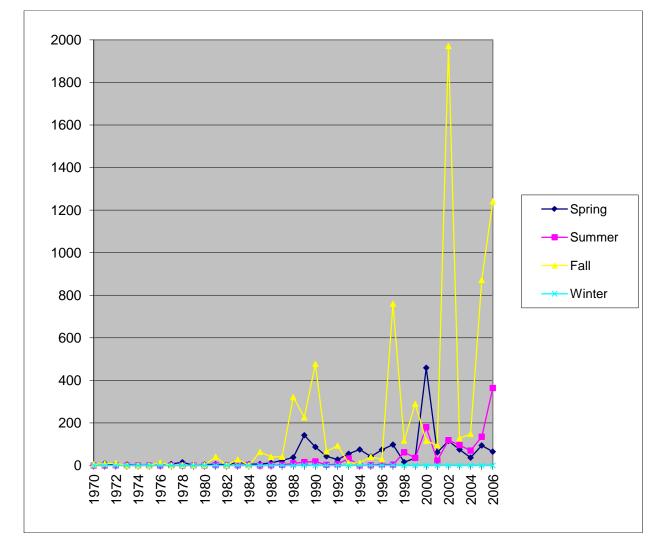


Figure 8. Great Egret Numbers by Season.

Snowy Egret *Egretta thula*

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	57/47 (16)	29/25 (11) mig	177/90 (15)	0/0	263/162
Average/day	1.21	1.16	1.97		1.62
Average/season	3.56	2.64	11.80		

Status: Occasional Spring Migrant and Post-breeding Dispersal Migrant in Summer and Fall

Dates:

- Spring: Earliest arrival = March 29, 1998 Lake Springfield Average arrival (16 years) w/range March 29 – May 22 = April 27 Average departure (17 years) w/range April 8 – June 11 = May 19 Latest departure = June 13, 2000 adult Lake Springfield
- Fall: Earliest arrival = June 22, 1986 adult Cinder Flats
 Average arrival (18 years) w/range June 22 August 20 = July 29
 Average departure (16 years) w/range July 29 October 6 = August 25
 Latest departure = October 6, 2002 Cinder Flats

An all white, small heron that had a black bill and legs and a yellow cere and feet. Juvenile Snowy Egrets were a little more difficult to distinguish from other herons when they had vellow on the rear edge of the legs and the bill was not totally black. This heron had made somewhat of a come back, but earlier records before this study were scant and not documented. The first record for the study was in spring on April 13, 1977 at the south end of Lake Springfield. The second record was in summer on June 11, 1978 at Lake Springfield (non-breeding), and the next, a fall record, on August 7, 1979 a juvenile at the Cinder Flats. Then, this egret was not recorded for six years, but from 1986 to 2010, though not numerous, it was seen every year except 1988. Other early spring arrivals besides the one above were: April 5, 1986 Cinder Flats; April 3, 1995 Lake Springfield; April 3, 1999 Sangchris. High counts for spring were only two: May 13 – 18, 2000; April 16, 2002; and May 30, 2006. There were nesting birds in Illinois, but only in Madison and St. Clair Counties, and this heron was considered an Endangered Species in the state. The spring birds that occurred here were either overmigrants or ones that nested north or west of Illinois. In summer they were still wandering in June, though most of these were late spring migrants: June 11, 1978 Lake Springfield: June 8, 1990 Sediment Retention; June 10, 2000 Lake Springfield; and June 10, 2007 Lake Springfield. Post-breeding dispersal started in late June or July and many of these were juveniles. There were eight years with 18 records in July, three of which were of two birds (July 28 & 30, 1993 and July 26, 2002). High counts for fall were: 5, August 20, 1991; 6, August 4, 2002 and 13, August 11, 2002 (2002 was the biggest influx ever). Other late departure dates included: September 26, 1986; September 30, 2008; and September 22, 2009. The only food seen taken by this heron was fish, but it had a distinctive feeding habit of darting around in quick, jerky motions. Also, I saw hover fishing in flight by three immatures on August 9, 1998 at Clear Lake. The Snowy Egret winters from the Gulf Coast south to South America. The nominate subspecies of eastern North America is found the county.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

Highest # Days/Season

Spring12 (2000)Summer6 (1990)Fall30 (2002)

Highest # Birds/Season

Spring16 (2000)Summer6 (1990)Fall102 (2002)

Little Blue Heron

Egretta caerulea

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	87/75 (30)	491/160 (27)	1123/355 (32)	0/0	1701/590
Average/day	1.16	3.07	3.16		2.88
Average/season	2.90	18.19	35.09		

Status: Occasional Spring Migrant and Uncommon Irregular Post-breeding Dispersal Migrant in late Summer and Fall

Dates:

- Spring: Earliest arrival = March 24, 1982 adult Cinder Flats Average arrival (30 years) w/range March 24 – May 23 = April 23 Average departure (24 years) w/range April 23 – June 14 = May 13 Latest departure = June 14, 1991 immature Sediment Retention
- Fall: Earliest arrival = June 30, 1998 three im. Sangamon River east Average arrival (33 years) w/ range June 30 – August 30 = July 19 Average departure (34 years) w/range July 22 – November 3 = August 30 Latest departure = November 3, 1998 immature near Sangchris

Most Little Blue Herons that arrived in **spring** were in adult plumage, and since they did not breed north of here they must have been overmigrants or wandering birds. Some of these herons were in immature (white) or calico plumage (blue and white) and were non-breeding. Other early spring arrivals were two adults, April 2, 1994 at the south end of Lake Springfield and an adult April 5, 2005 at Nipper Prairie. This heron was not recorded in seven springs. Usually seen as single birds in spring, the five adults April 15, 1981 at Sangchris and two adults and three immatures May 11, 1999 at Lake Springfield were the highest counts. Where these spring birds went after they left the county remains a mystery, but presumably back south. One adult at Sangchris stayed 15 days from April 15 – May 2, 1993. They could appear at almost any pond such as the adult at Washington Park on April 16, 1975. Very rarely, one was present in summer such as an adult June 19, 2000 at Lake Springfield. This heron does nest in Southern Illinois especially along the Mississippi River. In late summer and **fall**, these herons showed postbreeding flights consisting mostly of juveniles (see Figure 9). Other early fall (post-breeding) arrivals were immatures July 1, 1991, July 5, 1999 and July 4, 2000. The flights were variable in numbers of birds and it was not recorded in 1970, 1973, and 1974. The major years (over 100 birds) during this study were 1976, 1988, 1990, 1991, 1998, and 2002. Other years where numbers were fairly high (over 40 birds) were 1989, 1993, 1996, 1997, 1999, and 2004. Numbers were lower near the end of the study. A very young bird (photograph on file ISM) at Buckhart July 5, 2004 was white, but had brown streaks on the crown with sprigs of feathers forming a topknot. Also, it had the usual bluish wing tips of juveniles. High daily counts were: 20 immatures, August 15, 1976; 21, August 24, 1988; and 48 (43 immatures and 5 adults) July 15, 1998. Most birds had migrated south by the end of August or by mid-September, but one immature at the Sediment Retention, September 30, 1988 was late. Later still was an immature

standing in a field with gulls near Sangchris on November 3, 1998. This heron winters from the Gulf and southern Atlantic coasts to Mexico and the West Indies.

Documentation: Photographic: IL. Sangamon Co., HDB on file ISM.

Highest # Days/Season

Spring15 (1993)Summer15 (1991)Fall38 (1988)

Highest # Birds/SeasonSpring15 (1993)Summer138 (1998)Fall195 (1976)

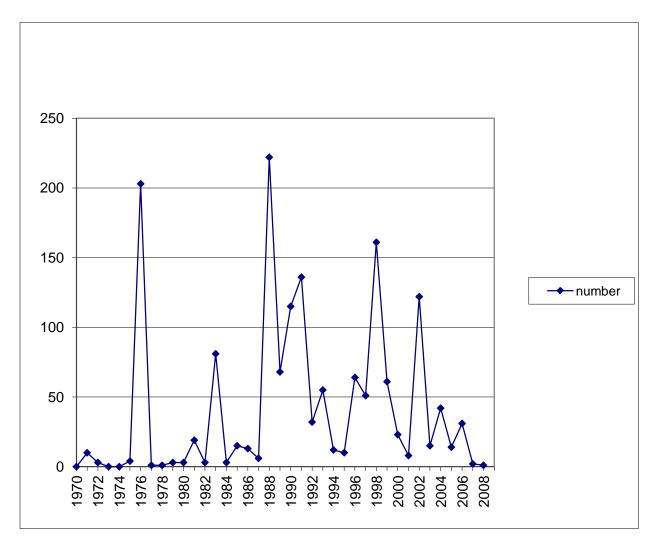


Figure 9. Dispersal Numbers (Summer + Fall) of Little Blue Herons in Sangamon County

Tricolored Heron

Egretta tricolor

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1/1 (1)	1/1 (1)	2/2 (1)	0/0	4/4
Average/day	1.0	1.0	1.0		1.0
Average/season					

Status: Very Rare Migrant

Dates: Three Records: non-breeding adult, Marine Pt., October 4 - 5, 1976; second year, Marine Pt., July 31, 1998; second year, Cinder Flats, May 30, 2001.

This was a southern, mainly coastal species that wandered into the county. None of the three I saw were in breeding plumage. This heron had a relatively long bill, plus white underparts which contrasted with the dark neck and upperparts, and a white throat with a white mid-line on the neck that were distinctive. The October bird was very late and waited out some harsh weather. It was last seen on October 5. The July heron flew into the islands presumedly because other herons were roosting there. The May bird was actively feeding on the flats by running back and forth, and it was soon chased off. I later saw it at Marine Pt. There are several other records from other localities in Illinois. The subspecies is assumed to be the North American *E. t. ruficollis*.

Documentation: Drawings and notes: IL. Sangamon Co., HDB - on file ISM.

Cattle Egret

Bubulcus ibis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	398/130 (29)	83/40 (17) all mig	104/61 (24)	0/0	585/231
Average/day	3.06	2.08	1.70		2.53
Average/season	13.72	4.88	4.33		

Status: Uncommon Spring Migrant, Occasional Fall Migrant and Rare in Summer

Dates:

Spring:	Earliest arrival = April 1, 1986 south Springfield
	Average arrival (28 years) w/range April 1 – May 7 = April 18
	Average departure (26 years) w/range April 14 – June 14 = May 22
	Latest departure = June 14, 1994 Sangchris

Fall: Earliest arrival = June 17, 2000 Sangchris Average arrival (22 years) w/range June 17 – September 9 = July 25 Average departure (23 years) w/range August 2 – November 11 = October 2 Latest departure = November 11, 1985 Lake Springfield

This small white heron apparently made its own way to the new world from Africa (in the late 1800's). My first record, and probably the first for Sangamon County, was April 16, 1972 south of Springfield. Cattle Egrets were seen in Illinois as early as 1952, so there could have been earlier birds in the county before my study began. After 1976, I recorded them every year, but not every potential season. In spring they showed the buff patches and pinkish-red legs, but other plumages were less easy to identify. Other early spring arrivals were April 3, 2003 & 2007 and April 5, 2009. They were usually in marshes or wet pastures with cows or other livestock, but on May 3, 1995 two were feeding in a rural front yard. They sometimes stood with gulls at the Cinder Flats or the Beach area at Lake Springfield, while at other times they came in to roost in the trees at the islands at Marine Pt. High counts for spring were: 13, May 3, 1987; 22, April 27, 1994; 18, May 5, 1999; and 17, April 30, 2009. This heron was found in summer, but most were migrants. However, the summers of 1998, 1999 and 2008 had birds all summer, but they did not appear to be breeding. High counts for summer were: 6, June 12, 1998 and 11, June 5, 2008. There may be some post-breeding dispersal in late summer and early fall, but it was usually minimal. I did not record this heron in **fall** until 1978, and fall numbers were 3.8 times less than spring. High counts for fall were 25, July 20, 1980 and 27, September 7, 1981. Other late departures were October 25, 1989 and October 30, 1983 & 2004. The nominate subspecies occurs in the US. The Cattle Egret winters from the southern US south to South America.

Documentation: Specimen = 1 skeleton) IL. Sangamon Co., ISM # 693461 LSpfld, May 6, 2005, coll. by HDB. Also photographs – HDB – on file ISM.

Highest # Days/Season Spring 10 (1994, 1995, 1996) Summer 7 (1998) Fall 7 (1998)

Highest # Birds/Season

Spring 92 (1994) Summer 26 (1980) Fall 40 (1981)

Green Heron

Butorides virescens

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1199/708 (37)	2503/1128 (37)	2718/1198 (37)	0/0	6420/3034
Average/day	1.69	2.22	2.27		2.12
Average/season	32.41	67.65	73.46		

Status: Fairly Common Spring Migrant and Common Summer Resident and Fall Migrant

Dates:

Spring: Earliest arrival = **April 4**, 1976 Lick Creek Average arrival (37 years) w/range April 4 – May 6 = **April 17**

Fall: Average departure (37 years) w/range September 10 – November 26 = **October 7** Latest departure = **November 26**, 1970 Carpenter Park

The Green Heron was small with a rufous neck, and at times the back looked greenish. It was found at ponds, lakes, sloughs, overflow areas, or any where there was water. All spring arrival dates were in April except May 6, 1988. Other early arrivals were April 5, 1974; April 7, 1978; April 9, 1991; and April 8, 1999. High counts in spring were low usually 3 - 4, with: 8, May 9, 1987; 7, April 17, 2002; and 7, May 8, 2004. On May 7, 1983 I saw one soaring like a hawk over Carpenter Park during the day, but most migrated crepuscularly or nocturnally. In summer numbers were fairly even after the 1970s, but the BBS showed some higher numbers in the last 10 years. Also the Sangamon River Census had higher numbers in 1991 than 1976. There was a nest with two eggs April 22, then four eggs April 27, 2006 at Lincoln Garden Prairie. Fledged young were seen from June 5 to August 15, but most occurred in July. Adults showed some wing molt from July 3 to August 16. Family groups were seen in late summer and seven along the Sangamon River at a drying pool August 6, 1975 was typical, but nine were feeding at one pond July 4, 1977 and 12 were seen June 12, 1991. There may be some post-breeding dispersal in this heron, but if so, it went undetected. On August 28, 2009 at Lincoln Gardens songbirds were observed mobbing a Green Heron along the shore. By September these herons were leaving, and in 15 years that month was the departure time. High counts for **fall** were: 13, August 24, 1985; 12, August 4, 1993; and 19, August 18, 2002. Occasionally, I saw migrating birds in fall such as October 4, 1986. A few straggled into November:(see record above); November 10, 1976 at the warm water ditch; November 3 -5, 1981 at Washington Park; November 3, 2000 at Lake Springfield; and November 1, 2006 at Lake Springfield. The nominate subspecies is found in the county and winters from the Gulf Coast to northern South America.

Documentation: Specimens = 3) IL. Sangamon Co., ISM# 606214 \Diamond , east side Springfield, May 31, 1975, coll. by C.Tipps, wt. = 182.9 gms, testes = 16 mm; ISM# 607109 \heartsuit , State Fair Grounds, April 21, 1979, coll. by T.Miller, wt. = 208.7 gms, ovary = 20 mm; ISM# 609544 immature \Diamond , Lake Springfield Dam, August 21, 1988, coll. by HDB, wt. = 178.0 gms, testes = 6 mm.

Highest # Days/Season Spring 35 (1991 & 1992)

 Spring
 35 (1991 & 1992)

 Summer
 57 (2002)

 Fall
 66 (2002)

Highest # Birds/Season

Spring69 (1999)Summer188 (2002)Fall203 (2002)

Black-crowned Night-Heron

Nycticorax nycticorax

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	604/274 (37)	377/169 (25)	823/293 (34)	2/2 (1)	1806/738
Average/day	2.20	2.23	2.81	1.0	2.45
Average/season	16.32	15.08	24.21	2.0	

Status: Uncommon Migrant and Summer Resident and Very Rare Winter Resident

Dates:

Spring: Earliest arrival = March 13, 1974 adult Lake Springfield Average arrival (37 years) w/range March 13 – May 6 = April 11

Fall:Average departure (32 years) w/range August 15 – November 23 = October 8Latest departure = November 23, 1982 im. se Spfld & 1995 im. LSpfld

As the name suggests this heron was most active at night, but it was also crepuscular, and during the day it could be seen roosting in trees. This medium-sized, plump heron was gray with a black crown and back, and red eyes and yellow legs. Juveniles/ immatures were gravish brown. Most spring arrival dates were in April, but there were five dates for March: March 29, 1973; March 13, 1974; March 31, 1982; March 25, 1987; March 29, 2003 and a late arrival on May 6, 1986. High spring counts were: 10, May 4, 1974; 18, May 5, 1990; 12, May 1, 1991; and 11, April 25, 1993. This Illinois endangered heron was most likely a sporadic breeder in summer at Lake Springfield and maybe at Sangchris and more recently at Buckhart. Apparently, some nesting occurred in the county before my study, as Eifert noted a breeding colony on west Washington (Springfield) in 1924 (from typed notes - on file ISM). Juveniles were first seen June 6, 1978 at Sangchris, and others, some with adults, were seen from 1988 – 1992 (especially at the Sediment Retention); 1995; 1997 – 1999 and 2001 – 2006. Most juveniles/immatures were seen in June, but the dates went from May 2 to August 23. Some later birds could have been dispersal migrants. A problem arose at Lake Springfield about 1998 when jet skis became prevalent because these machines went into shallow water where the herons fed and numbers appeared to be less since then. No nests were seen, but numbers and timing (many of the family groups were seen in June) suggested that breeding had occurred and this heron could nest alone as well as in colonies. The areas at Lake Springfield were the islands off Marine Pt., the warm water ditch, and the south end of the lake. A high count for summer was 9 adults and 20 immatures July 25, 1989. Post-breeding dispersal occurred by August. High counts for fall were: 9, August 23, 1988; 22, August 17, 1990; 33, September 14, 1990; 13, September 23, 1991; and 14, September 14, 2005. Other November dates of departure were: two immatures, November 11, 1970; one immature, November 5, 2006; and adult and two immatures, November 16, 2008. However, winter records occurred in 1985 with an immature January 23 and an adult January 26, both at the warm water ditch at Lake Springfield. Again in 2008, an immature was there December 9 -12. One bird was killed for its feet in 1982, presumedly for some cult ritual. This heron winters in the southern US south through its vast breeding range. The subspecies is the North American N. n. hoactli.

Documentation: Specimens = 2) IL. Sangamon Co., ISM# 606204 adult \bigcirc , LSpfld, May 3, 1975, ovary = 16 mm; ISM# 607473 immature \Diamond , southeast part Spfld, November 23, 1982, coll. by W.Brett, testes = 8 mm.

Highest # Days/Season

Spring21 (1990)Summer30 (1991)Fall37 (1990)Winter2 (1984)

Highest # Birds/Season

Spring90 (1990)Summer93 (1991)Fall320 (1990)Winter2 (1984)

Yellow-crowned Night-Heron

Nyctanassa violacea

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	25/21 (13)	33/27 (14)	25/25 (14)	0/0	83/73
Average/day	1.19	1.22	1.0		1.14
Average/season	1.92	2.36	1.79		

Status: Rare Migrant and Summer Resident

Dates:

- Spring: Earliest arrival = March 22, 2000 adult Lick Creek West Average arrival (13 years) w/range March 22 – May 31 = April 24
- **Fall:** Average departure (17 years) w/range July 5 November 8 = **August 31** Latest departure = **November 8**, 1979 immature Lake Springfield Dam

The adult, one of the most beautiful of the herons, was difficult to find in its swampy habitat. Once found, they were usually tame and allowed fairly close approach. I recorded Yellowcrowned Night-Herons less than half the years of the study, and it seemed to appear sporadically probably due to whether it was nesting. Other early spring arrivals were two adults, April 10, 1978 at Lick Creek and an adult, April 8, 1979 at Carpenter Park. There were no high counts; the most at any season was 2-3 birds per day. These herons were seen in summer certain areas and were probably nesting :1) Riverton (1974, 1976, 1980 – 2 fledged young July 26; 1992); 2) Riverside Park (1980, 1982 – adult and fledged young July 24; 1985, 1986 - adult with two fledged young July 22; 1987, 1995 – adult with fledged young June 30 and July 11; 1996, 2000, 2002 - fledged young July 10, 29, 30; and 2006; 3) and Lick Creek (1977, 1978, 1981, 1984, 1985, 1986, 1989, 2000). I believe that heavy human disturbance in these areas caused nest failure and abandonment, even though the birds tried to persist. I noted a second year bird at Riverside Park July 16, 1980, which was not the brown immature but gray like the adult but without the face pattern. The young that were produced and other post-breeding wanderers make up the fall records usually at Lake Springfield, Sangchris or near the nesting areas. In late summer and fall they could be found at drying ponds and mudflats. Other late fall records besides the November record above were immatures: September 29, 1976 at Lake Springfield; September 30, 1982 at Lake Springfield; October 2, 1984 at Sangchris; September 30, 1989 at Woodside Bridge. This heron was slipping away in the county. I last saw it May 20, 2006 at Riverside Park and found none in the three years of the addendum (2007 - 2010). It winters in the southern Gulf States south to Central America. The subspecies in eastern North America is the nominate form.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

Highest # Days/Season

Spring3 (1987, 2000, 2006)Summer4 (1980 & 1986)Fall5 (2002)

Highest # Birds/Season

Spring4 (1985)Summer6 (1986)Fall5 (2002)

Glossy Ibis Plegadis falcinellus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	2/1 (1)	0/0	2/2 (2)	0/0	4/3
Average/day	2.0		1.0		1.33
Average/season	2.0		1.0		

Status: Very Rare Migrant

Dates:

Two Records (& one Ibis species): adult, September 9, 1971, Sangchris; ♂♀, May 4, 1982, Cinder Flats; "dark" Ibis species? October 28, 1984 south end of Lake Springfield. Plus one in the addendum: adult, north of New City, April 21, 2009.

The Sangchris bird was seen at 30 yards and had no white on the face, and body, bill, and legs were a blue-black color. It was observed on the mudflat and circling for several minutes. Two different size birds (= 3 \bigcirc) with bluish facial skin and weak white marks were viewed for some time at the Cinder Flats. The "dark" Ibis (sp?) was a low fly-by, which could have been either Glossy or White-faced Ibis. Glossy Ibis was the more prevalent ibis in Illinois earlier in the study, but this had changed recently in Central Illinois. However, in the addendum an adult was seen in a flooded field and photographed. The Glossy Ibis was usually found in the South and East in the US, but like most waders wandered north occasionally. It winters along the Southeastern coast and Florida south to Venezuela.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

White-faced Ibis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1/1 (1)	0/0	0/0	0/0	1/1
Average/day	1.0				1.0
Average/season	1.0				

Status: Very Rare Spring Migrant

Dates: One Record: adult May 4, 2006 Cinder Flats. Plus one in the addendum: adult, Rt. 29 Bridge north, April 26 & 27, 2009.

This odd, but amazedly beautiful wader eluded me until the last spring, when I caught up with it at the north end of Lake Springfield. It waded in the shallow water probing with its down-curved bill up to eye level. The ibis preened for a while, flew around, and then departed; but not before I photographed it. I noted its red eye, reddish face, thick white facial marks, and reddish legs. With the sun on this bird in flight, it was essentially a purple bird with green wings and tail. The addendum ibis was feeding in a flooded field near the Sangamon River (seen with N. Klobuchar and KB). This ibis usually migrated and nested further west on the Great Plains, but Illinois records are increasing. The White-faced Ibis winters from Southern Texas south to South America.

Documentation: Photographic: IL. Sangamon Co., both birds HDB - on file ISM.

Black Vulture

Coragyps atratus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	3/3 (3)	1/1 (1)	0/0	0/0	4/4
Average/day	1.0	1.0			1.0
Average/season					

Status: Very Rare Spring Migrant and Summer Visitor

Dates: Four Records: adult in flight, west of Chatham, June 20, 1998; adult, Marine Pt., April 4, 1999; adult, Marine Pt., April 6, 2001; adult, Marine Pt., April 30, 2005.

The easiest method to separate Black Vultures from Turkey Vultures was short tail length (much shorter in Black Vultures), the flat flight profile, more flapping, and whitish area near the wing tips in Black Vultures. The vulture roost at Marine Pt. apparently attracted an occasional Black Vulture since one was observed to fly in on April 6, 2001 and another April 30, 2005. However, the last one was harassed by crows even though the crows did not bother the Turkey Vultures. One Black Vulture there on April 4 was eating a huge dead catfish with Turkey Vultures. The Black Vulture breeds as close as Southern Illinois, and a strong south wind could bring them to Sangamon County. Spring arrivals could be due to overmigration. Black Vultures winter from Southern Illinois south to Panama.

Documentation: Photographic: IL. Sangamon Co., April 30, 2005 bird and drawings and notes HDB – on file ISM.

Turkey Vulture

Cathartes aura

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	15269/1216 (34)	5392/597 (27)	16418/1176 (33)	1509/222 (15)	38588/3211
Average/day	12.56	9.03	13.96	6.80	12.02
Average/season	449.09	199.70	497.52	100.60	

Status: Uncommon up to 1990, now a Common Migrant and Summer Resident and Occasional Winter Resident

Dates:

Anyone aware of the status of this bird now would not believe how scarce it was in 1970. Why the numbers were low was not apparent, but I suspect it was DDT. The first two years (1970 and 1971) it went unrecorded, and the first record was March 12, 1972. It was then strictly a migrant, and summer records did not begin until 1978. The first breeding was noted in 1989, though they were probably nesting by 1985. The first winter record was a wind blown bird December 16, 1984 on a Christmas bird count, and it was 1990 before they became regular in winter. The numbers made a big jump in the mid- 1990's when a roost was established at Marine Pt. at Lake Springfield. Also, another smaller roost was near Irwin Bridge northwest of Springfield about 1995. By 1992 many spring arrivals were in February and later even January. Soon after 1989 it was difficult to determine spring departures and fall arrivals, but the average spring departures in the early part of the study was May 10 for 17 years of data. High counts for spring were: 74, March 13, 2001; 102, March 13, 2004; 100, March 29, 2005; and 120, March 30, 2006. Early in spring (March) birds out in the county could be seen sitting on barns, old sheds, and dead trees places where they nest. Young dark headed birds were seen coming into the roost at Marine Pt. usually in August, although two were seen on June 21, 2001. Young birds were also noted at Riverside Park on August 20, 1986 and at Horse Creek on July 29, 1989. High counts for summer were: 50, July 12, 2001; 62, June 22, 2004 and 68, July 2, 2005. Fall arrivals early in the study averaged September 21 for 17 years of data before it became impossible to distinguish them from summer residents. Migrants apparently stopped at the Marine Pt. established roost, because color marked birds were seen in fall and spring and numbers increased. High counts for fall were: 103, September 22, 2000; 100, October 4, 2001; 175, October 30, 2004; 165, October 17, 2005; and 125, October 25, 2006. By 1997, even fall and winter seasons became blurred when birds started to stay most or all **winter**. The vultures moved the Marine Pt. roost to more sheltered areas such as tall conifers in severe weather. High counts for winter were: 38, February 29, 2004; 13, January 30, 2005; 32, February 25, 2006; 50, December 16, 2006; and 15, January 1, 2007. Vultures on the ground seemed comical, but in flight these birds were graceful and beautiful. They feed on dead animals from deer to skunks to fish, and once one "turned the

Spring: Earliest arrival = **January 23**, 2002 & 2005 (arbitrary due to WR) Average arrival (35 years) w/range January 23 – May 10 = **March 10**

Fall: Average departure (32 years) w/range September 21 – January 28 = **November 6** Latest departure = **January 28**, 2006 three Lake Springfield (arbitrary due to WR)

tables" and fed on a road killed cat. Some vultures apparently migrate all the way to northern South America to winter. The subspecies in eastern North America is *C. a. septentrionalis*.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 606540 $\stackrel{\frown}{\bigcirc}$, near Chatham, April 12, 1977, coll.by HDB, wt. = 1550.0 gms, testes = 19 mm.

Highest # Days/Season

Spring91 (2004)Summer60 (2000)Fall117 (2006)Winter44 (2006)

Highest # Birds/Season

Spring2168 (2000)Summer769 (2000)Fall2486 (2006)Winter374 (2004)

Greater White-fronted Goose

Anser albifrons

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	20841/468 (28)	8/8 (1)	1196/70 (16)	71013/561 (22)	93058/1107
Average/day	44.53	1.0	17.09	126.58	84.06
Average/season	744.32	8.0	74.75	3227.86	

Status: Common Spring Migrant, Uncommon Fall Migrant, Very Common Winter Resident and Very Rare in Summer

Dates:

- Spring: Earliest arrival = January 17, 2001 three Lake Springfield Average arrival (25 years) w/range January 17 – March 30 = February 20 Average departure (28 years) w/range March 8 – May 13 = April 7 Latest departure = May 13, 1996 three Sangchris
- Fall:Earliest arrival = October 6, 1990 fourteen Sediment RetentionAverage arrival (16 years) w/range October 6 November 27 = October 28Average departure and latest departure obscured by WR see text

The Greater White-fronted Goose had an easy to recognize yelping call in flight, and its tail pattern, white "headlight", orange legs, and speckled belly made it easy to identify. This species had undergone a complete status change from 1970 to 2010, and the status above was the recent status (2010). From 1970 to 1984 it was an occasional spring migrant and not even recorded in fall or winter until 1984. Then it increased dramatically in the 1990s and especially in the 2000s with most migration taking place in the winter season (see Figure 10). Even in **spring**, this goose was not seen until 1974 and it always arrived in March through 1984. It was not until 1985 that it began to arrive in February and later in 1992 in January, and finally by 1998, it was a winter resident. An early high count was 70 on April 6, 1974, while later spring counts were: 400, March 4, 1997; 965, March 3, 2001; and 1000, March 6, 2003. Most had gone north by April, but a few straggled into May some years. There was one at the Cinder Flats May 24, 1991; one at Sangchris May 5 - 21, 1997; and one in summer at Sangchris from the end of May to July 16, 2002. These geese sat on deep water, but seemed to prefer mudflats and also fields for feeding. The Greater White-fronted Goose breeds in northern Canada and Alaska. Fall migration had the lowest numbers for this species because of its elliptical migration route, when most passed to the west of Sangamon County on the Great Plains. They now tended to appear, instead, in numbers in late December, January and February. However, the winter status above maybe somewhat misleading since many of the numbers were actually spring migrants at that season. High counts for fall were: 155, November 2, 2001; 154, November 25, 2006; and 250, November 27, 2008. Late dates of fall departure up to 1995 were in November, but these became part of the winter residents later in the study. Winters after 1995 usually had the highest numbers, and this had continued until 2009-10. High counts in winter were: 600, February 5, 1998; 1200, February 18, 2003; 1540, February 22, 2006; 2045, January 27, 2007; and 1500, January 22 & 23, 2009. Two neck-collared birds at Sangchris on December 4, 2001 were banded in Selawik, Alaska in July 1998. Possible hybrids were: Canada X White-front. February 18 & 19, 1985; Blue X Whitefront. March 6, 2001; Snow X White-front. February 28, 2008 (photograph) and one White-front with white feathers in the back and wings on January 27, 2007 (photograph). The subspecies that migrates and winters in the central US and in the county is *A. a. frontalis*.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 660488 \bigcirc , Sangchris, December 19, 1996, coll. by R. Green, wt. = 2310 gms, ovary = 9 mm.

Highest # Days/Season

Spring52 (1996 & 2002)Summer8 (2002)Fall15 (2001)Winter63 (2001)

Highest # Birds/Season

Spring4921 (2003)Summer8 (2002)Fall294 (2001)Winter17627 (2006)

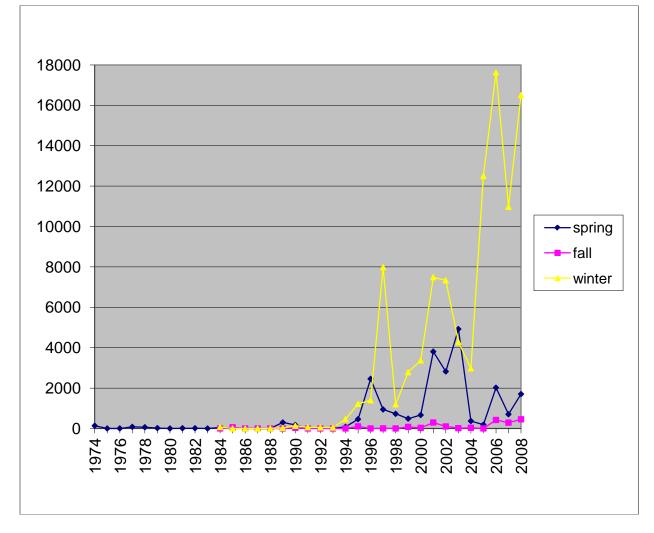


Figure 10. Greater White-fronted Goose Numbers by Season.

Snow Goose

Chen caerulescens

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	593141/785 (37)	89/73 (11)	13837/485 (36)	1420790/658 (35)	2027857/2001
Average/day	755.59	1.22	28.53	2159.26	1013.42
Average/season	16030.84	8.09	373.97	40594.0	

Status: Very Common Spring Migrant and Winter Resident, Uncommon Fall Migrant and Occasional (non-breeding) Summer Resident

Dates:

- Spring: Earliest arrival = January 7, 1998 135 Sangchris (arbitrary due to WR) Average arrival (35 years) w/range January 7 – March 29 = February 16 Average departure (37 years) w/ range March 7 – May 3 = April 4 Latest departure = May 3, 1999 four blue Divernon
- Fall: Earliest arrival = September 15, 1988 five blue Sediment Retention Average arrival (35 years) w/range September 15 – November 4 = October 12 Average departure (33 years) w/range October 24 – January 16 = December 10 Latest departure = January 16, 1971 10 blue & 6 white Sangchris

This species includes blue geese, white snow geese and intergrades of the blue and white phase. The status of the Snow Goose in the county had changed dramatically during the study (see Figure 11). From 1970 to 1994 numbers were fairly low especially in fall and winter. The species had an elliptical migration in which most went south from their Arctic nesting grounds through the Great Plains, wintered in the Gulf States, and in the spring went north further east. The spring season was the time most were in Sangamon County. From 1995 to 2006 and through 2010, the migration route was still basically the same. However, there were many more birds and the timing was earlier in the spring with much spring migration taking place in the winter season. Early in the study, spring numbers were modest with some good years like 1980, 1986, 1990, 1994, and 1995 the year that the numbers soared. There were lean years such as 1976, 1981, 1983, 1987, and 1993. High daily spring counts were: 1000, March 15, 1980; 6000, March 2, 1996; 95,000, March 12, 2003; and 45,000 March 3, 2006. Toward the end of the study, most spring migration was in winter (see winter numbers). The majority of the late migrants in spring were immatures such as 34, April 3, 1994 and 30 over Carpenter Park April 7, 2006. The first summer goose occurred at the north sewer pond July 4, 1990, the second was at Sangchris until June 17, 1996, then, there were none in 1997, but there were summer geese from 1998 to 2010. These summer geese were injured or shot geese, some healthy geese may have stayed with them. The most were seen 1998 (13), 2001 (24), and 2006 (22); some lasted into the fall. Also, one Blue Goose was with (mated?) a Canada Goose with three young May 13, 1992. Fall migration showed good years (over 1000) in 1973, 1979, 1984, 1987, 1988, and 1989, but was low other years especially 1975 and 1993, even up to 2006. High fall daily counts were 1500, November 3, 1973 and 335, November 26, 1988. The biggest jump in numbers came in winter, which were relatively low until 1989, and were much higher from 1995 – 2010. These winter numbers reflected spring migrants with actual winter residents being very few. High counts were: 28,200,

February 21, 2001; 19,000 February 8, 2002; 57,000, February 22, 2004; 135,000, February 5, 2005; and 45,000, February 12, 2007. The great flights of this goose were spectacular viewing and could be seen at Lake Springfield, Sangchris, and Buckhart, but they also fed in open grain fields, which could be almost anywhere in rural Sangamon County. The large migratory flocks had the appearance of an island when they sat on Lake Springfield. One had to question whether the increase was a return to the past numbers (pre-1600) or something totally new. Initially, this goose would have been restricted to prairies and sloughs. To deal with this increase, the federal government allowed hunting during spring migration, which affects the breeding cycle of many other bird species. I have noted hybrids with Canada (?) Goose on November 21, 1981 and with Greater White-fronted Goose February 28, 2008. The subspecies occurring in the county is the nominate form.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 661892 \bigcirc white phase, northwest end Sangchris, February 5, 2008, coll. by HDB, wt. = 4 lbs 13.4 oz, ovary = 21mm.

Highest # Days/Season

Spring74 (2000)Summer21 (2001)Fall62 (2006)Winter53 (2006)

Highest # Birds/Season

Spring408999 (2003)Summer24 (2001)Fall1611(1973)Winter309964 (2005)

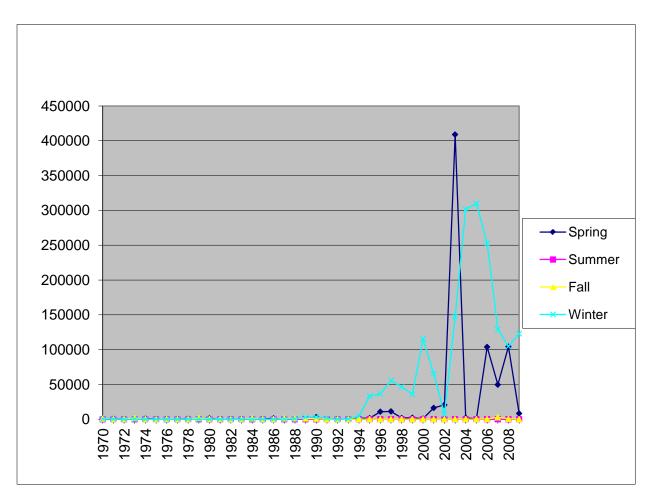


Figure 11. Snow Goose Numbers by Season 1970–2008

Ross's Goose

Chen rossii

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	444/137 (17)	1/1 (1)	46/33 (11)	303/127 (18)	794/298
Average/day	3.24	1.0	1.39	2.39	2.66
Average/season	26.12	1.0	4.18	16.83	

Status: First record Fall 1985, now Occasional Spring Migrant and Winter Resident, Rare Fall Migrant and Very Rare Summer Resident

Dates:

- Spring: Earliest arrival = January 7, 1998 (arbitrary due to WR) Average arrival (20 years) w/range January 7 – March 23 = February 14 Average departure (18 years) w/range March 2 – May 10 = March 31 Latest departure = May 10, 2003 adult Sangchris
- Fall: Earliest arrival = October 21, 2002 adult Beach House
 Average arrival (15 years) w/range October 21 December 22 = November 21
 Average departure (12 years) w/range October 30 January 26 = December 13
 Latest departure = January 26, 2005 Lake Springfield

With the great increase in goose numbers, an unforeseen bonus was the eastward movement of this small goose into this area until it became regular about 1995. The first record for this study and probably the county was an immature at Lake Springfield on November 16, 1985. They were usually with Snow Geese and could be difficult to pick out because they had a tendency to stay in the center of the flock. I preferred to examine them on the ground or in the water at close range where I could see the small bill with little or no grin patch, short neck, and other field marks so that I could rule out hybrids, which were fairly regular with Snow Geese. Both the adults and immatures of Ross's Geese were whiter than the corresponding plumages of Snow Geese. Plus, there was little or no staining of the head in the Ross's Goose. The Ross's Geese were occasionally seen in small intraspecific flocks such as six seen April 2, 2001 on Lake Springfield, or with other geese like two with Cackling Geese December 4, 2005 and 20 with Greater White-fronted Geese February 19, 2006. Most of these geese were white phase, but there have been a few blue phase: adult, January 26, 1998; adult and immature, February 26, 2001; adult, February 15, 2002; and adult, January 18, 2004. Like Snow Geese there were much fewer in fall due to the counter-clockwise elliptical migration route (1 in fall to 9.7 in spring). High counts in fall were 4, November 23, 2001 and 6, November 18, 2003. Many in winter were actually spring migrants, and occasionally these geese reacted to false springs by coming north with Snow Geese. Winter counts were 10, February 19, 1997 and 9, February 20, 1998. True winter birds were rare such as an immature, January 7, 1997 at Sangchris. Spring migration started early and the highest counts were: 50, March 26, 2002 and 20, February 19, 2005. Most flocks of Snow Geese were too far away or too compact to figure all the Ross's Geese present and most counts were a sampling. There was one **summer** adult at the beach at Lake Springfield June 25, 2004 (DO), and like other migrant geese, it could have been injured, but if so it was not

apparent. Ross's Geese breed in the high Arctic and now winter from southern Illinois south to the western Gulf Coast.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 660605 adult \bigcirc , Buckhart, April 2, 2002, coll. by HDB, wt. = 991.6 gms, ovary = 16 mm.

Highest # Days/Season

Spring18 (2002)Summer1 (2004)Fall10 (2001)Winter19 (1997)

Highest # Birds/Season

Spring145 (2002)Summer1 (2004)Fall13 (2001)Winter83 (2005)

Brant

Branta bernicla

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	0/0	0/0	13/12 (2)	0/0	13/12
Average/day			1.08		1.08
Average/season					

Status: Very Rare Fall Migrant

Dates:

Two Records:

immature, south end of Lake Springfield and Sediment Retention, October 7 – 25, 1987; two immatures, Sangchris, November 13, 1995.

These small dark geese breed high in the Arctic and winter on the east coast. The subspecies in the east is B. *b. hrota*. Both of the sightings were with Cackling Geese, and in the November record several geese had neck collars, that I was able to trace to breeding populations on Baffin Island. The habitat in both cases was mudflats with grassy areas in which the birds could graze. Also, I noted that the eyes of the Brants glowed an orange-brown at certain angles, which the other geese did not show.

Documentation: Written descriptions: Il. Sangamon Co., HDB – on file ISM.

Cackling Goose

Branta hutchinsii

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	584/48 (6)	0/0	2984/107 (6)	10300/268 (6)	13868/423
Average/day	12.17		27.89	38.43	32.78
Average/season	97.33		497.33	1716.67	

Note - no numbers until spring 2001

Status: Occasional Spring Migrant, Uncommon Fall Migrant and Fairly Common Winter Resident.

Dates:

- Fall:Earliest arrival = September 20, 1990 twelve Sed Ret & 2005 four Buckhart
Average arrival (20 years) w/range September 20 November 29 = October 14
- Spring: Average departure (18 years) w/range March 11 May 26 = April 13 Latest departure = May 26, 2004 Lake Springfield

Although Cackling Goose was not split from the Canada Goose until 2004, I started keeping track of numbers in 2001. I noted small subspecies as far back as 1971, but kept no numbers. Also, the older records could have involved the Lesser Canada Goose (Branta canadensis parvipes), which still remains a subspecies of the Canada Goose. I did use some of the older records to figure the dates above. High counts for fall were: 250, November 20, 1995; 115, November 24, 2001; and 120, November 28, 2004. Many times these small geese stayed in their own group and were counted every day before they flew out to feeding areas. Winter high counts were: 200, December 1, 1989; 100, December 8, 1997; 110, January 1, 2002; 180, December 19, 2002; 300, January 18, 2004; and 125, December 4, 2006. Like other geese, much of the migration occurred in the winter season and spring had low numbers with a high count of 90, March 6, 2002 and 30, March 1, 2009. Most of the small geese I saw were about Mallard size, with a small stubby bill, a pale to whitish breast. Some had white edgings on the back and a few had a white ring on the neck. These were the Richardson's Goose (B. h. hutchinsii) from the central Arctic, north and west of Hudson's Bay. One small darker subspecies at Marine Pt. March 22 – April 29, 1999 may have been B. h. minima. On October 29 & 30, 1990 at the Sediment Retention there were two small geese with small bills that did not have a white cheek patch or black neck, but had dark brown crowns and a gray neck. They appeared to be still in some juvenile plumage. Like all geese, the Cackling Goose increased near the end of the study.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

Highest # Days/Season		Highest	Highest # Birds/Season		
Spring	12 (2002)	Spring	320 (2002)		
Fall	29 (2001)	Fall	1278 (2001)		
Winter	67 (2005)	Winter	2740 (2001)		

Canada Goose

Branta canadensis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	179489/2383 (37)	37070/1165 (30)	220506/2614 (37)	1145558/1983(37)	1582623/8145
Average/day	75.32	31.82	84.36	577.69	194.31
Average/season	4851.05	1235.67	5959.62	30961.03	

Status: Very Common Migrant and Summer and Winter Resident

Dates:

- Spring: Earliest arrival = January 1, 2002 (arbitrary due to WR) Average arrival (28 years) w/range January 1 – February 28 = February 8 Average departure (37 years) w/range February 6 – May 10 = March 30 Latest departure = May 10, 1975 three Sangamon Co.
- Fall: Earliest arrival = September 9, 2003 (arbitrary due to SR) Average arrival (34 years) w/range September 9 – October 20 = September 25 Average departure (8 years) w/range November 11 –January 20 = December 16 Latest departure = January 20, 1979 (arbitrary due to WR) [Note -after 1981 late migrants & WR were indistinguishable]

The status of the Canada Goose changed dramatically during the study, and it was at the top of the list both numerically (5th) and days observed (19th). Some geese of the small subspecies (Cackling Geese) were counted under this species before they were split off, but as they were much less numerous earlier, it was probably insignificant. I began counting Cackling Geese separately about 2001. In the early part of the study Canada Geese were migrants and winter residents only. Arrival in spring was fairly easy to determine until 1990 when there were so many winter residents that it was misleading to designate a date of arrival because most of the spring migration was taking place in the winter period. In 1980, I noted that spring migration was virtually over by March 19. High counts for spring were: 12,000 flying by Sangchris in two hours, February 21, 1981; 10,000 over Carpenter Park, March 14, 1982; 12,000, March 1, 1986; 8,000, February 17, 1991; 8,000, January 21, 1998; and 20,000 at Lake Springfield, January 21, 2009. These geese used to leave by May, but in 1976 I found the first nest at the Cinder Flats and 5 downy young on April 25. Recently, there was hardly a large puddle that did not have its breeding geese. I wrote (1992) they became ubiquitous and in some cases a nuisance driving off other waterfowl. The summer population showed a dramatic increase starting in 1989 and 1990 (see Figure 12). The original breeding population in the county was probably shot out fairly early (pre-1890s ?) and it was perhaps the giant subspecies B. c. mufti (= maxima), the same subspecies that was introduced, and now breeds here (or did *B. c. interior* breed this far south?). Adults were paired by at least early March, and there was a lot of fighting over mates and territories with loud vocalizations. Copulation took place on the water, and was observed April 1, 2005. Egg dates were between March 24 and May 14, with most in April. Also, I noted adults on nests as early as March 14, assuming they had eggs. From 1986 to 2005, there were 285 broods, equaling 1354 young (I did not count combined young, which became prevalent in 2000, because the broods were indistinct), which averaged 4.75 birds/brood. Downy young broods were seen

between March 26 and July 15, with most occurring from April through June. Besides the nesting birds, there were groups of unmated geese in late spring and summer. A certain percent of the breeding geese in Illinois (and other areas) apparently flew to the far north as far as the Arctic on molt migration in mid-June, though I had never knowingly observed these. Migrant geese normally returned in **fall** in late September and early October, these first groups moving with cold fronts not only over the lakes but along the Sangamon River. Later geese arrived when forced out by cold and ice further north. High counts for fall were: 500, November 30, 1971; 600, November 28, 1978; 800, November 26 & 30, 1989; 550, November 30, 1996; 325, October 30, 1998; and 230, September 14, 2001. Goose numbers in winter have increased, but they took a big jump in 1989 to almost nine times 1988 totals and have stayed high. Also, with much migration taking place at that season, it was difficult to pick out the truly wintering geese. High counts for winter were: 2,300 February 18, 1974; 6,000, January 21, 1990; 4,000, December 24, 1991; 4,000, January 22, 2000; and 7,200, February 3, 2000. Given the large numbers of geese, there were some that looked strange, e. g., one showing leucism – all white with pink bill, but dark eyes, January 1 & 3, 2002; three with pink bills and dull yellowish legs, February 8, 2003; one with a white face and neck April 2, 2004; a hybrid Canada X White-front (?), February 18, 1985; a hybrid Canada X Grey-lag (?), February 12, 1990; a hybrid Canada X Blue (?) November 15 & 21, 1981 and others. The subspecies found here are: B. c. moffitti – the breeding population, which may be permanent residents and were initially recently introduced; B. c. interior – the migrant population and most of the winter population; B. c. parvipes – the smaller subspecies still included with Branta Canadensis, which is a migrant and winter resident. A late record for this subspecies was May 25, 2009 at Lake Springfield. I have twice seen normal sized geese with tan (October 3, 1990) or brown (December 28, 2001) breasts indicating variation or possibly another subspecies.

Documentation: Specimens = 3) IL. Sangamon Co., ISM# 606936 $\stackrel{\circ}{\circ} B. c. moffitti$, Cinder Flats, December 9, 1978, coll. by HDB, no wt., testes = 15mm; ISM# 609995 $\stackrel{\circ}{\circ} B. c. interior$, Cinder Flats, March 7, 1989, coll. by HDB, wt. = 9 1/8 lbs; ISM# 608803 $\stackrel{\circ}{\circ} B. c. interior$, Cinder Flats, February 28, 1986, coll. by HDB, no wt., ovary = 35 mm.

Highest # Days/Season

Spring92 (5 years) maxedSummer61 (6 years) maxedFall122 (2004 & 2006) maxedWinter90 (2003) maxed

Highest # Birds/Season

Spring	21834 (1986)
Summer	3430 (2004)
Fall	22994 (1989)
Winter	97054 (1989)

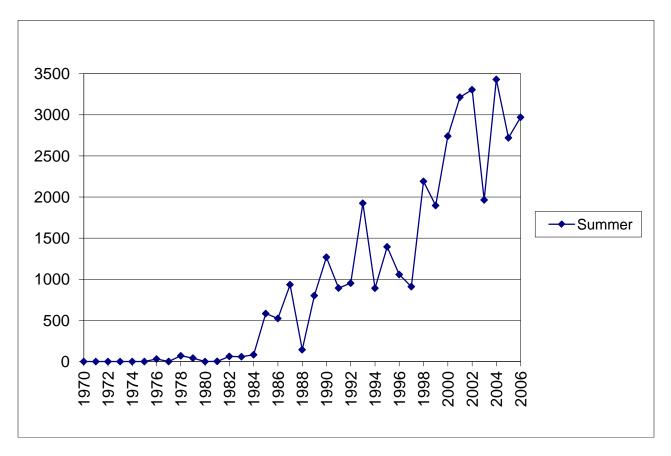


Figure 12. Canada Goose Numbers in Summer in Sangamon County 1970–2006.

Mute Swan

Cygnus olor

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	352/217 (19)	134/71 (14)	308/176 (17)	1996/611 (27)	2790/1075
Average/day	1.62	1.89	1.75	3.27	2.60
Average/season	18.53	9.57	18.12	73.93	

Status: Introduced, now Uncommon Permanent Resident and Rare Migrant

This swan was an introduction from Europe and all that were seen in this county were put there by humans. Initially, it was introduced in Fulton County in 1971 by the Illinois Department Natural Resources, but private individuals have since kept them at ponds. I could have seen this swan nearly every day, but only counted it when I happened to find it while counting other birds. The numbers in the study were not constant until 1981. Most were counted in winter because ponds froze up forcing them into Lake Springfield or Sangchris, both of which had artificially warmed water. Some might have been migrants from out of state or from the Illinois Valley. High counts were: 9, October 9, 1972 at Sangchris; 11, January 24, 1994; 14, December 25, 1998; 14, December 30, 2000; 14, February 4, 2004; and 17, December 26, 2004. These swans were present at the IDOT pond, Bunn Park, some of the Mall ponds, and Buckhart as well as Lake Springfield. They breed in several of these areas. Most young were seen in June and July. Although an attractive bird, this was still an invasive species and probably should not be encouraged. Plus, they were very aggressive toward other waterfowl.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 603835 ♂, Washington Park, April 5, 1960, coll. by J. Bumgarner.

Highest # Days/Season

Spring30 (2002)Summer17 (1998)Fall38 (2002)Winter58 (2003)

Highest # Birds/Season

Spring40 (2002)Summer31 (1999)Fall45 (1998)Winter255 (2003)

Trumpeter Swan

Cygnus buccinator

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	11/3 (3)	0/0	0/0	296/62 (4)	307/65
Average/day	3.67			4.77	4.72
Average/season	3.67			74.0	

Status: Reintroduced, now a Rare Migrant and Occasional Winter Resident

Dates:

- Fall:Earliest arrival = December 2, 1995 immature BuckhartAverage arrival (3 years) w/range December 2 31 = December 16
- **Spring:** Average departure (5 years) w/range February 13 March 15 = March 3 Latest departure = March 15, 2002 immature Sangchris

Though this swan certainly must have occurred in Sangamon County naturally before the arrival of Europeans and Africans, there were no records of it. The birds found here now were migrants from reintroduced swans from the west, into Wisconsin, Michigan, and other northern states and could be traced because of their neck bands. I did not detect them in this county until an immature was seen December 2, 1995 at Buckhart. There were only six records of this swan, some of the flocks stayed for some time (recorded 39 days in 2000-01 and 20 days in 2001-02). The other five records were: 6 (4 adults and 2 immatures), February 13, 1998; 6 (4 adults and 2 immatures), March 2, 1999; 5 (later 4, all adults), December 14 – March 1, 2000-01; 9 (later 8, with 6 adults and 3 immatures), December 31 – February 6, 2001-02, and 1 immature, March 15, 2002. Most of these swans were seen at Lake Springfield and came in with the freeze-up, while others were in corn fields feeding. Two more recent (addendum) records not in the totals were 15 (10 adults and 5 immatures) at Sangchris March 12, 2007 and 6 adults at Lake Springfield January 23, 2009.

Documentation: Photographic: IL. Sangamon Co., HDB & DO – on file ISM.

Highest # Days/Season		<u>Highest # Birds/Season</u>		
Spring	1 (3 years)	Spring	15 (2007)	
Winter	39 (2000)	Winter	165 (2001)	

Tundra Swan

Cygnus columbianus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	14/7 (3)	0/0	16/9 (8)	202/52 (10)	232/68
Average/day	2.0		1.78	3.88	3.41
Average/season	4.67		2.0	20.20	

Status: Rare Migrant and Occasional Winter Resident

Dates:

- Fall:Earliest arrival = November 3, 1995 four adults Lake SpringfieldAverage arrival (13 years) w/range November 3 January 9 = November 25
- **Spring:** Average departure (9 years) w/range January 26 April 29 = **March 1** Latest departure = **April 29**, 2000 immature Berlin Sewer Pond

Most of the migration of the Tundra Swan took place north of this county nearer the Great Lakes and was more of an east to west movement in spring and vice versa in fall. Fortunately, some strayed from these flyways due to winds (northeast) and other factors, but few were encountered in this county and many years it went unrecorded. The first record in the study was an immature, February 20, 1971 at Sangchris. The first fall birds were two immature swans that came into Lake Springfield during a snow storm on November 25, 1977. Most fall records consisted of 1-4 swans, that were probably off the normal flyaway. These swans arrived in late fall with nine November, two December and one early January dates of arrival. The high count for fall was 11, November 13, 2007. Most of the numbers in winter were actually spring and fall migrants, while the majority of these swans wintered on the East Coast. The only time that they stayed the winter in Sangamon County was 1997-98 at Lake Springfield, when numbers accumulated until there were 11, January 23, 1998. Spring migration started early and I had one late January, seven February and three March dates of arrival. High spring counts were: 18, February 15, 1982; 14, February 9 – 12, 2007; and 12, March 8, 2008. Flocks usually contained both adults and immatures, which spent a lot of time sleeping, and occasionally feeding. It could be very frustrating and cold trying to identify a "tucked" swan out on the ice. Swans could also be found on shallow water and in corn fields. One immature at Lake Springfield was eating fish on February 9, 1996. These swans breed in the High Arctic. The subspecies is the North American C. c. columbianus.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

Highest # Days/Season		Highest	Highest # Birds/Season		
Spring	4 (2000)	Spring	6 (2001)		
Fall	2 (1990)	Fall	4 (1981 & 1995)		
Winter	24 (1997)	Winter	96 (1997)		

Wood Duck

Aix sponsa

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	14861/2201 (37)	15715/1123 (36)	23120/2067 (37)	1177/404 (34)	54873/5795
Average/day	6.75	13.99	11.19	2.91	9.47
Average/season	401.65	436.53	624.86	34.62	

Status: Common Migrant and Summer Resident and Occasional Winter Resident

Dates:

Spring: Earliest arrival = January 28, 2002 five Sangchris (arbitrary due to WR) Average arrival (35 years) w/range January 28 – March 14 = February 26

Fall:Average departure (37 years) w/range November 4–December 31 = November 24Latest departure = December 31, 1989 five LSpfld (arbitrary due to WR)

At the beginning of the study, this beautiful duck was not seen nearly as often as at the end. The Wood Duck had responded well to the ponds created and to the nest boxes people put up for their use. It ranked 45th in total numbers and 31st in days observed in the study. The Wood Duck was well named because they were found along wooded creeks and rivers and in wooded sloughs and ponds. Only occasionally did they come out to open lakes mostly due to frozen smaller ponds. They usually came back in **spring** in February or March, but were arriving earlier in the last half of the study (first half 1971 – 1988 averaged February 29 and second half 1989 – 2006 averaged February 19). High counts for spring were: 65, March 24, 1984; 70, March 14, 1990; and 92, May 27, 2000. This duck was recorded in **summer** in 13 years on the BBS and ranked 48th, with increases in later years. Copulation was noted at Washington Park on April 12, 2006. Other than nest boxes they used natural cavities especially in sycamore trees. They appeared odd way up in the tops of tall trees sitting on a branch. After hatching, the young jumped to the ground and followed the female to water. I noted 499 broods (see Table 7) between April 21 and August 7 and all the broods averaged between a low of 4.2 young (1994) and a high of 10.2 young (1998). All the young were not counted some years, since, for example, in 1978 two females were escorting 36 young of different sizes. In the spring of 2000, nearly a hundred males and females gathered at Sangchris from May 23 to mid-July and apparently did not breed. It was very dry that spring, and at least 95 ducks were there on June 3. Oddly, this duck became a summer resident at Washington Park, where it had been just a migrant and later a winter resident. On June 1, 1994 a female and five young were seen there. Now they regularly breed at Washington Park with several broods seen each year. Plus, they were very tame, feeding with the local waterfowl on bread and grain provided by humans. Late summer produced some numbers in Sangamon County like 124, July 19, 1977 and 200, July 11, 1991. Summer numbers surpassed spring numbers and fall numbers were 1.6 times spring numbers. High counts for fall were: 88, September 21, 1975; 85, August 15, 1985; 330 on one pond at Jefferies Orchard (A. Jefferies), October 13, 1987; 100, September 8, 1988; 330, October 18, 1990; 125, September 17, 1996; and 90, August 13, 2002. Nearly all Wood Ducks left during winter, a few stayed at sewer ponds, the warm water ditch (where K.Watt feeds them), Washington Park or Sangchris. High counts for winter were: 20, December 1, 1989; 16, February 28, 1998; 6, January 5, 2004; and

12, January 28, 2006. A female hybrid with a Mallard was at Washington Park on April 25, 2000 and photographed (DO). A leucistic female, all white except the crown and a line on the wing were dark, was with a normal male at Lincoln Gardens on April 14, 1986.

Documentation: Specimens = 3) IL. Sangamon Co., ISM# 660449 \Diamond , south of Spfld, March 24, 1995, coll. by HDB, wt. = 663.2 gms, testes = 5mm; ISM# 660073 \Diamond , east Spfld, April 22, 1990, coll. by HDB; ISM# 609907 immature \heartsuit , LSpfld, August 17, 1989, coll. by HDB, wt. = 527.6 gms.

Highest # Days/Season

Spring84 (2000)Summer57 (2000)Fall93 (1989)Winter32 (2005)

Highest # Birds/Season

Spring1125 (2000)Summer1920 (2002)Fall2357 (1990)Winter203 (2005)

YEAR	# of BROODS	# YOUNG/BROOD	DATES	AVERAGE # YG/BR
1976	10	3-9	April 25 – June 20	6.0
1977	10	3 – 10	May 27 – July 11	6.7
1979	15	2 - 12	June 3 – July 8	6.5
1981	4	2 - 10	June 8 – July 4	7.3
1982	9	4 - 10	May 15 – July 24	6.6
1983	5	2 - 12	May 15 – June 11	6.6
1984	7	2 - 10	June 10 – June 30	7.1
1985	16	1 – 15	May 11 - June 25	7.5
1986	33	1 – 15	May 12 – July 22	8.2
1987	28	2 – 16	May 8 – July 28	7.7
1990	14	2 – 11	April 21 – July 13	5.9
1991	36	1 – 13	May 20 – July 21	6.8
1992	20	1 - 12	May 17 – July 22	5.6
1993	20	1 – 12	May 21 – July 28	5.8
1994	18	1 – 7	May 20 – July 13	4.2
1995	23	1 – 16	June 5 – August 7	7.9
1996	29	2 - 12	June 4 – July 26	5.9
1997	28	1 – 10	April 27 – July 19	5.6
1998	19	4 - 18	May 18 – August 2	10.2
1999	19	1 – 13	May 9 – July 27	6.8
2000	15	2-9	June 7 – July 17	4.8
2001	19	2 – 13	May 3 – July 22	6.6
2002	38	2-18	May 17 – August 7	7.0
2003	12	2-9	May 27 – July 14	5.7
2004	30	2-14	May 2 – July 30	6.6
2005	22	1 – 15	May 2 – July 23	6.3

 Table 7. Wood Duck broods in Sangamon County (only downy young counted).

Gadwall

Anas strepera

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	27015/1578 (37)	71/47 (8)	30300/1406 (37)	16658/1083 (37)	74044/4114
Average/day	17.12	1.51	21.55	15.38	18.0
Average/season	730.14	8.88	818.92	450.22	

Status: Common Migrant, Fairly Common Winter Resident and Rare Summer Resident (non-breeding)

Dates:

- Spring: Earliest arrival = January 30, 1988 (arbitrary due to WR) Average arrival (26 years) w/range January 30 – March 8 = February 18 Average departure (37 years) w/range April 7 – May 31 = May 10 Latest departure = May 31, 2000 2 ♂♀ Sangchris
- Fall: Earliest arrival = August 29, 1976 Sangamon Co.
 Average arrival (37 years) w/range August 29 October 18 = September 24
 Average departure –obscured by WR % late Nov. /early Dec.
 Latest departure –obscured by WR

Although a rather plain looking duck with a white square in the secondaries, the drake on close inspection was nicely marked with gray, black and brown. I noted on December 14, 1997 that some males (older?) had iridescent green supercilliaries and that a few were purple. Even with the winter residents, the increase in **spring** was usually detectable and the birds began to appear in different areas. Some of the migration occurred in the winter season. Courtship started as early as February 19, 1994. Several males were seen chasing a female March 11, 1985 and again March 10, 2001. It was noted that most were paired by March 19, 2002 at Lake Springfield. High counts for spring were: 200, March 17, 1992; 235, March 26, 1997; 230, March 28, 1998; 255, March 25, 2003; and 325, March 31, 2006. By the end of April, most Gadwalls remaining were stragglers, but they were recorded in May in all but six years. They were seen in summer in eight years, but breeding was not suspected. Summer records were: 1976 - ♂ June 6 – July 11 at Lake Springfield; 1979 - \bigcirc July 1 – August 8 at Buffalo sewer pond; 1987 - \bigcirc July 15 – 19 at the Cinder Flats; 1992 - 3 June18 – 22 at the Cinder Flats; 2000 – two pair, one pair June 6 at Lake Springfield and one pair June 11 at Sangchris; 2001 - 3 and \bigcirc stragglers all through May and June at Sangchris with one until August 17 and a 3 June 23 at the Cinder Flats (most ever in summer); 2002 – pair June 16-17 south of Chatham; 2005 – pair from May to June 12 with the Quntil July 7 at Lake Springfield. Gadwalls breed mainly on the northern Great Plains in the US and Canada. Fall numbers were slightly higher than spring numbers and arrival dates were quite variable from late August to mid-October. High counts were: 700, November 1, 1979; 345, October 23, 1996; 300, November 24, 2000; and 330, October 19, 2005. This species was found in winter every year of the study with higher numbers starting about 1989 and continuing to 2010. Most of these ducks spent the winter on sewer ponds or warm water lakes like Sangchris. I noted that Gadwalls flew from the sewer ponds into Lake Springfield to roost late in the day, sometimes at dark. High counts for winter were: 160, January 18, 1998; 300, December 12,

1999; and 260, December 22, 2001. A leucistic, mostly gray and white, was at Lake Springfield on October 18, 1982 and another, all white with dark eyes, was at Sangchris November 4, 1993 – February 20, 1994.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 606702 \bigcirc , North sewer pond, coll. by HDB, February 23, 1978, wt. = 532.3 gms, ovary = 15 mm.

Highest # Days/Season

 Spring
 80 (2001)

 Summer
 20 (2001)

 Fall
 63 (1989 & 2006)

 Winter
 62 (1998)

Highest # Birds/Season

Spring2446 (2001)Summer33 (2001)Fall2339 (2006)Winter1565 (1998)

Eurasian Wigeon

Anas penelope

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	3/3 (1)	0/0	3/3 (1)	0/0	6/6
Average/day	1.0		1.0		1.0
Average/season					

Status: Very Rare Migrant

Dates: Two Records: ♂ Buckhart bottoms, March 15 – 17, 1994; ♂ eclipse plumage Sangchris, November 15 – 18, 2006.

I found both of these ducks in big flocks of other waterfowl, and though they were beautiful males, they were so in different ways. The spring male, in alternate plumage, was mostly gray with a rufous head and the fall male, in eclipse plumage, was reddish rufous all over. They were both in shallow water with some American Wigeon present and both stayed at least three days. Although this was a Eurasian species it probably occurred every year in Illinois, but in very small numbers. I have no reason to suspect either duck was a hybrid.

Documentation: Photographic: IL. Sangamon Co., Spring DO and fall HDB – on file ISM.

American Wigeon

Anas americana

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	24032/1456 (37)	37/34 (10)	17811/1452 (37)	8377/851 (37)	50257/3793
Average/day	16.51	1.09	12.27	9.84	13.25
Average/season	649.51	3.7	481.38	226.41	

Status: Fairly Common migrant, Uncommon Winter Resident and Very Rare Summer Resident (non-breeding)

Dates:

- Spring: Earliest arrival = January 24, 1990 ♂ Buckhart (arbitrary due to WR) Average arrival (37 years) w/range January 24 – March 20 = February 14 Average departure (37 years) w/range April 14 – May 29 = May 5 Latest departure = May 29, 1991 ♂ Sediment Retention (arbitrary due to SR)
- Fall: Earliest arrival = August 23, 1988 ♂ Sediment Retention Average arrival (37 years) w/range August 23 – October 2 = September 15 Average departure (26 years) w/range November 26 – January 9 = December 15 Latest departure = January 9, 1981 ♂ Lake Springfield (arbitrary due to WR)

The American Wigeon could be identified at a distance by its distinctive white wing patches or its whistling call. I started seeing these ducks in spring as soon as there was open water. They occurred on lakes, ponds, and flooded areas. By the late 1980s the wigeon was arriving earlier in spring. There were four years (1988, 1990, 1993, 1998) of arrival in January through 1998. This was never a very numerous duck, and numbers in spring dropped by the year 2002. High counts were: 200, March 29, 1970; 300, March 16, 1981; 220, March 17, 1992; and 360, March 11, 1996. By March, most wigeon were paired or in the process, with nuptial flights being seen. An example was several males chasing a female on March 31, 1982 at Sangchris. Also, threat displays by males in which they laid low in the water and raised their wings showing their white patches to other males was observed on October 23, 2001 at Lake Springfield. Numbers diminished by mid- to late April, and usually very few were present in May. In nine years there were stragglers into summer with June and very rarely July records: $2 \stackrel{\wedge}{\supset} \& \stackrel{\circ}{\rightarrow}$ June 29 – July 27, 1970 at Sangchris; \mathcal{J} , June 22, 1977 at Lake Springfield; \mathcal{J} , June 29 – July 24, 1978 at Lake Springfield; \mathcal{J} , June 8 – 23, 1982 at Cinder Flats, \mathcal{J} , June 30 – July 13, 1985 at Cinder Flats; \mathcal{J} , June 1, 1991 at Sediment Retention; 3, June 3 – 24, 1997 at airport pond; 9, June 6 & 7, 1999 at airport pond; and \mathcal{Q} , June 2 & 3, 2002 at Buckhart. Wigeon breed in the northern Great Plains north through Canada to Alaska. Fall migrants arrived from August to October, being on the later side after 1990. Also, high counts were lower later in the study. High counts for fall were: 400, October 23, 1970; 300, October 5, 1977; and 160, October 7, 1990. This lowering of numbers might mean there were fewer birds or it could mean there were increased disturbances on the lakes with boats and jet skis. This duck usually tips in the water to feed, but on November 26, 1987 at Knight's pond several were diving for food. A few wigeon were seen nearly every winter usually at sewer ponds or warm water areas like Sangchris, but most numbers in winter were migrants. Some of these winter season counts were: 60, January 23, 1971; 200, December

25, 1971; 150, February 27, 1996; and 225, February 15, 1998. Four male hybrids were found, three were crossed with Mallards: one February 7, 1976 at Lake Springfield; one November 23, 1995 to January 1, 1996 at the East side sewer pond (drawings on file ISM); one December 23, 1998 at Lake Springfield; and one crossed with a Gadwall on December 31 and January 11, 2009-10 at the East sewer pond (photographs). Also, a male wigeon with an all white head except for the eye patch was at the Buffalo sewer pond March 19, 2000. Most American Wigeon winter in the Southern US and Mexico.

Documentation: Specimen = 1) IL. Sangamon Co.? ISM# 606425 $\stackrel{\bigcirc}{\rightarrow}$, Sangchris, October 17, 1975, coll. by W.Anderson.

Highest # Days/Season

Spring72 (1990)Summer10 (1985)Fall70 (1990)Winter68 (1997)

Highest # Birds/Season

Spring2349 (1996)Summer10 (1970 & 1985)Fall2347 (1970)Winter2086 (1997)

American Black Duck

Anas rubripes

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	3144/697 (37)	26/22 (7)	9448/1300 (37)	16193/1778 (37)	28811/3797
Average/day	4.51	1.18	7.27	9.11	7.59
Average/season	84.97	3.71	255.35	437.65	

Status: Uncommon Spring Migrant, Fairly Common Fall Migrant and Winter Resident and Very Rare in Summer

Dates:

Fall:	Earliest arrival = August 1, 2003 Cinder Flats
	Average arrival (37 years) w/range August 1 – October 31 = September 24

Spring: Average departure (37 years) w/range March 21 - May 18 = April 14Latest departure = May 18, 1999 \bigcirc Buckhart (arbitrary due to SR)

The American Black Duck was declining in numbers in the county considering that the earlier years of the study had more birds in less hours/days than in more recent years. Arrivals in fall varied from August (5 years), to September (16 years), to October (16 years); and arrivals seemed to get later more recently, tending toward October. High counts for fall were: 52, November 28, 1971; 60, October 23, 1974; 75, November 24, 1976; and 50, November 20 & 30, 1977. It was interesting to note that high counts diminished until the year 2000, when it then was 10 or less to the end of the study. **Winter** numbers were typically higher than the migration periods. Black Ducks were seen frequently with other puddle ducks especially Mallards, but I had also seen them consistently off to themselves at the same favored places. It should be noted that a certain percent (I would guess 2+%) of these ducks were hybrids with Mallards, which became apparent on close examination. The hybrid males were much easier than females to distinguish. These birds were included in the Black Duck numbers (photograph – on file ISM). High counts for winter were: 70, February 7, 1971; 100, December 22, 1976; and 56, December 11, 1987. Again, more recent counts were lower than earlier counts. Spring numbers were less than fall numbers (about 1 to 3), but with the same drop toward the end of the study. High counts for spring were 36, March 13, 1975 and 35, March 6, 1980. As with other waterfowl in warm early springs they left earlier. I recorded summer ducks in seven years: near Carpenter Park, June 10, 1978; pair? at Cinder Flats, June 11 – August 19, 1985; \bigcirc Buckhart, June 2 &27 and \bigcirc Bunn Park, July 15, 1996; one east of Rochester, June 16, 1999; ♀ Lake Springfield, May 7 – June 9 and \bigcirc Sangchris, May 30 – August 16, 2000; \bigcirc Long Inlet (west of Marine Pt.), June 26, 2001; and \bigcirc Buckhart, June 17 and \bigcirc Rt. 29 north, July 17, 2002. Some of these might have bred, but I never confirmed that they did. The preponderance of females was noteworthy. This duck breeds in northeast North America, including northern Illinois.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

Highest # Days/Season

Spring46 (1991)Summer10 (2000)Fall70 (1980)Winter73 (2000)

Highest # Birds/Season

Spring288 (1983)Summer12 (2000)Fall1063 (1976)Winter1449 (1976)

Mallard

Anas platyrhynchos

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	164202/2904 (37)	38306/1647 (37)	520673/3695 (37)	764577/2412 (37)	1487758/10658
Average/day	56.54	23.26	140.91	316.99	139.59
Average/season	4437.89	1035.30	14072.24	20664.24	

Status: Very Common Migrant and Winter Resident and Common Summer Resident

Dates:

Fall:Earliest arrival = August 28, 1978 fifty Sangamon Co. (arbitrary due to SR)Average arrival (37 years) w/range August 28 – November 12 = October 13

Spring: Average departure (37 years) w/range March 11 – April 15 = March 31 Latest departure = April 15, 1978 (arbitrary due to SR)

If you fed ducks at Washington Park, then you would be familiar with this duck in which the drakes had a green head and the hens were brown. It was 6th on both the numbers and days lists of all species, and it was recorded in all 148 seasons of the study. The semi-domesticated Mallards were very tame even at Lake Springfield due to feeding by humans, and though migrant populations arrived in fall and stayed all winter and left in spring, the two groups intermingled and were difficult to tell apart. Fall numbers were 3.2 times more than spring numbers, but that may be due to timing, as most migrants left before the spring season, plus, of course hunting took its toll in late fall and winter. Numbers in fall dropped in 1998 to the end of the study (2006) especially at Lake Springfield, though Sangchris continued to have numbers of ducks they were not always in Sangamon County. High counts for fall were: 3,000, November 25, 1973; 10,000, November 7 & 27, 1976; 5,000, November 25, 1983; and 5,000, November 30, 1989. In winter, Mallards sat on the ice near the remaining open water at Lake Springfield and Sangchris and flew out in the mornings and evenings to feed in fields. Numbers actually increased in very cold weather, because they congregated at Lake Springfield, when most other bodies of water were frozen. They also found open water at sewer ponds. High counts in winter were: 10,000, December 26, 1970; 10,000, December 4, 1973; 2,000, January 21, 1981; 3,500, December 9, 1989; 2,000, January 3, 1994; and 4,000, February 5, 1999. Numbers were fairly high in winter until 2003 to the end of the study, when they dropped. Spring was a continuation of winter (when much of migration took place) until most birds left in late March and April. High counts for spring were: 3,000, March 6, 1978; 1,200, March 4, 1991; 2,500, March 4, 1994; 4,000, March 10, 1996; and 2,250, March 6, 2002. Mallards mated mostly in early spring from February 11 to mid-April, but they apparently copulated all year as I had dates of January 7, June 17, and October 22. They also displayed on November 28, and December 6. The mating process at Washington Park was very aggressive in April, with gang rape in which some females were killed, this may be due to an excess of males. Also, I noted homosexual males copulating March 15 and April 15, but this behavior probably had more to do with dominance than sex. Mallards nest almost anywhere and not necessarily near water. Egg dates were from March 28 to May 28 and numbers of eggs ranged from 2 - 17. There were 545 broods of downy young detected with 1 - 20 young from April 14 to August 24. These broods averaged between 4.8 to 8.8 young per

brood (see Table 8). The largest broods were apparent earlier in the year because of subsequent attrition caused by predation. Some older young were seen as late as September 9, 1998 at Lake Springfield. On July 8, 2004 Mallards were feeding under a mulberry tree on fallen fruit. Several hybrids occurred with Mallards. I saw a Black Duck mated with a hen April 28, 1992. These hybrids were not uncommon at Lake Springfield, Sangchris and Washington Park. Two Mallard X Northern Pintail drakes were found at Lake Springfield, one December 11, 1977 and the other one January 6, 2000. A Mallard X Am.Wigeon was at Lake Springfield on December 23, 1998 (plus see Am.Wigeon). Other odd ducks were seen such as "blond" Mallards and all white ducks of this species. The subspecies in the county is the widespread nominate form.

Documentation: Specimens = 4) IL. Sangamon Co., ISM# 608238 \circlearrowright , Sangchris, April 13, 1982, coll. by HDB, wt. = 750.0 gms, testes = 14 mm; ISM# 607822 \circlearrowright , Spfld, April 1984; ISM# 606391 \circlearrowright , Sangchris, November 21, 1975, coll. by B. Anderson, wt. = 1011.0 gms; ISM# 606390 \circlearrowright , Sangchris, December 11, 1975.

Highest # Days/Season

Spring92 (6 years) maxedSummer61 (6 years) maxedFall122 (5 years) maxedWinter90 (2003) maxed

Highest # Birds/Season

Spring24290 (1996)Summer2930 (1988)Fall51135 (1990)Winter62140 (1999)

YEAR	# of BROODS	# YOUNG/BROOD	DATES	AVERAGE # YG/BR
1973	4	5 - 8	June 1 – July 17	6.5
1976	12	3 – 13	May 17 – June 15	6.7
1977	12	1 – 11	May 11 – July 11	7.2
1978	4	4 – 9	June 4 – August 24	7.3
1979	7	1 - 12	May 9 – July 8	6.6
1980	4	3 – 11	May 1 – June 15	7.0
1981	6	3 – 10	April 25 – June 17	6.5
1982	4	7 – 12	June 13 – 23	8.8
1983	6	5 - 20	May 21 – June 11	10.5
1985	19	2 - 20	April 28 – July 17	8.7
1986	15	1 – 12	April 28 – July 8	6.3
1987	30	2 - 15	April 26 – July 11	7.3
1989	16	2 - 10	May 13 – August 21	4.8
1990	5	4 – 9	April 18 – July 4	6.2
1991	24	2 - 12	May 1 – July 21	6.2
1992	13	1 – 14	May 4 – August 3	6.9
1993	12	1 – 10	May 11 – August 12	5.5
1994	15	2 - 9	April 28 – July 26	6.9
1995	24	2 - 14	April 27 – July 18	6.8
1996	24	2 - 10	April 30 – July 31	5.3
1997	28	2 – 11	April 30 – August 23	5.3
1998	34	1 – 12	April 23 – July 20	6.5
1999	30	2 – 13	April 28 – July 24	6.0
2000	40	2 – 17	April 26 – July 30	7.1
2001	40	1 – 14	April 29 – August 11	5.6
2002	38	2 – 11	May 14 – July 29	5.8
2003	31	2 – 11	April 14 – August 17	6.2
2004	28	1 – 11	April 29 – July 27	5.9
2005	20	2 - 10	April 24 – August 20	6.5

 Table 8. Mallard Broods in Sangamon County (only downy young counted).

Mottled Duck

Anas fulvigula

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	12/12 (2)	38/38 (3)	27/27 (2)	13/13 (3)	90/90
Average/day	1.0	1.0	1.0	1.0	1.0
Average/season					

Status: Very Rare Permanent Resident

Dates: One Record: ♂ (seen 90 times) Lake Springfield and East side sewer pond from May 21, 2004 to December 16, 2007.

One male was found with Mallards at the beach area and photographed. It had a yellow bill and black gape, a buffy head and dark brown body with buff feather edgings. The speculum was dark blue (aqua in certain light) with black edges and had a thin white trailing edge. The throat was unstreaked (see Bohlen, 2004 for more details). This duck stayed four years and was seen with a female Mallard at the dam at Lake Springfield June 9, 2006 with which it appeared to be mated. A male Mallard tried to join them, but the Mottled Duck thrashed it and swam off with the female. On June 17, 2006 the Mottled Duck was showing some molt. This species is normally found in the coastal areas of the southeastern US, but recently there were inland records for many Midwestern states. This is the first documented record for Illinois.

Documentation: Photographic: IL. Sangamon Co. Lake Springfield, May 21 & 25 & June 21, 2004 and East side sewer pond, December 21, 2004 and Cinder Flats, June 17, 2006 HDB – on file ISM.

Blue-winged Teal

Anas discors

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	47873/2235 (37)	939/384 (33)	46959/1656 (37)	35/29 (10)	95806/4304
Average/day	21.42	2.45	28.36	1.21	22.26
Average/season	1293.86	28.45	1269.16	3.50	

Status: Common Migrant, Occasional Summer Resident and Rare Winter Resident

Dates:

Spring: Earliest arrival = February 19, 1994 ♂ Cinder Flats Average arrival (36 years) w/range February 19 – March 22 = March 9 Average departure (34 years) w/range May 13 – June 2 = May 25 Latest departure = June 2, 2006 two ♂ LSpfld (arbitrary due to SR)

Fall: Earliest arrival = July 1, 1982 ♂ Cinder Flats
Average arrival (34 years) w/range July 1 – August 18 = July 30
Average departure (36 years) w/range October 5 – November 29 = November 2
Latest departure = November 29, 1975 Lake Springfield (also see WR)

This small duck showed light blue wing patches in flight, usually foraged in shallow water, and could be quite tame. The drakes in spring had a white crescent on the face and a white flank, but in fall all of these teal were brown like the females. This was a numerous species being 27th in numbers of all species in the study. Besides the early **spring** date above, there were three males February 27, 1996 at the Cinder Flats and a male February 28, 2000 at the Rochester sewer pond. One male in alternate plumage February 11, 1989 at Lake Springfield may have been a wintering bird. Males sometimes arrived first, but in other years both sexes arrived together. High counts for spring were: 125, April 23, 1970; 150, April 10, 1982; 185, May 1, 1991; 210, April 8, 1995; 320, April 22, 1996; and 310, April 20, 2000. Most had gone on north by late May, but a few stayed to nest or were non-breeders in summer. Copulation was seen at Berry on April 15, 1999. Nuptial flights in which several males chased a single female were noted at Sangchris April 11, 2001 and April 10, 2002. All breeding evidence had been found at Sangchris: two young, July 14, 1970; 5 downy young with female, June 13, 1978; a nest with 6 eggs, April 28, 1991; 3 young with female, July 6, 1993; and 5 broods in 2002 – 8 young, June 23, 6 &10 young, June 25, 5 young, July 1, and 9 young, July 6. However, the fishermen had the IDNR abolish the refuge at Sangchris and now none nest there. There were many other summer records especially for the Cinder Flats, Sediment Retention, Buffalo sewer pond, Buckhart, and some overflow areas in which teal were seen only a day or in a few cases all summer, but nesting was not observed. Fall arrival was somewhat muddled by summer residents, but occurred in July (17 times) or August (20 times). Some falls the flights were rather leisurely, with birds staying and feeding in shallow water, but in drier falls the teal arrived on the cold fronts, landed on deep water, sat in tight (almost coot-like) flocks, did not feed and were gone at least by the next day (driven off by boaters). There was a raft of 150 teal at Lake Springfield on September 21, 1979. Blue-winged Teal in fall were in brown basic plumage as were 300 on September 11, 1996, except one male, which was in bright alternate plumage. A single male showed the white facial

crescent even though it was in basic plumage at the Cinder Flats September 23, 2009 (photograph). From my notes these teal molted into basic plumage in mid- July. The earliest molt was July 16, although one was in faded alternate plumage on August 9. High counts for fall were: 500, September 26, 1970; 400, September 5, 1989; 400, August 31, 1995; 425, September 11, 1996; 310, September 14, 2005; and 570, September 19, 2006. Most last departure dates were in late October and November, but in 8 years birds straggled into winter. These records were: 5, December 12 and one, December 26, 1970; one, January 30 and February 2, 1971; one, December 24, 1971 and January 2 and 9, 1972; male in alternate plumage (!) January 1, 1985; one, December 18, 1988 and February 11, 1989; one, December 2 and 3, 1991; a male that slowly changed into alternate plumage, December 28, 1993 to February 8, 1994; one, December 1-6, 2001; one, December 4, 2005; and one, December 11, 2009. Some oddly plumaged birds were seen (see Cinnamon Teal for hybrids, Table 9) including a drake on March 19, 2000 that showed a white V on the nape suggesting that it had a deflated crest or tuft (I had seen this several times on different birds); one September 10, 1990 that was mostly white except a dark area on secondaries and an orange bill and tarsi and dark eye; one March 31, 1993 with a normal male head, but the body all whitish and no blue in the wing. The Blue-winged Teal winters from the Gulf Coast south to South America.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 609906 \bigcirc , Lake Springfield, September 12, 1989, coll. by HDB, wt. = 292.0 gms.

Highest # Days/Season

Spring85 (2000)Summer35 (1990)Fall72 (1980 & 1981)Winter9 (1993)

Highest # Birds/Season

Spring3920 (2000)Summer139 (1990)Fall3929 (1970)Winter9 (1993)

Cinnamon Teal

Anas cyanoptera

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	27/27* (10)	0/0	6/6 (3)	0/0	33/33
Average/day	1.0		1.0		1.0
Average/season	2.70		2.0		

* numbers include hybrids – see records

Status: Very Rare Migrant

Dates:

- Spring: Earliest arrival = March 16, 2000 ♂ south end Lake Springfield Average arrival (6 years) w/range March 16 – April 13 = April 1 Average departure (5 years) w/range March 25 – April 18 = April 8 Latest departure = April 18, 1997 ♂ near Beamington
- Fall:Earliest arrival = August 17, 1980 Buffalo Sewer PondLatest departure = September 30, 1985 Buffalo Sewer Pond

In the study there were nine records for this western teal, six in spring and three in fall. Additionally, there were two fall records in the addendum. Plus, there were four spring hybrid records with Blue-winged Teal (see Table 9). The first record was not until 1980, when a drake was seen southwest of Springfield on April 13 and 14. All spring records were of single birds. Most of the occurrences (8 of 14) were between 1990 and 2000. As seen above, this teal came through in a short period of time, usually with a large influx of Blue-winged Teal. There were two fall records of females (?) one at Lake Springfield on September 7, 2007 and two at the Cinder Flats September 20, 2009 in the addendum. Females in fall can be tawny buff and stand out from the Blue-winged Teal, all of which would be in basic plumage. All hybrids were males and showed characters of both teal including red eye and reddish plumage of the Cinnamon Teal and the whitish crescent and white flank patch of the Blue-wing (descriptions on file ISM). I noted also a male Blue-winged Teal with a red eye on April 15, 1998. This teal breeds as close as the Great Plains and they winter in the southwestern US and Mexico. The subspecies in the county is *A. c. septentrionalium*.

Documentation: Photographic: IL. Sangamon Co., HDB & DO – on file ISM.

1980	♂ SW Springfield April 13 – 14 (photos) one, Buffalo sewer pond August 17 – September 7
1984	one, Sangamon River September 2
1985	♀ Buffalo sewer pond September 30
1990	♂ Buckhart March 18 – 25
1991	♂ Sangchris March 28 – April1 (photos)
1992	♂ hybrid with Blue-winged Teal, Sediment Retention April10
1993	♂ hybrid with Blue-winged Teal, southwest of Springfield April 14 – 16
1995	♂ south end Lake Springfield April 11 – 13
1997	♂ near Beamington April 13 – 18
1998	♂ hybrid with Blue-winged Teal, Rochester sewer pond April15 – May 3
2000	♂ south end Lake Springfield March 16
2004	♂ hybrid with Blue-winged Teal, Cinder Flats/Rochester sewer pond April14 – 18

Table 9. Records of Cinnamon Teal and Hybrids in Sangamon County

Addendum:

2007	$\stackrel{\frown}{_{\sim}}$ Lake Springfield September 7 (photos)
2009	two, Cinder Flats September 20 (photos)

Northern Shoveler

Anas clypeata

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	43983/1962 (37)	93/86 (12)	14273/1492 (37)	3035/426 (35)	61384/3966
Average/day	22.42	1.08	9.57	7.12	15.48
Average/season	1188.73	7.75	385.76	86.71	

Status: Common Spring Migrant, Fairly Common Fall Migrant, Occasional Winter Resident and Rare (non-breeding) Summer Resident

Dates:

Spring: Earliest arrival =February 3, 1992 Buckhart & 2003 LSpfld (arbitrary due toWR) Average arrival (37 years) w/range February 3 – March 21 = February 25 Average departure (37 years) w/range April 22 –May 31 = May 14 Latest departure = May 31, 1988 & 2000 (arbitrary due to SR)

Fall: Earliest arrival = August 6, 1989 Sangamon Co.
Average arrival (36 years) w/range August 6 – September 22 = August 26
Average departure (36 years) w/range November 7 – January 7 = December 10
Latest departure = January 7, 1994 ten Sangchris (arbitrary due to WR)

This spatulate-billed puddle duck liked shallow water and sewer ponds, and its numbers increased when wetlands were available such as the Sediment Retention Facility. Spring arrival timing had become earlier from 1971 to the present (early March to mid-February). High spring counts varied yearly: 150, March 26, 1976; 140, March 29, 1988; 260, April 22, 1996; 850, April 6, 2000; and 430, April 6, 2006. Some years nuptial flights occurred in which several males would chase a female; this was noted April 10, 1999 at Sangchris and March 7, 2002 at Lake Springfield. The shoveler occasionally had a special way it fed – called "wheel feeding" and this was observed at the Rochester and Buffalo sewer ponds and at the Sediment Retention. It involved usually 50 - 100 shovelers all paddling in a circle with their bills in the water to obtain food. Apparently the circular motion of the ducks made the food (phytoplankton) more available. I had noted this method of feeding in both spring and fall (see Bohlen & Oehmke, 1991). One was diving for food, which was not usual for this duck, at Washington Park September 22, 2000. There were several stragglers into **summer** some of which were late spring migrants, but a few were present for longer periods. These were: male, June 22 – July 27, 1970 at Sangchris; male, July 3 & 11, 1976 at North sewer pond; female, May 31 – August 11, 1981 at Cinder Flats; female - then a pair, June 27 – July 23, 1993 at Cinder Flats; male, May 27 – August 3, 2001 at Sangchris; male, June 3 – July 23, 2002 at Sangchris and male, June 23, 2002 at Buffalo sewer pond. Molt was seen in some of these summer birds from July 29 – August 27, the latter bird was flightless. Most nesting of the Northern Shoveler is in the prairie region of the northern US and Canada. Returning ducks in **fall** were in brown basic plumage, and numbers were much less than spring numbers (3.1 in spring to 1 in fall). High counts in fall were: 100, November 1, 1979; 70, September 27, 1981; and 110, November 8, 2000. Shovelers could be identified on the water because they sat in dense, closely packed flocks. There were not large numbers in winter, but they had increased by 1987, and were now expected every winter especially at sewer ponds.

Most counts in winter were early in the season (late fall migrants?) and were usually low in numbers (few to 20–30 birds), but the highest was 150, December 17, 1999. On January 4, 2009 a drake at the Berlin sewer pond had a bright orange bill, which was usually dark gray or black (photograph – on file ISM). Most Northern Shovelers winter in the southern US and Mexico.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

Highest # Days/Season

Spring87 (2000)Summer27 (1981)Fall87 (1989)Winter36 (2001)

Highest # Birds/Season

Spring6679 (2000)Summer27 (1981)Fall1155 (1987)Winter509 (1999)

Northern Pintail

Anas acuta

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	8427/611 (37)	22/17 (4)	19676/1399 (37)	12191/759 (37)	40316/2786
Average/day	13.79	1.29	14.06	16.06	14.47
Average/season	227.76	5.50	531.78	329.49	

Status: Fairly Common Spring Migrant, Common Fall Migrant, Occasional Winter Resident and Very Rare Summer Resident

Dates:

Spring: Earliest arrival = January 5, 1998 sixty Sangchris (arbitrary due WR) Average arrival (36 years) w/range January 5 – March 4 = February 4 Average departure (37 years) w/range March 1 – May 27 = April 12 Latest departure = May 27, 1990 ♂ Sangamon River (but see SR)

Fall: Earliest arrival = August 17, 1975 Sangchris
Average arrival (37 years) w/range August 17 – September 27 = September 2
Average departure (35 years) w/range October 25 – January 10 = December 10
Latest departure = January 10, 1981 East side sewer pond (arbitrary due to WR)

Northern Pintails were one of the first ducks that came north with a warm up in mid-winter (January), and many times these were false starts to **spring**. I had watched flocks moving along the South Fork and over Sangchris in early March. However, late in the study, after 2003, most of the migration occurred in late winter and was practically over by March. High spring counts were: 100, February 25, 1977; 100, March 15, 1980; 115, March 8, 1996; 200, February 13, 1998; 350, February 16, 2001; 350, March 2, 2001; 400, February 24, 2002; and 300, March 8, 2002. Other late departure dates were a male, May 13, 2000 and a pair, May 10, 2004. Many pintails were paired even in late January and February. These ducks breed in the northern Great Plains, Canada and Alaska. Summer records in Sangamon County were non-breeding birds: male, Cinder Flats, June 3, 1982; male, east of Springfield, June 10, 1990; female, Sangchris, June 5 – July 24, 1995; male and female, Buckhart, until June 6, 2002; and a male, north of New City, June 18 – July 2, 2008. When the pintails returned in early **fall** they were in brown (basic) plumage, and essentially all resembled females. By late September or early October, I had seen males in apparent alternate plumage. There were two very cinnamon-colored pintails with regularly colored birds on September 9, 1989, but this could possibly be an age difference or due to staining. Fall migration began in either August or September; shallow water was usually required and was not always available. These ducks foraged in shallow water or on mudflats, and as with shorebirds, some years this habitat was not there. The Sediment Retention provided excellent habitat from 1987–1990 and the highest numbers during the study, but numbers dropped somewhat afterward. High counts for fall were: 100, November 3, 1970; 125, November 20, 1977; 200, September 28 & October 24, 1987; and 250, October 31, 1990. Pintails often fed in fields with other waterfowl. Many of the **winter** numbers came from migrants, and truly wintering pintails were few. Fall migration usually went into December. Other counts from the winter season were: 175, December 26, 1970; 80, December 9, 1989; 150 December 5, 1990;

and 130, January 16, 1998. On February 25, 1977 at Lake Springfield, a bird was seen, which was white except for a brownish head. A hybrid N. Pintail X Mallard was observed below the dam at Lake Springfield on December 11, 1977. Most Northern Pintails winter from southern Illinois to US coastal areas south to Central America and the West Indies.

Documentation: Photographic: IL. Sangamon Co., HDB - on file ISM.

Highest # Days/Season

Spring31 (1991)Summer10 (1995)Fall78 (1990)Winter66 (1997)

Highest # Birds/ Season

Spring890 (2001)Summer10 (1995 & 2002)Fall5856 (1990)Winter1864 (2000)

Green-winged Teal

Anas crecca

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	22089/1190 (37)	92/60 (16)	30708/1950 (37)	2389/ 351 (36)	55278/3551
Average/day	18.56	1.53	15.75	6.81	15.57
Average/season	597.0	5.75	829.95	66.36	

Status: Common Migrant, Occasional Winter Resident and Rare Summer Resident

Dates:

- Spring: Earliest arrival = January 21, 1990 four East side sewer pond (arbitrary due toWR) Average arrival (37 years) w/range January 21 – March 24 = February 20 Average departure (37 years) w/range April 11 – May 26 = May 2 Latest departure = May 26, 1988 ♂ Sediment Retention
- Fall: Earliest arrival = June 20, 1987 two adults Cinder Flats
 Average arrival (37 years) w/range June 20 September 5 = August 8
 Average departure (36 years) w/range November 7 January 2 = December 11
 Latest departure = January 2, 1971 five Sangchris (arbitrary due to WR)

This small shorebird-like duck preferred mudflats and shallow water, and the population fluctuated with available habitat. They tended to return in **spring** as soon as there was open water, and they may have migrated on north earlier in the later part of the study (after 1981). possibly due to climate change. High counts for spring were: 350, April 8, 1989; 200, March 18, 1991; 210, March 16, 2000; and 210, March 14, 2006. A nuptial flight occurred when ten males were chasing a female on March 18, 2001 at Sangchris. Displays on the water had been noted as early as March 14, 2001. Most birds appeared to be paired by mid-April. Nearly all left in late April or early May, but some lingered through the summer (no breeding recorded): male, Lick Creek, June 30, 1978; 3, Sediment Retention, June 6 & 11, 1988; male, Sediment Retention, June 4, 1989; injured male, Cinder Flats, June 2–July 7 and female, Buckhart, June 6, 1991; pair, Sangchris, from May–June 17, 2000 (because of drought?); pair, south of Chatham, June 17, 2002 and female, Buckhart, June 28, 2002 (drought on Great Plains). Most breed on the Great Plains, across Canada and Alaska. Early fall arrivals were usually in brown (basic) plumage, and it was October before males regained any colors. Separating this teal from similar Blue-wings in fall could be difficult (except when in flight), but note that Green-wings had a light yellowish mark near the tail and the legs were dull gray. Although the earliest fall arrival was in June, that was the only June date, while this teal arrived in July in eleven years, August in 21 years, and September in four years. Other early fall arrivals were July 1, 1982 and July 4, 1984. Some were seen atypically diving at a pond on October 22, 1976, and had to kick to get under the water. Fall high counts were: 2000, November 12 & 14, 1971; 300, September 26, 1988; 400, October 11, 1990; and 120, November 21, 2005. These ducks stayed in fall until the mudflats froze. Truly wintering Green-winged Teal were difficult to find, most being migrants, but the best places were the sewer ponds and Sangchris. High counts were: 125, December 12, 1970; 50, February 19, 1994; and 70, December 5, 1998. Possible intergrades with Eurasian Teal were seen March 17, 1992 at Sangchris and April 16, 1996 at the Rochester sewer pond, both were showing white

marks on scapulars and in front of the wings. The subspecies found here is *A. c. carolinensis* which winters south to northern Central America.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 607386 $\stackrel{\frown}{\circ}$, Sangchris, March 17, 1982, coll. by HDB, wt. = 280.5 gms, testes = 9 mm.

Highest # Days/Season

Spring69 (2000)Summer14 (1988)Fall111 (1989)Winter54 (1997)

Highest # Birds/SeasonSpring2893 (2000)Summer28 (1988)Fall4458 (1988)Winter346 (1997)

Canvasback Aythya valisineria

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	10456/663 (37)	20/20 (3)	4656/530 (35)	24531/1210 (37)	39663/2423
Average/day	15.77	1.0	8.78	20.27	16.37
Average/season	282.59	6.67	133.03	663.0	

Status: Fairly Common Migrant and Winter Resident and Very Rare in Summer (nonbreeding)

Dates:

- Spring: Earliest arrival = January 3, 1995 34 Lake Springfield (arbitrary due to WR) Average arrival (33 years) w/range January 3 – March 1 = February 5 Average departure (37 years) w/range March 26 – May 16 = April 13 Latest departure = May 16, 1976 ♀ North sewer pond
- Fall: Earliest arrival = October 8, 1989 three Sediment Retention Average arrival (34 years) w/range October 8 – November 16 = October 23 Average departure (19 years) w/range November 16 – January 8 = December 15 Latest departure = January 8, 1977 ♂ Lake Springfield (arbitrary due to WR)

This diving duck with the distinctive sloping bill and head profile became more numerous in winter and less evident in spring and fall as the study progressed. **Spring** arrivals were mainly in February (14 years) and March (once) from 1971 to 1985, but then arrivals were in January (11 years), February (8 years) and undetermined (6 years, possibly winter residents) from 1986 to 2009. This indicated earlier arrivals more recently. Canvasbacks were found on the deeper water of Lake Springfield and Buckhart, but also occurred on sewer ponds. The males started migrating somewhat earlier than females. High counts for the spring period were: 300, March 3, 1977; 380, March 11, 1989; 170, March 17, 1992; and 110, March 1, 2006. Canvasbacks departed in spring usually in April (in 31 years), but in March (five years) and May (four years). Although some straggled into May, very few were found in **summer**: female, Cinder Flats, June 11 – 16, 1985; male, Sediment Retention, May 31 – June 11, 1988; and very worn female, Lake Springfield, May 31 – July 9, 1999. Canvasbacks breed in the prairie areas of the Great Plains, northwestern US and Canada and Alaska. Most fall arrivals were in October, but seven years were in November, and fall arrival may be later recently (due to climate change?). High counts for the fall period were: 60, October 22, 1976; 125, November 20, 1978; 120, November 13, 1992; and 130, November 22, 2000. Winter became the time for this species, with much spring and fall migration occurring at this season as well. Canvasback were staying for winter in areas with open water such as Lake Springfield, Sangchris, and sewer ponds. In fact, I could usually tell when the Illinois Valley froze because Lake Springfield had a flight of Canvasback (usually in late November or early December). Fall departures were difficult to discern from winter residents. High counts for winter were: 250, February 27 & 28, 1976; 108, January 23, 1999; 102, December 17, 1999; 200, February 19, 2003; and 350, February 20, 2006. The Canvasback winters south to central Mexico.

Documentation: Specimens = 2) IL. Sangamon Co., ISM# 606428 & 606389 both $\bigcirc \bigcirc$, IL. Sangchris, October 28, 1975, coll. by W. Anderson.

Highest # Days/Season

Spring34 (1999)Summer14 (1999)Fall38 (1989)Winter75 (2000)

Highest # Birds/Season

Spring1483 (1980)Summer14 (1999)Fall508 (1989)Winter2942 (2002)

Redhead

Aythya americana

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	20863/1015 (37)	56/23 (7)	6163/633 (37)	6574/660 (37)	33656/2331
Average/day	20.55	2.43	9.74	9.96	14.44
Average/season	563.86	8.0	166.57	177.68	

Status: Common Spring Migrant, Fairly Common Fall Migrant, Occasional Winter Resident and Rare Summer Resident (non-breeding)

Dates:

- Spring: Earliest arrival = January 7, 2001 (arbitrary due to WR) Average arrival (37 years) w/range January 7 – February 24 = February 6 Average departure (37 years) w/range March 28 – May 29 = April 21 Latest departure = May 29, 1975 ♀ Cinder Flats
- Fall: Earliest arrival = September 16, 1998 ♀ Lake Springfield Average arrival (37 years) w/range September 16 – November 3 = October 13 Average departure (37 years) w/range November 5 – January 9 = December 8 Latest departure = January 9, 1996 (arbitrary due to WR)

A fairly large diving duck, the Redhead, usually occurred on larger bodies of water, but some times could be seen on sewer ponds, flooded areas and other ponds. **Spring** arrival actually took place in late winter and false springs some years accounted for very early arrivals. I noted them paired by February 21 and into March, but there always seemed to be a preponderance of males. High counts in spring were: 300, March 7, 1977; 300, March 7, 1981; 250, March 27, 1982; 160, February 28, 1994; 170, March 8, 2002; and 125, March 3, 2004. Higher numbers early in the study might mean that there was a decline in this duck, but increased boat traffic could be chasing off the birds. By the end of April, the great majority of Redheads had gone on north, but there were some May records in at least ten years. Plus, there were summer records in seven years as follows: 1976 - 2 ?, June 6 at the IDOT pond and the 2, June 19 – September 18; 1979 - \mathcal{O} , June 11 at Lake Springfield; 1984 - \mathcal{O} , June 7 – 18 at the Cinder Flats; 1985 - \mathcal{O} , June 1 – September 26 at the Cinder Flats; 1996 - 3° , June 9 – 11 north of Springfield on overflow; 2001 - 3° , June 1 – 8, then 3° June 15 at Sangchris; 2002 (continuing from an influx in late May involving $\partial \partial$ and $\Im \Im$ and coinciding with flooding in mid-June) - \Im , Horse Creek, $\partial \Im \Im \Im$, Sangchris and $2 \sqrt[3]{5}$, north of New City June 15, \bigcirc , Horse Creek and $5 \sqrt[3]{5}$, Alpha Road June 16, β , north of New City and 5 $\beta\beta$, Alpha Road June 17, and 4 $\beta\beta$, Alpha Road June 18. An influx (in 2002) of this magnitude at this time of year was unprecedented. It may have been caused by dry conditions on the Great Plains. The Redhead breeds in interior Alaska and the Great Plains of Canada and the US and the western US. Just using spring and fall numbers, spring out- numbered fall 3.4 to 1. High counts in fall were: 60, November 11, 1977; 100, November 3 & 9, 1979; and 72, November 1, 1996. Truly wintering Redheads were few, and some winters (18) there were none. They were usually found at sewer ponds, Sangchris or the warm water area at Lake Springfield. Some winter records include: 11, December 26, 1970; 3, January 2, 1988; 4, December 29, 1993; 6, January 2, 1999; and 15, January 8, 2007. I

occasionally saw females that had partially white plumages and one on March 23, 1980 was all creamy yellow except a light brown mark above the eye. The Redhead winters south as far as Guatemala.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 606726 $\stackrel{\triangleleft}{\circ}$, west end Sangchris, April 14, 1978, coll. by HDB, wt. = 695.0 gms, testes = 14 mm.

Highest # Days/Season

Spring79 (2001)Summer8 (1984)Fall33 (1978)Winter50 (1993)

Highest # Birds/Season

Spring3321 (1977)Summer29 (2002)Fall607 (1978)Winter1170 (1991)

Ring-necked Duck

Aythya collaris

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	39893/1301 (37)	60/57 (13)	31107/1099 (37)	14884/860 (37)	85944/3317
Average/day	30.66	1.05	28.30	17.31	25.91
Average/season	1078.19	4.62	840.73	402.27	

Status: Common Migrant, Uncommon Winter Resident and Rare in Summer (nonbreeding)

Dates:

- Spring: Earliest arrival = January 17, 1988 ♂LSpfld (arbitrary due to WR) Average arrival (37 years) w/range January 17 – March 9 = February 11 Average departure (37 years) w/range April 8 – May 12 = April 27 Latest departure = May 12, 1971 ♂ LSpfld (arbitrary due to SR)
- Fall: Earliest arrival = August 25, 1974 North sewer pond (arbitrary due to SR) Average arrival (37 years) w/range August 25 – November 9 = October 1 Average departure (35 years) w/range November 22 – January 9 = December 13 Latest departure = January 9, 1971 three Lake Springfield (arbitrary due to WR)

This was the diving duck with the white slash in front of the wing and the ring on the bill, but the ring on the neck was seldom visible. The hen was brown with a distinctive peaked crown and face pattern. Flocks could be found on lakes, ponds, overflow areas, sewer ponds, and unlike most diving ducks it would lay into the edges of ponds and lakes where brush and trees extended. Arrival in **spring** was early, usually as soon as some thawing occurred, and they were subjected to false springs. Most arrivals (22) were in February, but ten were in January and four were in March. If the spring arrivals were broken into early (1971 - 1989) and recent (1990 - 2006) the resulting arrivals would be February 18 (early) and February 3 (recent). This means spring migration became a half month earlier during the study. High counts for spring were: 400, March 2 & 3, 1977; 400, March 24, 1979; 770, March 11, 1989; 400, March 6, 1990; and 480, March 15, 2002. Some flocks later in the season contained mostly females such as March 23, 1994 at Sangchris, suggesting differential migration of the sexes. I noted copulation on Lake Springfield March 7, 2007, although they do not breed here. The female gave a grating call sounding like "herrum". The majority of birds left by the end of April (in 26 years), and the departure was in May in eleven years with stragglers into late May and summer in 13 years (see Table 10). Most of the stragglers were males. The Ring-neck breeds in central Alaska, Canada, and the Northwest and Northeast US as close as Wisconsin. Though there were some early arrivals for fall, most were in late September or early October. High counts for fall were: 350, November 3, 1979; 700, November 22, 1983; 320, October 27, 1985; 550, November 2, 1991; and 300, October 31, 2006. Most duck numbers in winter were migrants, but some stayed at sewer ponds, Sangchris or the warm water ditch. The numbers appeared to increase in the winter season of 1993, but this may reflect an earlier spring migration. High counts were: 300, February 27, 1977; 250, February 18, 1994; and 85, December 18, 1999. Numbers in winter usually dropped to near zero when there was a freeze- up. Many winter in southern Illinois and as far

south as Panama. A mostly white female was at the Berlin sewer pond on October 21, 2000 (drawing on file ISM).

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 606427 ♂, Lake Springfield, November 30, 1975, coll. by Thrawl, wt. = 767.1 gms.

Highest	# Days/Season	Highest # Birds/Seaso	<u>n</u>
Spring	63 (1994)	Spring	2697 (1977)
Summer	16 (2002)	Summer	16 (2002)
Fall	48 (2006)	Fall	1858 (1992)
Winter	68 (2000)	Winter	1747 (2000)

Table 10. Summer Records of Ring-necked Ducks in Sangamon County

1975	3	Washington Park, July 11 – August 4
1775	0	Washington Fark, Saly FF August 4
1976	8	IDOT pond, May 28 – June 6 until September 18
1986	6	Buffalo sewer pond, May 17 – July 20
1987	6	Sediment Retention, May 2 – July 4
1990	8	Sediment Retention, May 3 – July 24 and \circlearrowleft at Cinder Flats, July 9 – 27
1991	8	Buckhart, June 6 & 11
1994	2 ී ී	Sangchris, May 14 – 22, then a ♂ until June 22
1995	8	Sangchris, May 16 – June 27
1997	8	East side sewer pond, June 22 – July 19
2000	2 ී ී	Knight's Park, May 13 – June 4 and a $ \bigcirc $ at south end LSpfld June 12
2001	2	Bunn Park, May 15 – July 11
2002	3	Sangchris, May 19 – July 9 and a 🖒 at Rt.29 bridge N. May 29 – June 4
2006	6	Lick Creek, June 5

Addendum:

2008	3	Mall pond, June 22
2009	50	Lake Springfield, July 1 – into October

Tufted Duck

Aythya fuligula

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	5/5 (1)	0/0	0/0	0/0	5/5
Average/day	1.0				1.0
Average/season					

Status: Very Rare Spring Migrant

Dates: One Record: ♀, Lake Springfield and Buffalo Sewer Pond, March 15 – 20, 2004.

Individuals of the Tufted Duck were first observed at Lake Springfield and later at the Buffalo sewer pond. These ducks were eleven miles apart, but almost surely represented the same bird as they were in the same plumage. Also, many of the outlying migrant waterfowl flew into Lake Springfield to roost in the evening. This was a Eurasian species which had increased in North America, but it was still in very low in numbers, there being only three other records from Illinois at the time of my sighting. This female was typical with a short tuft and no white on the face. It arrived with a spring influx of scaup and was always seen in the company of a small flock of these ducks. It was seen diving for food and slept a lot (for further details see Bohlen, 2004a). I determined an earlier (1983) duck at the Buffalo sewer pond thought to be this species was a Greater Scaup.

Documentation: Photographic: IL. Sangamon Co., Buffalo Sewer Pond, March 17 & 20, 2004, HDB- on file ISM.

Greater Scaup

Aythya marila

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	283/125 (24)	14/14 (2)	268/115 (30)	662/282 (30)	1227/536
Average/day	2.26	1.0	2.33	2.35	2.29
Average/season	11.79	7.0	8.93	22.07	

Status: Occasional Migrant and Winter Resident and Very Rare (non-breeding) Summer Resident

Dates:

Fall:	Earliest arrival = October 13, 1987 \checkmark Sed Ret & 1994 \bigcirc LSpfld
	Average arrival (32 years) w/range October 13 – December 21 = November 3

Spring: Average departure (25 years) w/range March 7 – May 20 = April 8 Latest departure = May 20, 2007 ♀ Lake Springfield (photo)

This duck was the larger version of the Lesser Scaup, but it had a more rounded head, wider bill, and broader and longer white wing stripe. It was difficult to separate out these two duck species at a distance without a good scope, and in the early years I did not have one. My first record was January 1, 1976, and I recorded them every year since. Scaup at a distance in this study were listed as Lesser Scaup. Greater Scaup were more numerous on the Great Lakes than further south in Illinois and in Sangamon County. The preponderance of Greater Scaup in this county was usually females as they probably wintered further south than males. Most **fall** arrivals were in October and November. Lesser Scaup averaged almost a month earlier in fall, but note in 1994 Greater Scaup were seen earlier. Other early fall arrivals were October 20, 1991 and October 18, 1992. High counts for fall were: 6, November 11, 1984; 10, November 5, 1986; 10, November 17, 1991; and 8, November 19, 1997. Winter had the highest numbers, but daily counts were only: 10, February 22, 1998; 12, December 22, 2004; 14, 2002February 26, 2007 and 22, December 10, 2007. Arrivals in spring were from late January to mid-March. Most counts were under five, with high counts in spring: 10, February 28, 1991; 44, March 6, 1987; and 14, March 9, 2007. Thirteen of these ducks were feeding near shore on algae covered rocks at Lake Springfield on March 5, 2007. Other late spring departures were females: May 4, 1985; April 29, 1996; and April 28, 1998. There were two summer records: female at the Cinder Flats, May 26 to June 25, 1985 and a female at Buckhart, June 18, 2002. On November 20, 1997 I observed a cream colored female (?) at Lake Springfield which showed a dilution of melanins. Although there is some overlap with Lesser Scaup, the Greater Scaup breeds further north in northern Canada and Alaska. The subspecies in North America is A. m. nearctica.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

Highest # Days/Season Spring 14 (1999)

Spring14 (1999)Summer13 (1985)Fall14 (1991)Winter28 (1993)

Highest # Birds/Season

Spring48 (1987)Summer13 (1985)Fall47 (1991)Winter74 (1992 & 1997)

Lesser Scaup

Aythya affinis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	367322/2072 (37)	158/101 (21)	102519/1259 (37)	69542/1611 (37)	539541/5043
Average/day	177.28	1.56	81.43	43.17	106.99
Average/season	9927.62	7.52	2770.78	1879.51	

Status: Very Common Spring Migrant, Common Fall Migrant, Uncommon Winter Resident and Occasional Summer Resident (non-breeding)

Dates:

- Spring: Earliest arrival = January 5, 1998 (arbitrary due to WR) Average arrival (36 years) w/range January 5 – March 15 = February 8 Average departure (37 years) w/range May 2- 31 = May 15 Latest departure = May 31, 1989 ♂♀ Sangchris (arbitrary due to SR)
- Fall: Earliest arrival = September 26, 2003 ♂ Lake Springfield Average arrival (36 years) w/range September 26 – October 21 = October 10 Average departure (18 years) w/range November 14 – January 8 = December 9 Latest departure = January 8, 1981 ♀ LSpfld (arbitrary due to WR)

The Lesser Scaup was the most numerous diving duck in the county and was second only in numbers to the Mallard of all ducks. They were seen on the larger bodies of water such as Lake Springfield, Sangchris, and Buckhart as well as ponds, sewer ponds, over flow areas and occasionally on the Sangamon River as were 12 on February 21, 2006. A lot of spring migration occurred in late winter, and that had increased since 1982. At Lake Springfield on March 10, 1982, a large flock descended to the lake in a spiral and they made a loud whooshing sound. There was some differential migration with the males dominating the early flocks up to the end of March, with both sexes in early April, and then mostly females. I did not see much pairing or nuptial flights in this duck, though I did see several males pursuing a female March 27, 2001. Most of the time, they just rested on Lake Springfield, but some years they were actively feeding with attendant gulls. High counts for spring were: 3,000, April 1 & 2, 1971; 8,000, March 23, 1980; 4,000, March 27, 1981; 7,800, March 17, 1992; and 4,100, March 19, 2005. All spring departures were in May. After mid-May, there were only stragglers left; and many of them were hiding out at sewer ponds or Sangchris (before the waterfowl refuge was eliminated). Nearly all Lesser Scaup went north to breed in the prairie areas on the northern Great Plains and further west and north to interior Alaska. Some few stayed here into summer, for unknown reasons (some cripples?) in 21 years, but there was no evidence of breeding (see Table 11). All fall arrivals were in October except the one above and 10, September 29, 1984 at Lake Springfield. Numbers in fall were 3.6 times lower than spring, indicating different migratory route in fall. Many thousands occurred on the Mississippi River at that season. Some fall migration occurred in early winter, and this trend increased later in the study, especially from 1991 on. High counts for fall were: 1,500, November 1, 1971; 2,000, November 22, 1978; 1,500, October 28, 1980; and 1,500, November 2, 1986. Scaup stayed until freeze up, and some managed to find areas like the warm water ditch at Lake Springfield, Sangchris or sewer ponds that remained open. High

counts for **winter** may reflect mostly migrants: 300, February 28, 1977; 400, February 28, 1986; 1,600, February 26, 1995; 300, January 30, 1998; and 200, December 8, 1998. There were two odd Lesser Scaup, both at Lake Springfield, with cream colored plumages, one November 12, 2000 and the other April 5, 2009. On February 6 and November 20, 2006, a male with a red bill tag was observed, which was found to have been marked in March, 2005 at Pool 19 on the Mississippi River. Lesser Scaup winter south to northern South America.

Documentation: Specimens = 5) IL. Sangamon Co., $\Diamond \Diamond = 3$, LSpfld (2) & Buffalo sewer pond, January 24 – November 29, wts. = 609.5 – 895.5 gms, testes = 9 –14 mm, one gizzard with *Gastropoda* sp?; $\bigcirc \bigcirc = 2$, LSpfld, April 1 – November 9, wt. = 701.2 gms; ovaries = 20 –21 mm.

Highest # Days/Season		<u>Highest</u>	# Birds/Season
Spring	78 (1999)	Spring	23878 (1995)
Summer	27 (1983)	Summer	39 (1983)
Fall	51 (1989)	Fall	10831 (1978)
Winter	80 (1997)	Winter	12005 (1997)

Table 11. Summer Records of Lesser Scaup in Sangamon County 1970–2006

1970	∂2 ♀♀	Sangchris June 2 – 22 with ♂ until July 14
1971	9	south of Spfld July 21
1972	24	LSpfld & $\stackrel{\frown}{2}$ at Sangchris until June7 with $\stackrel{\frown}{\partial}$ at LSpfld June 14
1975	2	LSpfld May 29 – June 10 – crippled
1976	S.	IDOT pond June 6
1977	2 ♂♂ ♀	North sewer pond all summer until September 24
1978	50	Sangchris June 6 and immature ()? at Cinder Flat August 4 – 6
1981	2 ් ්	Buffalo sewer pond, then one 🖒 June 21 – September 5
1983	1-2 ්්්	Cinder Flats June 2 – 30 and one ${\mathbb F}$ until July 7; also ${\mathbb F}$ at Sangchris
	1200	September 14 – very early fall migrants?
1984	9	Cinder Flats June 13 – 17
1985	3 8 8 9	LSpfld June 11
1986	4 රිරි	North sewer pond most of summer, with one \Im until July 31 and \Im at Cinder
1700		Flats August 2 – 17
1989	1 0	North sewer pond June 3, then 👌 June 26 - September 16
1992	50	East sewer pond June 21
1993	5	IDOT pond June 5
1995	50	Cinder Flats June 5 – July 27
1999	2	Sangchris May 31 – June 16 and <i>∂</i> at LSpfld June 2 – 13
2001	S.	Sangchris June 2
2002	2	LSpfld dam June 2 – 17 was joined by a \bigcirc June 4 & 5
2004	50	Buffalo sewer pond June 6
2006	50	Mall pond west side Spfld June 17 and 🖒 at Buckhart July 10

King Eider

Somateria spectabilis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	24/24 (3)	0/0	0/0	46/46 (3)	70/70
Average/day	1.0			1.0	1.0
Average/season					

Status: Very Rare Winter Resident

Dates:

- Fall:Earliest arrival = December 6, 2000 immature ♂ Lake SpringfieldAverage arrival (3 years) w/range December 6 February 19 = January 16
- Spring: Average departure (3 years) w/range March 11 April 18 = March 26 Latest departure = April 18, 1987 immature ♂ Lake Springfield

There were three records for the King Eider for Sangamon County, and all were from Lake Springfield. The three birds, two immature males and one female, stayed for winter and left in the spring. Two seemed to arrive at periods of maximum ice. The records were: immature \mathcal{A} , February 19 – March 17, 1979; immature ♂, January 22 – April 18, 1987; ♀, December 6, 2000 - March 11, 2001. I found all three of these "sea ducks" by daily searches of the lake. Eiders were chunky bodied and in these birds mostly brown, with sloping foreheads. In flight, they flew low to the water with heavy beats of their rather small wings. The under-wing coverts were whitish. Eiders dived for food, and two of these birds caught fish, while gulls often tried to steal the fish when the eiders returned to the surface. When diving, eiders flip their wings and flare their tails. These ducks spent a lot of time loafing and sleeping, where they preferred to stay at the edge of the ice or around rocks on the shore. Although they associated with feeding flocks of Common Goldeneye, they mostly hung around near shore with the local Mallards. The immature males stayed long enough to show some changes in plumage such as more white on the breast. Both of the males had orangish-pink bills, but the female's bill was dark. The female also showed a pale bluish eyelid. All birds had an evering with a line continuing down the side of the neck. This eider breeds in the high Arctic and most winter along the northern coasts.

Documentation: Photographic: IL. Sangamon Co., DO, and drawings and notes HDB – on file ISM.

Harlequin Duck

Histrionicus histrionicu

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	6/6 (1)	0/0	0/0	20/19 (2)	26/25
Average/day	1.0			1.05	1.04
Average/season					

Status: Very Rare Winter Resident

Dates: Two Records: ♂♀, Lake Springfield, January 7, 1984; ♀, Lake Springfield, January 16 – March 12, 1994.

The stunning looking pair in 1984 (first seen by DO) was sitting with Mallards where they mostly slept, and later after being chase by a boater, sat on some rocks near the power plant. They did not dive or attempt to feed. These ducks may have been migrating back north for spring. The female in 1994 stayed a long time, and I saw it dive and catch fish. I noted the bill was bluish-slate color at close range, and the mouth lining was pink. It arrived at maximum ice conditions and it tended to stay in a cove with Mallards. This species has been regular on Lake Michigan in very small numbers, but rarely seen downstate. The Harlequin Duck breeds in two separate populations in the North West and North East of North America and winters mostly along the northern coasts and at sea.

Documentation: Photographic: IL. Sangamon Co., DO and notes HDB – on file ISM.

Surf Scoter

Melanitta perspicillata

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	56/43 (12)	0/0	198/91 (28)	77/58 (6)	331/192
Average/day	1.30		2.18	1.33	1.72
Average/season	4.67		7.07	12.83	

Status: Occasional Migrant and Winter Resident

Dates:

- Spring: Earliest arrival = February 7, 1994 Lake Springfield Average arrival (13 years) w/range February 7 – May 10 = April 2 Average departure (12 years) w/range March 4 – May 13 = April 21 Latest departure = May 13, 1992 ♂ Lake Springfield
- Fall: Earliest arrival = September 29, 1999 four Lake Springfield
 Average arrival (29 years) w/range September 29 November 23 = October 22
 Average departure (28 years) w/range October 16 January 6 = November 14
 Latest departure = January 6, 1992 & 1997 Lake Springfield

I first encountered this "sea duck" October 16, 1973 at Lake Springfield. It was not seen in spring until March 26, 1981 and was always less observed in spring than fall (1 to 3.5). Most were seen on Lake Springfield, but also they were recorded at Sangchris, Buckhart, IDOT pond, Sediment Retention and Cinder Flats. The spring male Surf Scoters were attractive with their orange, white and black bills, white eyes, red tarsi and white head patches. One female on April 13, 1981 at Lake Springfield chased coots and grebes trying to take their fish. High counts for spring were: 4, April 25, 1996 and 6, April 11, 1997. Other late spring records were two, May 4, 1990; female, May 7, 1998 and one, May 8, 2003. This scoter breeds in Alaska, northwestern Canada and Labrador. Except from 1978 - 1982 and 1991, this duck was seen every fall after 1973. Most scoters did not stay long and usually rested on the water, many times tucked, and were easily missed. Even with their distinctive shape, a good telescope was needed to pick them out of the flocks of waterfowl. However, three were diving at Lake Springfield on November 11 - 19, 1993. When these ducks dive they flip their wings back. High counts were: 8, October 1, 1974; 8, November 2, 1986; and 10, October 13, 1994. The first winter record was a pair during a period of maximum ice. They were present from December 27, 1992 to January 6, 1993. From then, this scoter was seen in winter until 1996-97 and again in 2002. The high count for winter was three, December 9 - 16, 1994. Some birds in late fall and winter show little white on the head. Surf Scoters mainly winter on both coasts and the Great Lakes.

Documentation: Specimen: IL. from Sangchris – but in Christian Co. (not counted in totals), ISM# 660485 ♂, November 16, 1996, wt. = 786 gms. Plus, photographic: HDB – on file ISM.

Highest # Days/Season

Spring	9 (1999)
Fall	16 (1993)
Winter	17 (1996)

Highest # Birds/Season

Spring	12 (1994 & 1999)
Fall	31 (1993)
Winter	29 (1994)

White-winged Scoter

Melanitta fusca

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	9/5 (5)	0/0	125/61 (22)	163/82 (14)	297/148
Average/day	1.8		2.05	1.99	2.01
Average/season	1.8		5.68	11.64	

Status: Rare Spring Migrant and Occasional Fall Migrant and Winter Resident

Dates:

- Fall:Earliest arrival = October 8, 1990 two Lake SpringfieldAverage arrival (23 years) w/range October 8 November 22 = October 31
- Spring: Average departure (13 years) w/range January 23 May 7 = March 3 Latest departure = May 7, 2002 ♂♀ Lake Springfield

These large, dark, chunky sea ducks were difficult to find, but continual checking of the larger bodies of water produced some. I saw this scoter in 25 of 37 years, but a good telescope was essential to view them because they usually stayed out in deeper water. The migration of this duck was essentially east-west, since they breed in the northwest interior and winter on the East Coast. Most of this flight occurred to the north of Sangamon County through the Great Lakes. Late fall had the best numbers, with high counts: 18, October 29, 1984; 9, October 29, 1990; and 7. November 3, 2004. Very rare was the observation of all three species of scoters November 11, 1997. Most birds left in late fall or early winter, the average being November 27 for 16 years, with extremes October 31 and January 4. Very few actually wintered as most went to coastal areas and some scoters in winter here were migrants. Winter records were: one, Lake Springfield January 1, 1981; 6, Sangchris January 16, 1999; one, Lake Springfield December 5 – January 3, 2002-03; and one, Lake Springfield December 24, 2003 – January 23, 2004. Spring arrivals were usually paired, but I noted them paired earlier such as at Lake Springfield December 12, 2008. The spring birds arrived very early with an average of February 21 for 10 years. In very cold periods they could be seen feeding in a hole in the ice. Usually, these scoters just rested, but they did dive for food and could be difficult to observe when in this mode. One bird on February 11, 1976 bobbed its head and then pointed its bill straight up. I timed the dives of this duck seven times which averaged 36.4 seconds. High counts for spring were: 6 (3 pair), January 19, 1982; 7, January 27, 1999; and 9, January 11, 2009 (some of these stayed until March 16). The latest date was the May record above, but two pair were also seen at Sangchris March 18, 1973. Although Lake Springfield, Sangchris and Buckhart were the basic water areas for this scoter, they occasionally were found at ponds and sewer ponds. They were seen in flocks of other species such as scaup, goldeneyes, mallards, and coots. The White-winged Scoter breeds in the Prairie Provinces in Canada and interior Alaska. The subspecies found in the county is the North American M. f. deglandi.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 607369 ♂, Springfield Spring Creek (North) sewer pond, February 15, 1982, coll. by HDB, wt. = 1293.2 gms, testes = 9 mm.

Highest # Days/Season Spring 1 (all 5 Years) 15 (2002) Fall Winter 22 (1998 7 2003)

Highest # Birds/Season

Spring	4 (1973)
Fall	23 (1984)
Winter	81 (1998)

Black Scoter

Melanitta nigra

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	10/9 (5)	0/0	91/44 (22)	38/37 (7)	139/90
Average/day	1.11		2.07	1.03	1.54
Average/season	2.0		4.14	5.43	

Status: Rare Spring Migrant, Occasional Fall Migrant and Very Rare Winter Resident

Dates:

- Fall: Earliest arrival = October 14, 2002 Lake Springfield
 Average arrival (22 years) w/range October 14 November 27 = October 31
 Average departure (18 years) w/range October 24 December 15 = November 22
 Latest departure = December 15, 1998 LSpfld (also see WR)
- **Spring:** Earliest arrival = **April 3**, 1986 \bigcirc & 1989 \bigcirc Lake Springfield Average arrival (4 years) w/range April 3 – 11 = **April 5** Latest departure = **April 11**, 1995 \bigcirc Sangchris

This was the least observed of the three scoters. The Black Scoter was much more numerous in fall than spring (9 times more) and even more in winter (3.8 times) than in the spring. This scoter resembled a Ruddy Duck with which it would flock on the water, but it was larger, chunkier, and darker. It also could be seen with coot flocks and other diving ducks. In **fall**, the only ones seen away from the lakes were one at the Williamsville sewer pond November 2, 1985 and four on an overflow of the South Fork on November 25, 1985. High counts for fall were 7, October 29, 1998 and 16, October 28, 1991. Most in fall were females or immatures and they usually rested on the water and occasionally dived. One glossy black adult male with the yellow cere was seen at Lake Springfield on November 4, 2009. Some migration occurred in the winter months, but the immature male that was seen from January 1 – February 27, 1994 and a female January 10, 2007 were winter records. The highest number in winter was two at Lake Springfield December 7, 1986. In the spring, the high count was only two, an apparent pair, April 4, 2001. All spring birds were at Lake Springfield except one male at Sangchris on April 11, 1995, which was still showing the cheek patch, but had a bright yellow cere. One in similar plumage was at Lake Springfield on April 3, 1986. This duck breeds in Alaska and northern Canada. Most of these ducks winter on the northern coasts of North America. The subspecies is M. n. americana.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

<u>Highest</u>	# Days/Season	Highest	<u>Highest # Birds/Season</u>		
Spring	5 (1994)	Spring	5 (1994)		
Fall	7 (2002)	Fall	20 (1991)		
Winter	23 (1993)	Winter	23(1993)		

Long-tailed Duck (Oldsquaw)

Clangula hyemalis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	83/55 (14)	0/0	76/54 (17)	325/197 (21)	484/306
Average/day	1.51		1.41	1.65	1.58
Average/season	5.93		4.47	15.48	

Status: Rare Migrant and Occasional Winter Resident

Dates:

- Fall:Earliest arrival = October 13, 1992 ♀ Lake Springfield
Average arrival (27 years) w/range October 13 January 30 = November 26
- Spring: Average departure (21 years) w/range January 5 May 2 = March 16 Latest departure = May 2, 2002 ♂ Lake Springfield

This was a small, usually whitish duck with a small bill, and adult males had long tails. Oldsquaws breed in the Arctic and mostly winter in coastal areas and the Great Lakes. In Sangamon County I saw it every year (including the addendum) but seven, although numbers were always low. It could be difficult to see, especially when actively diving or at a distance on the lake in a mixed raft of ducks – its ghostly little shape did not always stand out. Two were sitting on rocks on shore on November 25, 1996. One blended in as it deceptively sat with Bonaparte's Gulls on November 12, 2001. Most were seen in deep water on Lake Springfield, but they were also recorded at Sangchris, Buckhart, Cinder Flats, IDOT pond and sewer ponds. Occasionally, they dived for fish, but mostly they rested. The usual arrival in fall was October and November (17 years), but sometimes they did not seen until December or even January (nine years). Other early fall arrivals were a female (with gravish brown coloration), October 27, 1990 and a female, October 30, 2008 both at Lake Springfield. Most sightings were one or two birds, with high counts for fall: 5, December 7, 1973; 4, December 3, 1976; 7 females, November 11, 1980; 4, November 26, 1996; and 5, November 27, 2009. Oldsquaws sometimes stayed a long while in winter, e.g. a female, January 20 – April 8, 1971; three from December 30 to March 27, 1980-81; a male, January 15 to February 16 and a female, January 25 to February 1, 1991; varying numbers from November 20, 1996 (with 4, November 26) to January 5, 1997; and a male, December 17, 1999 to February 29, 2000. These records include the high counts for winter. Periods of maximum ice some times brought these ducks into Lake Springfield since it always had some open water. In spring, occasionally birds returning inland from the coast would stop briefly at the lake, such as the male seen May 2, 2002. Other late spring departures were a female, April 24, 1990 at Cinder flats and a female, April 22, 1996 at Lake Springfield. The only spring high count was three, March 27, 1981. The plumages in this duck were complicated, but both basic (March 13, 1992) and alternate males (April 22, 1990) were seen over the years. Even the small numbers seen in Sangamon County had declined since about 2000.

Documentation: Photographic: IL. Sangamon Co., HDB and DO – on file ISM.

Highest # Days/Season Spring 14 (1992) Fall 9 (1991 & 1996) Winter 47 (1999)

Highest # Birds/Season

Spring	27 (1981)
Fall	21 (1996)
Winter	97 (1999)

Bufflehead

Bucephala albeola

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	10031/1223 (37)	2/2 (1)	9556/640 (37)	6594/1084 (37)	26183/2949
Average/day	8.20	1.0	14.93	6.08	8.88
Average/season	271.11	2.0	258.27	178.22	

Status: Fairly Common Migrant, Uncommon Winter Resident and Very Rare in Summer (non-breeding)

Dates:

- Spring: Earliest arrival = February 2, 1991 ♂ Sangchris (arbitrary due to WR) Average arrival (30 years) w/range February 2 – March 15 = February 19 Average departure (37 years) w/range April 13 – May 28 = April 26 Latest departure = May 28, 2006 ♂ Cinder Flats
- Fall: Earliest arrival = October 15, 2000 ♀ Marine Pt.
 Average arrival (35 years) w/range October 15 November 11 = October 30
 Average departure (29 years) w/range December 2 January 13 = December 16
 Latest departure = January 13, 1993 (arbitrary due to WR)

This very small diving duck occurred on deeper water like Lake Springfield, Sangchris, Buckhart, and some of the sewer ponds. They rested or fed as species specific flocks more than most ducks and were easy to see at a distance since the males had so much white in their plumages. Because some over-wintered, **spring** arrivals were difficult to distinguish; but arrivals were usually in February. I noted several males chasing a female, males displaying to females, and paired birds the third week of March. One female on April 24, 1992 was in very worn plumage at Sangchris. High counts for spring were: 135, March 17, 1992; 86, March 20, 1995; and 75, March 25, 2003. Later in spring the Bufflehead was seen more often on ponds. The great majority of these ducks moved on north in April and early May, but some were found later in May such as a female May 22, 1991 and a male May 28, 2006, both at the Cinder Flats. One female was present at the Cinder Flats June 21 - 22, 1980 and was the only (non-breeding) summer record. Bufflehead breed mostly in central Canada and central Alaska, but also in the Northwestern US. This was a rather late arriving duck in fall, but another early female (see above) was at Lake Springfield on October 16, 2003. High counts for fall were: 300, November 20, 1978; 150, November 12, 1986; and 400, November 25, 1996. Fall migrant numbers dropped off about mid- to late December. The birds that remained were found on open water at sewer ponds. High counts for winter were: 90, December 8, 1994 and 82, December 6, 1999. Both counts were probably late fall migrants. Numbers in the winter season increased by 1983, but more of the numbers in winter were then migrants, indicating that fall migration became later and spring migration became earlier. The only time I heard this duck call, it gave a hoarse, grebelike quack. On November 26, 1993 I observed an apparent hybrid with American Goldeneye at Lake Springfield (drawing on file ISM).

Documentation: Specimens = 1) IL. Sangamon Co., ISM# 660622 ♂, Lake Springfield dam, December 27, 1999, coll. by HDB, wt. = 572 gms, testes = 5.5 mm.

Highest # Days/Season

Spring54 (1996)Summer2 (1980)Fall32 (1980)Winter81 (1997)

Highest # Birds/Season

Spring616 (1992)Summer2 (1980)Fall895 (1978)Winter788 (1999)

Common Goldeneye

Bucephala clangula

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	16422/814 (37)	8/8 (4)	25907/661 (37)	247593/2358 (37)	289930/3841
Average/day	20.17	1.0	39.19	105.0	75.48
Average/season	443.84	2.0	700.19	6691.70	

Status: Common Migrant and Winter Resident and Very Rare in Summer (non-breeding).

Dates:

Fall:Earliest arrival = October 26, 1974, 1976, 1980 Lake SpringfieldAverage arrival (36 years) w/range October 26 – November 15 = November 5

Spring: Average departure (37 years) w/range March 9 – May 20 = April 9 Latest departure = May 20, 1989 ♂♀ North sewer pond

This beautifully patterned diving duck formed the nucleus of the winter feeding flocks on Lake Springfield. The observer was alerted to the presence of Common Goldeneye by the whistling sound made by their wings in flight. Most fall arrivals were in November, with only 10 years in late October. Plus, the last few years of the study, the tendency was to arrive even later. Numbers dropped in fall after 1998, maybe because they arrived later. High counts for fall were: 350, November 25, 1977; 300, November 27, 1982; 500, November 30, 1985; and 460, November 27, 1996. Every winter, a good-sized flock occurred on Lake Springfield, but if there was open water they also flew to Buckhart, Sangchris, sewer ponds, and occasionally the Sangamon River. High counts for winter were: 450, December 9, 1989; 450, January 12, 1994; 600, December 14, 1994; 600, January 21, 1998; 800, December 17, 2000; and 300, February 5, 2007. Goldeneye were great fun to watch when exhibiting their head-throwing displays and aggression toward other golden-eye, and they had a buzzy call when displaying. Copulation was noted February 7 -March 8. On March 4, 1989 seven diving times taken, ranged from 27 – 38 seconds. Most of spring migration was the wintering birds departing, and there seemed to be few influxes from the south. High counts for spring were: 150, March 7, 1977; 300, March 12, 1979; 300, March 1, 1994; and 150, March 11, 2003. If it warmed too quickly in spring, the boaters came out and chase the ducks off the lake. The Common Goldeneye nests in boreal areas of Canada and the northern US. Summer, non-breeding records for the county were: adult male at the Cinder Flats, May 26 – June 3, 1986; male at the North sewer pond, June 12 – September 11, 1988; female, May 31 and immature male, June 9 – 16, 1991 both at Lake Springfield; and male at a pond near the airport, May 18 – June 11, 1997 (this male appeared to be paired with a Hooded Merganser female). A hybrid of goldeneye x Hooded Merganser was observed at the East sewer pond and later at Lake Springfield from March 4, 1989 to January 21, 1993 (five consecutive years) and was seen 39 times (see Bohlen & Oehmke, 1989). Also, a female of the same hybrid occurred at Lake Springfield, March 5 and 12, 1994 (drawing on file ISM). A Bufflehead x goldeneye hybrid was at Lake Springfield, November 26, 1993. A leucistic goldeneye that was all white and had an orange bill was with other Common Goldeneyes at Lake Springfield, November 25 –27, 1990. The subspecies in North America is B. c. americana.

Documentation: Specimens = 2) IL. Sangamon Co., ISM# 607340 adult \Diamond , Lake Spfld, December 20, 1981, coll. by HDB, wt. = 716.2 gms, testes = 10 mm; ISM# 660434 adult \heartsuit , Lake Spfld, December 8, 1995, coll. by HDB, wt. = 868.4 gms, ovary = 23 mm.

Highest # Days/Season

Spring39 (1991)Summer3 (1997)Fall31 (1993)Winter89 (2003)

Highest # Birds/Season

Spring1788 (1994)Summer3 (1997)Fall2644 (1996)Winter17850 (1997)

Barrow's Goldeneye

Bucephala islandica

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1/1 (1)	0/0	0/0	7/7 (2)	8/8
Average/day	1.0			1.0	1.0
Average/season					

Status: Very Rare Winter Resident

Dates:

Two Records: adult ♂, Sangchris and Lake Springfield, December 25, 1989 – January 1, 1990; ♀, Lake Springfield, February 18 – March 4, 1994.

There was a possibility that the 1989/1990 record was two different ducks, but I feel they were the same bird even though they were many miles apart. The male was at Sangchris originally and was best viewed on December 25 when it was the closest. The main field marks were the black back, the row of white spots on the wing coverts, the dark mark in front of the wing, the steep forehead and shaggy mane, and the loral crescent. Also, it had a white eye and a small bill. It associated with Common Goldeneye. The female was much less distinct and much harder to identify. It was detected because of head shape and its triangular all pinkish-orange bill. Also noted was the small amount of white in the wing. Several other possible females were seen, but not well enough for positive identification. This species could come from either the northwest or northeast populations, and though widely separated these populations have no subspecific names. The Barrow's Goldeneye winters along the northern coasts not far from its breeding areas.

Documentation: Drawings and notes: IL. Sangamon Co., HDB - on file ISM.

Hooded Merganser

Lophodytes cucullatus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	5502/955 (37)	373/146 (31)	12412/794 (36)	19470/1415 (37)	37757/3310
Average/day	5.76	2.55	15.63	13.76	11.41
Average/season	148.70	12.03	344.78	526.22	

Status: Common Migrant and Winter Resident and Occasional Summer Resident

Dates:

Spring: Average departure (37 years) w/range March 27 – April 27 = April 16 Latest departure = April 27, 1989 LSpfld (arbitrary due to SR)

Fall:Earliest arrival = October 2, 1980 ♀ LSpfld (arbitrary due to SR)
Average arrival (36 years) w/range October 2 – November 13 = October 24

This small merganser, like the Wood Duck, inhabited the Sangamon River and sloughs and ponds, but also was found during migration and winter on the deep water of Lake Springfield. In spring, the numbers on the lake declined as the Hooded Mergansers went out to the river, making it difficult to know the numbers present. This also may account for spring numbers being 2.2 times less than fall numbers. High counts for spring were: 52, March 11, 1996; 50, March 5, 2002; and 90, March 25, 2003. Most migrants left in April and were last seen on Lake Springfield. It was apparent that breeding was increasing in the county toward the end of the study, and this merganser could then be classified as an uncommon summer resident. Courtship was seen February 24, 2004 in which four males were surrounding a female, inflated their throats, and pumped their heads. Females emit a croaking call that sounded like a frog or small heron, while males gave a loud snoring sound. I noted many paired by March 6, 2002 at Lake Springfield and pairs along the river April 17, 1996 and March 23, 2002 and as early as January 31, 1998 and February 11, 2004. These mergansers nested in holes in trees, usually high in sycamores, and could be seen flying into them as females did at Carpenter Park on May 4, 1974, April 18, 2001, and April 9, 2005. There were 25 broods observed with 2 – 13 young (of various ages) from April 23 to July 19. Most of broods were in the Carpenter Park, Gurgens Park, Riverside Park area, with one each at Buckhart, Rt. 29 Bridge north and the Irwin Bridge area. Immatures, some still with a female, were seen in the summer at various places and could have bred there or were dispersing. These places were those above plus barrow pits, sewer ponds, Lake Springfield, Sediment Retention, Sangchris, and the airport marsh. Birds disappeared in summer when the sloughs dried up. High counts for summer were 12, June 30, 1995; 10, July 6, 2002; and 10, June 5, 2004. Fall migration started when several arrived at Lake Springfield or Sangchris usually in October. High counts for fall were: 125, November 9, 1979; 150, November 22, 1983; 140, November 13, 2002; and 155, November 11, 2004. In late fall and early winter when the water was still open, this merganser spent the daylight hours in shallow water such as the west end of Lake Springfield. Toward dusk, I watched as they came back to the main part of the lake to roost. They flew past Marine Pt. in small flocks, flying like bullets with their heads down. Over the years numbers in winter have increased with high counts: 147, December 20,

1998; 110, December 12, 1999; 110, December 22, 2004; and 120, December 15, 2005. Numbers in January and February were lower and this might indicate that early December birds were late fall migrants or that these birds waited until forced south by ice. For records of hybrids see Common Goldeneye.

Documentation: Specimen = 1) IL. Sangamon Co. (?), ISM# 606426 $\stackrel{\bigcirc}{\rightarrow}$, Sangchris, November 14, 1974, coll. by W. Anderson.

Highest # Days/Season

 Spring
 50 (2005)

 Summer
 16 (1987)

 Fall
 36 (1980)

 Winter
 87 (2003)

Highest # Birds/Season

Spring650 (2003)Summer68 (2002)Fall1446 (1997)Winter2243 (1999)

Common Merganser

Mergus merganser

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	17648/769 (37)	36/35 (5)	1192/177 (29)	165748/2012 (37)	184624/2993
Average/day	22.95	1.03	6.73	82.38	61.69
Average/season	476.97	7.20	41.10	4479.68	

Status: Very Common Winter Resident, Uncommon Spring and Fall Migrant and Very Rare in Summer (non-breeding)

Dates:

Fall:Earliest arrival = November 3, 1995 ♀ Lake Springfield
Average arrival (37 years) w/range November 3 – December 15 = November 24

Spring: Average departure (37 years) w/range March 7 – April 23 = March 31 Latest departure = April 23, 1970 ♀ Sangchris (see SR)

This large "goosander" was mostly associated with winter, but still managed to be ranked 15th in total numbers. Most arrivals in fall were in November (28 years), but by 1999 - 2006 they arrived six out of eight years in December, which might indicate adaption to a changing climate. Females usually arrived first in fall, with males a few days to a week later. High counts for fall were 50, November 30, 1976 and 50, November 29 & 30, 1977. However, most Common Mergansers did not arrive in the county until frozen out further north. Then, the larger flocks of these sleek waterfowl flying in lines showing dark and white with salmon-colored underparts began to come into Lake Springfield. They usually preferred deep water lakes and could be seen in flocks feeding with attendant Herring Gulls and sitting at the edge of the ice. Winter was the season with the most numbers and was 8.8 times the combined numbers of spring and fall. High counts in winter were: 300, December 11, 1976; 450, December 31, 1989; 500, January 12 & 13, 1994; 800, February 2, 1995; and 550, January 23, 1999. On February 22, 2001, an aberrant male with a white head was seen at Lake Springfield. When the ice melted, most of these mergansers went north. Toward **spring**, there was some pairing and I noted copulation on January 3, 1996; several males calling and displaying on February 10, 1992; and several males pursuing a female March 6, 2002. Mergansers were found in shallower water in spring and more often at Sangchris and Buckhart. High counts for spring were: 200, March 12, 1979; 250, March 10, 1982; 250, March 4, 1986; 400, March 11, 1996; and 300, March 2 & 4, 2003. Most were gone by March or mid-April, but there were some stragglers in late April, May and into summer (see Table 12). They were observed in summer in five years and in 2005 a male and female stayed until June 1 at Lake Springfield (photograph), but no evidence of nesting was found. The Common Merganser breeds as close as northern Wisconsin and central Michigan. The subspecies in North America is *M. m. americanus*.

Documentation: Photographic: Il. Sangamon Co., HDB – on file ISM.

Highest # Days/Season	Highest # Birds/Season
Spring 66 (1990)	Spring 2551 (1996)
Summer 15 (2005)	Summer 16 (2005)
Fall 16 (1992)	Fall 207 (1996)
Winter 81 (1993)	Winter 15803 (2000)

Table 12. Spring and Summer stragglers of Common Mergansers in Sangamon County

1979	3	Sangchris, May 29 –injured
1981	Ŷ	Sangchris, May 15 – 20
1990	0	Sangchris, March 12 – June 15
1995	0	Sangchris, May 12 – July 11
1998	Ŷ	Sangchris, May 24
1999	Ŷ	Sangchris, April 6 – 17 and 💍 May 10 – August 11
2002	6	Lake Springfield, April 1 – July 5 – injured
2005	2 ♂♂ ♀	Lake Springfield, April 2 – May 10, 2° May 16 – June 1, 2° June 2 – July26

Addendum:

2007	8	Sangchris, March 23 – May 30
2008	No.	Lake Springfield, April 8
2009	No.	Sangchris, March 19 – May 9 – injured

Red-breasted Merganser

Mergus serrator

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	50687/1649 (37)	11/9 (4)	12007/640 (36)	2658/563 (36)	65363/2861
Average/day	30.74	1.22	18.76	4.72	22.85
Average/season	1369.92	2.75	333.53	73.83	

Status: Common Spring Migrant, Fairly Common Fall Migrant, Occasional Winter Resident and Very Rare in Summer (non-breeding)

Dates:

- Spring: Earliest arrival = January 9, 2001 two ♂& ♀ LSpfld (arbitrary due to WR) Average arrival (37 years) w/range January 9 – March 16 = February 20 Average departure (37 years) w/range April 14 – June 14 = May 12 Latest departure = June 14, 1990 ♀ Lake Springfield
- Fall: Earliest arrival = October 14, 1980 ♀ Lake Springfield Average arrival (37 years) w/range October 14 – December 3 = November 1 Average departure (37 years) w/range November 18 – January 3 = December 14 Latest departure = January 3, 2002 & 2003 LSpfld (arbitrary due toWR)

Adult male Red-breasted Mergansers were very uniquely marked, but other plumages were similar to Common Merganser females, though still fairly easy to identify. They were usually on the deep water of Lake Springfield and to a much lesser degree at Sangchris and Buckhart. Occasionally, they were at sewer ponds or farm ponds. It ranked 37th of all species in numbers. These mergansers usually returned in **spring** in February and March. Some of the January dates (six years) were reactions to false springs, but once they arrived they usually stayed until the weather broke. Earlier flocks in February and March were mostly males, but by April most birds were females. When both sexes were present, several males pursued a female and the males gave a squeaky vocalization "greeer", while much head bobbing took place on the water. Many times, the busy boat traffic on Lake Springfield would chase off most waterfowl, but these mergansers would remain, probably because there was no other deep water available. High counts for spring were: 200, April 3, 1971; 400, April 7 & 11, 1983; 240, March 26, 1995; and 190, March 26, 2002. Some years they left in April (six years), but most of the time the departure was in May. In four years, they straggled into summer, see above, and a female June 3, 1999 at Lake Springfield. There was also an injured bird at Lake Springfield May 7 to June 2, 2002 and two females summered at Sangchris July 2 & 4, 1974. This merganser breeds from the Great Lakes north to northern Canada and Alaska. Fall numbers were 4.2 times less than spring numbers. In 2005, they did not arrive until December, but most arrivals were in late October (19 years) and November (17 years). Almost all the birds I saw in fall and early winter were in drab plumage, and were probably young of the year, but apparently most adults did not obtain the brighter plumage until November or later. High counts for fall were: 125, November 22, 1978; 175, November 12, 1984; 170, November 25, 1992; and 115, November 22, 2004. A lot of the winter numbers represented migrants both fall and spring and truly wintering birds were unusual. They consisted of occasionally one or two that stayed with the Common Mergansers. Numbers in

January were very low for example, 4, January 13, 1990 and 4, January 3, 2002. Migration in the winter season was particularly noticeable from 1997 to 2005. High counts for winter were: 32, December 6, 1986, 60, December 3, 1990; 53, February 28, 1998; and 50, February 28, 2002. Most Red-breasted Mergansers winter on the Great Lakes or coastally.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 661923 second year 3° , Lake Springfield, April 5, 2006, coll. by HDB, wt. = 905.4 gms, testes = 11 mm.

Highest # Days/Season

 Spring
 78 (1999)

 Summer
 3 (1990 & 1999)

 Fall
 35 (1992)

 Winter
 50 (1997)

Highest # Birds/Season

Spring4840 (1983)Summer4 (1974)Fall1758 (1992)Winter364 (1997)

Ruddy Duck

Oxyura jamaicensis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	83581/1716 (37)	130/76 (16)	50055/1507 (37)	33742/962 (37)	167508/4261
Average/day	48.71	1.71	33.21	35.07	39.31
Average/season	2258.95	8.13	1352.84	911.95	

Status: Common Migrant, Fairly Common Winter Resident and Rare Summer Resident (mostly non-breeding).

Dates:

- Spring: Earliest arrival = January 16, 2001 (arbitrary due to WR) Average arrival (34 years) w/range January 16 – March 18 = February 22 Average departure (37 years) w/range April 19 – May 30 = May 12 Latest departure = May 30, 1981 ♂ LSpfld & 1988 ♂ Sediment Retention
- Fall: Earliest arrival = August 9, 1973 ♂ Lake Springfield Average arrival (37 years) w/range August 9 – October 24 = September 24 Average departure (26 years) w/range November 22–December 29= December 10 Latest departure = December 29, 1990 (arbitrary due to WR)

The little Ruddy Duck in this area usually sat on Lake Springfield in flocks and seemed mostly to rest. Although I had seen males display infrequently, they did not appear to be paired. They had their favorite places just off Lincoln Gardens and the curve on East Lake Drive. Being reluctant to fly these ducks were often harassed by boaters. Spring arrivals were much more difficult to discern recently, because of greatly increased winter residents. High counts for spring were: 200, March 20, 1982; 400, April 1, 1996; 650, March 23, 2003; 840, March 23, 2004; and 900, April 1, 2006. Males started changing to the ruddy color and blue bill by late February and early March, however one was in breeding plumage as early as December 6, 2002 at Lake Springfield. I also noted two Ruddy Ducks that landed on the ice on March 14, 1982 and could not fly because they needed to run to take off. Soon Herring Gulls were attracted by the plight of these ducks, and one gull actually picked up one duck, but eventually both ducks got away. Even though most had migrated by late May there seemed to be some wandering in **summer** in this species. Usually this involved 1 - 2 adult birds (non-breeding?) such as: male, June 22, 1970 at Sangchris; male, IDOT pond, June 6 & 19, 1976; female, June 3 and July 15, 2000 at Lake Springfield. However, other situations that suggested nesting included several in 1990: two males and a female, June 3 at Sediment Retention; two males at the Cinder Flats June 7, and four males and three females at the Buffalo Sewer Ponds June 10. In addition, a total of 55 birds (the most ever in summer) from June 1 - 30, 2002 were in flooded fields, but none stayed into July. There was one female sitting on a nest at the Cinder Flats, May 13, 1995. The summer records continued in the addendum, with three males and a female, at Lake Springfield and a male and female at Buckhart, July 21, 2008. Ruddy Ducks mostly nest in the prairies of western North America. Early returning **fall** birds were difficult to distinguish from the wandering late summer birds. High fall counts included: 300, November 5, 1977; 700, November 9, 1979; 600, October 31, 1984; 345, November 15, 1994; and 385, October 27, 2002. Earlier in the study, there was

usually a late flight into early December, but then these ducks went further south (some as far as Mexico and Honduras). So from 1970 to 1994 most **winters** had few birds; but starting in the winter of 1995 wintering birds increased, and continued even with maximum ice conditions. At Lake Springfield they moved up near the warm water outlet in really cold conditions. Winter high counts were: 75, December 5, 1981; 475, December 8, 1994; 125, January 17, 2004; and 265, February 26, 2006. Some of the February counts were actually spring migrants. The spring of 2009 produced two odd looking Ruddy Ducks at Lake Springfield. One was white with some brown tones in the head and neck on March 23 (photograph), and the other was the black-headed form on April 15 (photograph).

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 603993 \bigcirc , Berlin, March 29, 1942, coll. by W. Robertson.

Highest # Days/Season

Spring85 (1990)Summer14 (1987, 1995, 2002)Fall60 (1989 & 2006)Winter80 (2003)

Highest # Birds/Season

Spring12301 (2006)Summer55 (2002)Fall3416 (2002)Winter7324 (2006)

Canada Goose Wood Duck Gadwall	PAIRED	DISPLAYING	NUPTIAL FLIGHTS	COPULATION	NESTS	EGGS	YOUNG
Wood Duck Gadwall	March 5	March 1		April 1	March 14	March 24 - May 14	March 26 - July 15
Gadwall							April 21 - August 7
Cadmai	March 19	February 19	March 10		ou		
American Wigeon	March 6	March 11	March 23		ou		
Am. Black Duck	March 6			Dec.28 - Feb 18	ou		
Mallard	Most of year?			Feb 11 - mid April		March 28 - May 28	April 14 - August 24
Blue-winged Teal			April 10	April 15	April 28	April 28	June 13 - July 14
Northern Shoveler			March 7		ou		
Northern Pintail	Late January				ou		
Green-winged Teal	Mid April	March 14	March 18		ou		
Canvasback					ou		
Redhead	February 21	February 21			ou		
Ring-necked Duck				March 7	ou		
Greater Scaup					ou		
Lesser Scaup			March 27		ou		
Surf Scoter					ou		
White-winged Scoter [December 12				ou		
Black Scoter	April 4				ou		
Oldsquaw					ou		
Bufflehead	March 20	March 19	March 19		ou		
Common Goldeneye		Most of Winter		February 7	ou		
Hooded Merganser	January 31	February 24			April 9		April 23 - July 19
Common Merganser		February 10		?January 3	ou		
Red-br. Merganser	March 24	March 4	March 18		ou		
Ruddy Duck		late April?			May 13		

Table 13. Waterfowl Breeding Indicators in Sangamon County, Illinois

Osprey

Pandion	hali	aetus	

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	267/221 (34)	23/23 (10)	990/727 (37)	0/0	1280/971
Average/day	1.21	1.0	1.36		1.32
Average/season	7.85	2.30	26.76		

Status: Uncommon Spring Migrant, Fairly Common Fall Migrant and Very Rare Summer Resident

Dates:

- Spring: Earliest arrival = March 29, 1991 Cinder Flats & 1995 Sangchris Average arrival (34 years) w/range March 29 – May 6 = April 12 Average departure (33 years) w/range April 23 – June 12 = May 14 Latest departure = June 12, 1985 Cinder Flats (also see SR)
- Fall: Earliest arrival = June 30, 1993 Buckhart
 Average arrival (37 years) w/range June 30 October 4 = August 23
 Average departure (37 years) w/range September 19 –November 24 = October 22
 Latest departure = November 24, 2002 Lake Springfield

The Osprey was another raptor that would have become extinct if the wide use of DDT had continued. It was easy to detect Ospreys since they were large and stayed near water, feeding on fish. One calling September 13, 1986 sounded like a weak flicker call. Their numbers began to come back about 1977 and were much better by 1980. In spring, the numbers increased by 1991(see Figure 13). There were almost always fewer in spring (1 to 3.7) than fall, apparently due to young of the year in fall, but also they remained longer in fall and perhaps were counted more often. Another early spring arrival was March 30, 2002 at Sangchris. On April 2, 2006 an Osprey migrant was being pushed east at Lake Springfield by an on-coming strong storm. High counts for spring were 4, April 26, 1997 and April 20, 1999. Most summer records were migrants, but one at Lake Springfield June 18 – 22, 1998; one at Sangchris June 15 – 30, 2006 and one at Buckhart July 7 - 29, 2006 could mean that this species was ready to nest in the county given the right nesting location. They had already nested in other parts of Illinois such as the Illinois River Valley. Ospreys nest as far north as central Canada and Alaska. If fall arrival dates are divided, the early half (19 years) average arrival was September 6 and the more recent half (18 years) was August 20. This was probably due to more birds recently. High counts for fall were 6, September 26, 1980; October 5, 1982; September 12, 1989; and September 16, 1993. On September 13, 2006 three were roosting on the south island at Marine Pt. Most birds left by October (25 years), but in 10 years it was November. Another late date of departure (besides the above date) was November 23, 1998 at Lake Springfield. Lower numbers in both spring and fall in the addendum may have been caused by competition with the increased numbers of Bald Eagles. At least two Ospreys hit the high power lines over Lake Springfield during the study. The Osprey winters from the Gulf Coast south to Argentina. The subspecies in North America is P. h. carolinensis.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 603928 sex?, 1 mi south Loami, October 4, 1966 coll.by F.Wassel.

Highest # Days/Season

Spring18 (1995)Summer10 (2006)Fall42 (1982)

Highest # Birds/SeasonSpring21 (1995)Summer10 (2006)Fall73 (1982)

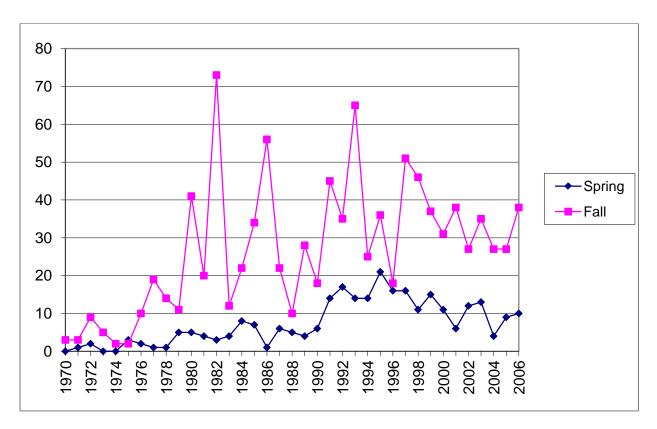


Figure 13. Ospreys in Sangamon County 1970–2006.

White-tailed Kite

Elanus leucurus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1/1 (1)	0/0	0/0	0/0	1/1
Average/day	1.0				1.0
Average/season					

Status: Very Rare Spring Migrant

Dates: One Record: adult, Washington Park, April 21, 1995.

This beautiful, graceful, southwestern US species flew in just above the tree tops at Washington Park, but did not land. I was very familiar with this species from California. Noted were the white tail, black shoulder patch, the pointed wings in a dihedral, and grayish primaries. There were some Broad-winged Hawks migrating at about the same time, and the kite continued on to the west (for more details see Bohlen, 1995a). These kites rarely stray northward in spring, but there was one other Illinois record from Knox County. Besides the west coast, there are populations in Texas and Florida.

Documentation: Drawing and notes: IL. Sangamon Co., HDB – on file ISM.

Mississippi Kite

Ictinia mississippiensis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	3/3 (3)	5/5 (2)	0/0	0/0	8/8
Average/day	1.0	1.0			1.0
Average/season	1.0	2.50			

Status: Very Rare Spring Migrant and Summer Visitor [and Very Rare Fall Migrant]

Dates:

Spring: Earliest arrival = May 3, 2007 adult Lake Springfield Average arrival (4 years) w/range May 3 – 24 = May 13 Latest departure = June 9, 1998 Lincoln Gardens & 1999 Spaulding Orchard Road

These kites were probably overmigrants from the south or west. There were five records during the study: subadult, Carpenter Park May 18, 1982; subadult, Lincoln Gardens June 4 - 9, 1998; adult, Sangchris May 24, 1999; adult, Spaulding Orchard Road June 9, 1999; and subadult, Jefferies Orchard May 7, 2003. Three additional records were in the addendum (2007 – 2010): an adult, Lake Springfield May 3, 2007; a subadult, Lake Springfield May 27, 2008 (photograph); and my first fall record, non-adult, north of Springfield August 18, 2009. The Lincoln Gardens kite arrived with an emergence of 13-year cicadas, and I observed it swooping just above the treetops to catch them. This kite became quite secretive, sitting and then flying off before I could approach it. It was apparently molting the inner primaries giving the wings a notched look. It also had what appeared to be juvenile feathers on the lower belly. When these birds were present, they were often harassed by other birds. The one at Carpenter Park was bothered by a gnatcatcher and then chased off by grackles; the Jefferies kite was chased by swallows; and the Sangchris kite was harassed by crows. Most kites were observed in flight, but rarely they were seen sitting in the dead limbs of large trees. The closest breeders of these highly migratory birds were found along the lower Illinois River. This kite winters in South America.

Documentation: Photographic: IL. Sangamon Co., HDB - on file ISM.

Bald Eagle

Haliaeetus leucocephalus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	125/101 (26)	5/5 (4)	190/152 (31)	547/348 (36)	867/606
Average/day	1.24	1.0	1.25	1.57	1.43
Average/season	4.81	1.25	6.13	15.19	

Status: Occasional Migrant, Uncommon Winter Resident and Very Rare Summer Resident

Dates:

Fall:Earliest arrival = August 14, 2002 immature Lake Springfield
Average arrival (33 years) w/range August 14 – December 26 = October 19

Spring: Average departure (32 years) w/range January 14 – June 17 = April 4 Latest departure = June 17, 1972 immature Lick Creek

Although this raptor had probably always been present in the county, by 1970 when the study started, it was very rare due to shooting and the use of DDT. My first record was of an immature at Sangchris on December 26, 1970; and I did not see an adult until January 21, 1979 at Lake Springfield. It was that year (1979) when the eagle became easier to find. Up to 2001, immatures mostly out numbered adults; but then adults started holding territories and were more numerous (see Figure 14). Also note that the numbers jumped in 1997. Fall arrival dates had varied with two in August (other was August 19, 2004), 11 in September, 6 in October, 14 in November, and 2 in December. Eventually, I believed the arrival date in fall would be in September, but would be difficult to distinguish from breeding birds. The high count for fall was 6, November 11, 1995. Winter was the time for Bald Eagles since they could forage on the ice and there were plenty of geese to eat. The numbers in winter increased in 1998-99. High counts for winter were 5 on February 25, 1995; January 19, 1999; December 26, 1999; February 19, 2006; and February 10, 2007. However, by the winter of 2009-10 numbers increased dramatically with 15 seen February 6 and 38 (27 were in the air at once at the Cinder Flats) February 7, 2010. Many could have appeared that season because of lack of food along the Illinois and Mississippi Rivers. Up to 1995, most departure dates were in February, March or April, but starting in 1996 most were in April, May or June. The high count for **spring** happened early, there were 6, March 10, 1979. Early in the study, there was a **summer** record of an immature at Lick Creek on June 17, 1972. Other June records of immatures occurred June 4, 1996, June 10, 1998 and June 5, 2002; plus there was an adult, June 4, 1998. However, there was no sign of breeding until December 2006, when the Jefferies discovered a nest west of the Illinois Rt. 29 Bridge north of Springfield. I saw one adult January 19, 2007, and one was sitting on the nest February 26. By March 15, there was one young visible, and I took a photograph March 28 that showed the young in the nest. A fledged young was seen July 2. In 2008, at the same site an adult was sitting on the nest and one young was seen there April 27. The nest was very difficult to see when the foliage came out. By early 2009, there were three Bald Eagle nests in Sangamon County. One was the Rt. 29 nest which had the adult sitting on February 16 and a young present on April 26. The second nest was at Buckhart, on private property, I did not see this nest (others did), but I saw adults present

February 19 to May 3 and one fledged young was seen July 18. The third nest was at the south island at Marine Pt. at Lake Springfield. I noted a pair hanging around this area starting November 11, 2008, nest building January 10, 2009, two adults standing on the nest January 31, an adult sitting on the nest February 2, adults feeding young in the nest April 16, one fledged young June 30, and two fledged young July 12. Again, the nest was difficult to view because of thick vegetation. The two adults stayed at the nest after the young left around October 21, 2009. Copulations from the island pair were noted on the ice at Lake Springfield December 13, 2009 and February 11, 2010. I did not expect to ever see nesting Bald Eagles in Sangamon County. Eagles preved on a wide variety of animals, some they hunted and others they scavenged. One was trying to take a fish from an Osprey east along the Sangamon River on September 13, 1980. Twice, I saw eagles eating fish while on the wing, and two were pouncing on spawning carp May 24, 1996 at Sangchris. They habitually stole fish from gulls. They scavenged on dead deer at Jefferies Orchard December 28, 1986; and at Sangchris (with two Red-tailed Hawks and 30 crows) January 6, 1996; a dead coyote at Sangchris February 17, 1999; and a dead raccoon in October, 2008. Bald Eagles chased coots, grebes, geese, ducks, and gulls. A Blue Goose was picked up by the head off Lake Springfield and dropped November 24, 2003; and a Glaucous Gull fought off two adult eagles at Lake Springfield January 3, 2008. The specimen in the collection was from the northern subspecies H. l. washingtoniensis, but the nesting eagles could possibly be the southern form.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 607988 immature \bigcirc , 3 mi northnorthwest of Glenarm along Sugar Creek, November 29, 1984, coll. by L.Rentsch, (banded in Wisconsin, Price Co. as nestling June 14, 1984 – electrocuted).

Highest # Days/Season

Spring11 (2002)Summer2 (1998)Fall20 (2006)Winter45 (2006)

Highest # Birds/Season

 Spring
 13 (2002)

 Summer
 2 (1998)

 Fall
 22 (2006)

 Winter
 87 (2006)

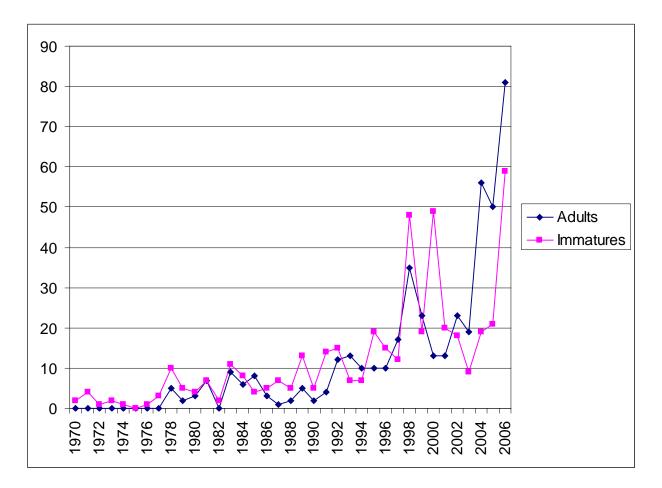


Figure 14. Bald Eagles in Sangamon County

Northern Harrier

Circus cyaneus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	663/425 (37)	30/21 (11)	804/561 (37)	377/256 (34)	1874/1263
Average/day	1.56	1.43	1.43	1.47	1.48
Average/season	17.92	2.73	21.73	11.09	

Status: Uncommon Migrant and Winter Resident and Rare Summer Resident

Dates:

- Spring: Earliest arrival = January 17, 1998 west of Sangchris (arbitrary due to WR) Average arrival (26 years) w/range January 17 – April 3 = February 21 Average departure (37 years) w/range April 6 – May 29 = April 29 Latest departure = May 29, 1996 ♀ Oak Ridge Cemetery
- Fall: Earliest arrival = June 24, 1992 ♀ Lake Springfield Average arrival (37 years) w/range June 24 – October 13 = August 28 Average departure (19 years) w/range November 4 – December 31 = December 1 Latest departure = December 31, 1988 ♂ west of Spfld (arbitrary due to WR)

This raptor had a long tail and a white rump patch and cruised low over fields. Most of the time they landed on the ground, but sometimes perched on fence posts or low trees. Males, females and juveniles had distinctive plumages. Males usually dominated early spring arrivals, which varied (January – April) with most being in February, but there were eleven years that arrivals could not be figured because of winter residents. High spring counts represented flights: 24, March 22, 1978; 10, March 2, 1982, and 7, April 12, 1983. These flights, if they still occur in the county, have not been detected since the late 1980's and early 1990's. Many times migrating harriers were flying very high, and their shape was the only field mark. I saw two males migrating at first light over Lake Springfield on March 30, 2005. The plumage of the males was gray with black wing tips and could mimic a gull which could have allowed this raptor to get closer to some prey. However, a female flew into the marsh at Sangchris on April 13, 1982 and came up with a mouse, and nearby waterfowl did not fly. Most summer birds in July were probably early fall migrants, but some that occurred west (and one east) of Springfield could have nested. There was a female west of Springfield with molting primaries June 23, 1984; an apparent nesting occurred between Salisbury and Pleasant Plains in 1995 with birds seen from June 28 (three) to July 27 immature male; a female was near Curran June 5, 1996; a female was east of Springfield (Tower Road) June 14, 2004; and a female with two juveniles June 22 and a female July 17, 2004 were near Pleasant Plains. The farming set aside had recently provided much needed habitat for this Illinois Endangered Species. However, building sprawl especially in very open spaces was at the same time limiting it. One male in fall migrating across Lake Springfield on October 22, 1991 was mobbed by Bonaparte's Gulls. There was a wide range of fall arrival dates; most early birds were immatures or females. High fall counts were 11, October 13, 1985 and 9, October 28, 2000. This bird usually wintered in the county, but not always, it was not found in 1979-80, 1992-93, and 1996-97; and several other years was present in very small numbers. I clocked the speed of a hunting harrier at 20 mph on January 20, 1999. They

form small roosts in winter, sometimes with Short-eared Owls. This behavior was especially true at Nipper Prairie. High counts for winter were: 5, February 11, 1972; 6, February 17, 1991; 16, February 14, 2004; and 5, December 30, 2006. The subspecies in North America is *C. c. hudsonius*.

Documentation: Specimen =1) IL. Sangamon Co., ISM# 600956 3, 9 mi north Spfld at Fancy Creek Cemetery, September 22, 1916, coll. by A. Davidson.

Highest # Days/Season

Spring25 (2002)Summer8 (1995)Fall29 (1989)Winter26 (2003)

Highest # Birds/Season

 Spring
 47 (1982)

 Summer
 14 (1995)

 Fall
 51 (1985)

 Winter
 63 (2003)

Sharp-shinned Hawk

Accipiter striatus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	301/231 (35)	2/2 (2)	1549/822 (37)	201/186 (32)	2053/1241
Average/day	1.30	1.0	1.88	1.08	1.65
Average/season	8.60	1.0	41.86	6.28	

Status: Uncommon Fall Migrant, Occasional Spring Migrant and Winter Resident and Very Rare Summer Resident

Dates:

- Spring: Earliest arrival = February 21, 1995 ♂♀ east Springfield Average arrival (29 years) w/range February 21 – May 1 = March 19 Average departure (34 years) w/range March 31 – May 17 = April 29 Latest departure = May 17, 1987 Oak Ridge Cemetery
- Fall: Earliest arrival = July 30, 1989 adult ♀ Carpenter Park Average arrival (37 years) w/range July 30 – September 26 = September 9 Average departure (33 years) w/range October 10 – December 27 = November 23 Latest departure = December 27, 1979 (arbitrary due to WR)

The Sharp-shinned Hawk was the most numerous accipiter until the come back of the Cooper's Hawk about 1996, which coincided with a decline of this smaller hawk (see Figure 15). The spring numbers had always been low and must reflect a different migrational path from fall (one in spring to 5.2 in fall). Spring arrival was muddled by wintering birds, and some years (1999 and 2002 - 2004) it was impossible to distinguish these arrivals. High counts for spring were: 7, April 30, 1979; 5, April 30, 1987; and 6, April 16, 1992. Most spring migrants were gone by early May. There were only two summer records, one migrant in July (above), and a June 9, 1990 adult carrying prey at Jefferies Orchard, but no breeding evidence was found. Though this hawk was supposed to nest here, there were no breeding records for the county and very few for Illinois. Most of these hawks went further north to nest. Fall migration was more obvious with most arrivals (31) in September. Definite flights occurred such as 40, October 13, 1985 and 66, October 4, 1986. However, these sustained flights ceased in this county after 1986 for unknown reasons and recently only a few birds were seen even with excellent conditions. One in flight on October 3, 1995 was mobbed by a flock of Cedar Waxwings. A few of these hawks stayed for winter feeding on small birds, but numbers were low and in five winters they went unrecorded. They learned to hunt at bird feeders, but occasionally became window kill victims in the process. The high count for winter was three, January 7, 2001. The size difference between the sexes was extreme in this hawk, with females being much larger. The subspecies here is the widespread A. s. velox.

Documentation: Specimens = 10) IL. Sangamon Co., adult $\partial \partial = 2$, Dawson & northwest Sangchris, March 25 – April 24, wt. = 93.6 gms, testes = 3 mm; immature $\partial = 1$, LSpfld, November 7, 1986, wt. = 93.4 gms, testes = 4 mm; adult Q = 2 (all Q = 3 showed double ovaries), Rochester & north Spfld, October 11 – November 9, wt. = 183.3 – 185.8 gms, ovaries = 9.5 – 10 mm; immature Q = 5, west Spfld (2) & Spfld & Rochester & Jefferies Orchard, November 6 – February 16, wt. = 122.2 – 185.4 gms, ovaries = 7 – 13 mm, one gizzard with two passerines sp?

Highest # Days/Season

 Spring
 19 (1992)

 Summer
 1 (1989 & 1990)

 Fall
 44 (1991)

 Winter
 14 (2000)

Highest # Birds/Season

Spring30 (1992)Summer1 (1989 & 1990)Fall164 (1986)Winter16 (2000)

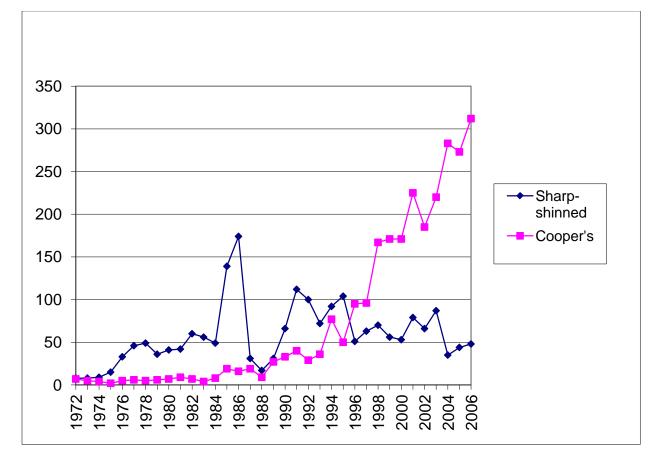


Figure 15. Sharp-shinned Hawk and Cooper's Hawk Numbers by Year.

Cooper's Hawk

Accipiter cooperii

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	737/515 (33)	135/107 (15)	1147/767 (37)	616/461 (31)	2635/1850
Average/day	1.43	1.26	1.50	1.34	1.42
Average/season	22.33	9.0	31.0	19.87	

Status: Common Migrant and Summer and Winter Resident (formerly less common)

Dates:

- Spring: Earliest arrival = February 10, 1996 (arbitrary due to WR) Average arrival (20 years) w/range February 10 – March 31 = March 6 Average departure (20 years) w/range March 21 – May 7 = April 16 Latest departure = May 7, 1995 Hunter Lake
- Fall: Earliest arrival = August 16, 1993 immature RSP (arbitrary due to SR) Average arrival (27 years) w/range August 16 – October 31 = September 20 Average departure (15 years) w/range October 10 – December 7 = November 9 Latest departure = December 7, 1985 (arbitrary due to WR)

During more than half of the study, this accipiter had low numbers; and none were recorded in four springs (up to 1981), 22 summers (up to 1991), and 6 winters (up to 1984), and only in fall was it seen all 37 years. The come back of the Cooper's Hawk (once on the Illinois Endangered List) was first detected in the fall of 1985 when numbers began to rise, and especially in 1994 and was undoubtedly a recovery from the poison DDT (see Figure 15). After 1997 in the fall and 1998 in the spring, few migrational dates could be determined due to summer and winter residents. The first summer bird was not seen until 1991 when an adult was northwest of Springfield on July 18. This hawk became essentially a permanent resident by 1999 and by the end of the study (2010) it became so numerous it was affecting the songbird populations. High counts for spring were: 4, March 6, 1999; 5, April 12, 2000; 4, March 8, 2004; and 6, April 16, 2006. The first nest discovered in the study was at Sangchris on March 25 – May 3, 1994. These hawks were at the nest sites as early as February 23 and did much calling. Flight displays from April 6 - 20 involved slow exaggerated flight just above the treetops with the undertail coverts up over the tail. Copulation was seen April 10. Adults were on the nests March 23 to May 28, and young were seen in the nest June 9. Fledged young were seen June 24 to August 8, with most seen in July. By the end of the study, these hawks were nesting in every moderately sized woodlot. Fall numbers were 1.6 times spring numbers. Occasionally, I saw some that were migrating, but most were local birds hunting. High counts for fall were: 4, October 12, 1985; 5, September 27, 1998; 5, September 15, 2000; 12 (an obvious flight), September 28, 2003; and 5, September 9, 2006. In winter, these hawks raided feeders, chased blackbirds at the roost, went after starlings and pigeons in downtown Springfield and even attack doves in open areas such as corn stubble. Other prey included any medium-sized songbird like cardinals and robins, even Horned Larks, ducks, flickers, House Sparrows, Blue Jays, and mammals such as chipmunks, squirrels, and rabbits. High counts in winter were 4 on December 16, 1999; February 26, 2005; January 22, 2006; and February 26, 2007. The increase of this accipiter changed the way

songbirds behaved in this county. Before, they sat more in the open and were easier to observe; later, they hid more, were much more nervous, and unwilling to be viewed. Many times when I arrived at an area and a Cooper's Hawk was my first bird, I left, because I knew from experience the other birds would be in hiding. If this hawk continues to proliferate at the present rate, eventually steps must be taken to limit the numbers for the sake of the songbirds. However, its numbers might be somewhat controlled by Great Horned Owls.

Documentation: Specimens = 4) IL. Sangamon Co., ISM# 603623 adult \Diamond , November 26, 1941; ISM# 607236 immature \heartsuit , west Spfld, December 8, 1980, coll. by B.Frasco, wt. = 509.5 gms, ovary (double) = 10 mm, gizzard with House Sparrow; ISM# 660211 immature \heartsuit , south LSpfld, February 24, 1991, coll. by M.Biggers, wt. = 630.7 gms, ovary = 17 mm; ISM# 660349 immature \heartsuit , northeast Spfld, January 13, 1993, coll. by VK, wt. = 562.0 gms, ovary (double) = 10 mm.

Highest # Days/Season

Spring52 (2004 & 2005)Summer14 (2002 & 2006)Fall80 (2006)Winter43 (2005)

Highest # Birds/Season

Spring87 (2005)Summer21 (2004)Fall150 (2006)Winter63 (2006)

Northern Goshawk

Accipiter gentilis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	21/17 (9)	0/0	24/22 (8)	35/34 (17)	80/73
Average/day	1.24		1.09	1.03	1.10
Average/season	2.33		3.0	2.06	

Status: Irregular Very Rare Migrant and Winter Resident

Dates:

- Fall:Earliest arrival = October 8, 1995 adult Jefferies Orchard
Average arrival (19 years) w/range October 8 January 21 = December 4
- Spring: Average departure (11 years) w/range February 1 April 12 = March 14 Latest departure = April 12, 1983 flight of 3 adults east Springfield

The Northern Goshawk was the largest accipiter, and it infrequently made incursions into the county from fall to spring with some echo invasions. The main invasion years were 1972-73 (all adults); 1982 –83 (largest ever – all adults) with an echo invasion in 1983-84 (some immatures); 1984-85 (mostly immatures); 1985-86 (mostly immatures); 1991-92 (limited numbers) with small echo in 1992-93. After that, sporadic occurrences and mostly immatures were seen. The decline in the flights might be due to the comeback of the Cooper's Hawk at about that time (1994). The Northern Goshawk recently became difficult to find and if I saw one a year, I felt fortunate. There were many years that none were seen 1970 and 1971, 1975 - 1981, 1987 -1989, 1998, 2000, 2003, 2005. High counts were 2 –3: see above; 2, November 13 & 27, 1982; 3, March 26, 1983; 2, February 22, 1984; and 2, March 2, 1986. I noted on January 13, 2001 at Lake Springfield that crows flew high up into the air to escape goshawks, while crows chased Cooper's Hawks. At Lincoln Gardens on December 1, 1982 I imitated a call I had heard and an adult goshawk landed on a limb above my head. The call sounded like a sapsucker except sharper and was three noted. This bird had an extended eyeline that gave the impression of eyes on the back of the head. These hawks were seen chasing blackbirds, ducks, pheasants, Rock Pigeons, cottontails and squirrels. Some goshawks were seen migrating especially in spring. They breed in the coniferous zone in the northern US and Canada. The subspecies occurring here is the eastern North American A. g. atricapillus.

Documentation: Specimens = 2) IL. Sangamon Co., ISM# 600988 adult 3, 5 mi east Springfield, March 22, 1917, coll. by A. Mitchell; ISM# 606063 adult 2, 10 mi east Spfld at tv tower (killed at tower), December 18, 1974, coll. by T. Gephart, double ovary = 18 mm (iris – reddish-orange).

Highest # Days/Season

Spring4 (1983)Fall5 (1982)Winter8 (1983)

Highest # Birds/Season Spring 7 (1983)

~P8	, (1) 00)
Fall	7 (1982)
Winter	9 (1983)

Red-shouldered Hawk

Buteo lineatus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	131/81 (32)	15/11 (5)	93/88 (26)	48/47 (20)	287/227
Average/day	1.62	1.36	1.06	1.02	1.26
Average/season	4.09	3.0	3.58	2.40	

Status: Occasional Migrant and Rare Summer and Winter Resident

Dates:

- Spring: Earliest arrival = January 22, 1990 adult Springfield (arbitrary due to WR) Average arrival (29 years) w/range January 22 – April 24 = March 4 Average departure (26 years) w/range March 7 – May 31 = April 17 Latest departure = May 31, 1973 immature Springfield (arbitrary due to SR)
- Fall: Earliest arrival = August 4, 2000 immature Sangchris (arbitrary due to SR) Average arrival (17 years) w/range August 4 – November 10 = September 9 Average departure (22 years) w/range October 4 – November 30 = November 14 Latest departure = November 30, 1999 adult Oak Ridge Cemetery

Prior to the use of DDT, this buteo was present in all wooded areas and was basically a permanent resident. Eifert (1945) called it "rather common... many are permanent residents and nest high in the trees". When I started the study in 1970, it was quite rare and from 1970 to 1976 I saw 5 spring birds and one fall bird and none in either summer or winter. It was not until the fall of 1977 that this beautiful raptor began to recover, but as of 2010 it was still not back to normal numbers and it was on the Endangered Species List in Illinois. They began to move north early in **spring**, sometimes in January or February. Apparently those that nested to the north of Sangamon County, would winter to the south, and I started seeing spring migrants in hawk flights especially at Lake Springfield. There were 18 (mostly adults) March 12, 1979 and 13 (all adults) March 14, 1982 (these were the highest counts). However, these flights stopped or were greatly reduced in recent years for unknown reasons. There were still migrants, but only one or two, and many birds seen more recently were already on territory. I had noted this hawk at Sangchris, twice chasing owls; on March 31, 1997 one adult was with crows chasing a Great Horned Owl, and on March 27, 2006 two adults were with crows chasing a Barred Owl. In spring these hawks began calling and circling over their territory usually in bottomland forest. This behavior was noted March 30, 2002 at Riverside Park and February 21, 2004 near Clear Lake. Copulation was seen March 30, 2006 at Buckhart. Buckhart seemed to be the principal area for nesting, and they were first noticed in that area with an immature, August 27, 1992 and another July18, 1998. Two adults were circling at Buckhart September 6, 1999; and two adults were there March 3, 2001; and one adult was there in molt on July 22, 2001. Also, at Buckhart were three juveniles on July 26, 2004; an immature August 22, 2005; and two immatures August 13, 2006 indicating breeding. Juveniles showed a black patch on the throat and a buffy to rufous crescent near the wingtips in flight. Other nesting areas were Oak Ridge Cemetery with two young, August 7, 2005; immatures near the Buffalo sewer pond August 22 and September 24,

2005; and birds at the Carpenter Park/Riverside Park area from 1992 - 2006. **Fall** migration was less well-defined with immatures observed early and adults late in fall. There were also no fall high counts, but two were seen, an adult and immature September 14, 2003 at Buckhart. There were none in **winter** until 1977-78, but since then have occurred in 20 winters, though the numbers were low. The only winter season high count was two, February 21, 2004. They seemed to be anywhere at this season - to name a few: adult along I-55, December 15, 1977; adult at the warm water ditch, January 26, 1981; adult near McDonalds on south 6th Springfield, January 31 - February 5, 1992; adult at Island Grove, January 8, 2001; immature along Woodside Road, December 16, 2003. These hawks called at any season of the year, and one adult was calling often and loud at the North sewer pond on December 30, 2000. The subspecies in the northeastern US including this area is the nominate form.

Documentation: Photographic: IL. Sangamon Co., HDB - on file ISM.

Highest # Days/Season

Spring9 (2006)Summer7 (2004)Fall11 (1986 & 2006)Winter7 (2001)

Highest # Birds/Season

Spring21 (1979 & 1982)Summer11 (2004)Fall12 (2006)Winter7 (2001)

Broad-winged Hawk

Buteo platypterus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	927/361 (36)	21/20 (17)	14150/287 (36)	0/0	15098/668
Average/day	2.57	1.05	49.30		22.60
Average/season	25.75	1.24	393.06		

Status: Uncommon Spring Migrant, Common Fall Migrant and Very Rare Summer Resident

Dates:

- Spring: Earliest arrival = April 8, 1998 adult Carpenter Park Average arrival (36 years) w/range April 8 – 25 = April 15 Average departure (36 years) w/range April 28 – June 7 = May 22 Latest departure = June 7, 1992 immature Washington Park
- Fall: Earliest arrival = July 13, 1988 adult Washington Park
 Average arrival (35 years) w/range July 13 September 23 = August 26
 Average departure (35 years) w/range September 22 November 30 = October 3
 Latest departure = November 30, 1986 Riverside Park

This pint sized buteo was a long distant migrant often seen in "kettles" using thermals to migrate. Broad-winged Hawk migrations were usually highly synchronized and unless the observer was in the correct spot, at the correct time and looking in the correct direction, thousands could fly over and they could be missed. Also, the height that they were flying played a role in whether they were seen. Some flights were only visible with binoculars. Usually at least a few hawks that had spent the night locally began to soar just above the treetops with the first thermals, gave the observer a clue that a flight was about to occur. All **spring** arrivals were in April and some were usually seen in woodland where they gave their loud whistled pewee-like call. Another early spring arrival was April 9, 2000 at Oak Ridge Cemetery. The prey most often seen were snakes and chipmunks, plus other prey were crayfish, rats, and squirrels. High counts for spring were: 20, April 23, 1976; 63, April 28, 1979; 25, April 26, 1995; and 30, April 25, 1996. Spring flights in the county were meager at best, and this could be because there were no north – south rivers or creeks to follow. Most birds went with the main flights, but a few straggled in to May and early June, many of these were immatures. There were at least eleven years when migrants were still moving in early June. Late spring migrants were: June 1, 1971; June 1, 1985, June 3, 1993 and June 1, 2001. A possible nesting occurred at Sangchris since an adult and immature were calling and begging in bottomland on July 25, 2003. Also, there were other birds in summer, an immature south of Springfield on June 25, 1973; an immature at Washington Park June 6 & 21, 1995; and an adult at Irwin Bridge on June 5, 2005. This buteo breeds in Illinois, but there were few records for the central part of the state. Fall migrants drift into the county as early as July (two years). Besides the record above, the other early record was July 25, 1989 of an adult at Washington Park. By August (17 arrivals) there were some early migrants, but no numbers and if these early birds were missed the arrival dates usually coincided with the main flights. High counts (= maximum flights) were: 1,400 (in one hour), September 22, 1974; 1,052, September

21, 1981; 1,150, September 17, 1983; 2,000, October 4, 1986; 845, September 23, 1993; and 987, September 22, 2000. Plus, there were lesser flights: 415, September 21, 1977; 500, September 17, 1979; 400, September 21, 1983; 440, September 18, 1984; 243, September 24, 1985; 235, September 22, 1987; 535, September 23, 1992; 400, September 19, 1994; 240, October 6, 2002; and 270, September 25, 2006. Additionally, there were another eleven flights of 90-200 birds, plus another five flights with about 50 birds. So, the main flights in fall were contained between September 17 to October 6 and these accounted for 93 percent of the birds in fall. A dark phase of this buteo exists, that I knowingly saw twice, October 5, 1971 at Washington Park and September 27, 1994 south of Lake Springfield. One Broad-wing Hawk was calling at Carpenter Park on September 5, 1988. Late fall departures were; immature, October 11, 2002 at Riverside Park; adult, October 17, 2007 south end of Lake Springfield. The latest one was at Riverside Park, November 28 –30, 1986 (photograph). This hawk winters in Central America and northern South America.

Documentation: Photographic: IL. Sangamon Co., DO & HDB - on file ISM.

Highest # Days/Season

Spring20 (1976)Summer3 (1995)Fall19 (1986)

Highest # Birds/Season

Spring134 (1979)Summer3 (1995)Fall2211 (1986)

Swainson's Hawk

Buteo swainsoni

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	6/6 (6)	0/0	3/3 (3)	0/0	9/9
Average/day	1.0		1.0		1.0
Average/season	1.0		1.0		

Status: Very Rare Migrant

Dates:

- **Spring:** Earliest arrival = **April 16**, 1997 light phase Lake Springfield Latest departure = **May 17**, 1986 immature Buffalo Sewer Pond
- Fall:Earliest arrival = September 21, 2003 light phase Lake Springfield
Latest departure = October 14, 2007 immature Sediment Retention

I had only nine records of this western hawk (plus one in the addendum), even though there is a small remnant breeding population in northern Illinois. They were usually seen in open areas with grassland. The records consisted of six adults and four immatures. I first detected this species in the county over Lake Springfield on April 23, 1981. One darkish intermediate hawk was observed during a Broad-winged Hawk flight on October 13, 1985 northwest of Springfield. Most were seen migrating, but they occasionally landed as did an immature near the Sediment Retention September 25, 1986. The other three records not yet mentioned were an adult at Lake Springfield April 17, 1985, an adult, near Buffalo April 21, 1990 (with DO), and an immature at Lick Creek May 16, 1988. This was a highly migratory raptor wintering mainly in southern South America.

Documentation: Photographic: IL. Sangamon Co., DO & HDB - on file ISM.

Red-tailed Hawk

Buteo jamaicensis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	7278/1872 (37)	1471/665 (33)	9023/2361 (37)	8104/1825 (37)	25876/6723
Average/day	3.89	2.21	3.82	4.44	3.85
Average/season	196.70	44.58	243.86	219.03	

Status: Common Migrant and Summer and Winter Resident

Dates:

- Fall:Earliest arrival = August 1, 1981 adult east Spfld (arbitrary due to SR)Average arrival (36 years) w/range August 1 October 27 = September 16
- Spring: Average departure (30 years) w/range March 26 May 28 = April 27 Latest departure = May 28, 1971 immature Sangamon County

The Red-tailed Hawk was one of the most variable species encountered in the study and was the most numerous raptor (see Table 14). When the study first began in 1970, this hawk was only a migrant and winter resident making arrivals and departures more obvious. There were no summer records until 1974. The original breeding population had probably been exterminated by habitat destruction, shooting, and DDT. Numbers began to recover, but it was 1993 before this hawk was common again in summer in Sangamon County. Meanwhile, the hawk migration in the county had changed. In the 1970s, 1980s, and early 1990s there were days in spring and fall when there were sustained flights (with kettles) of this hawk and others; but after 1996 it was much less noticeable even though there were more hawks seen in general. Although there were a few arrival dates in fall in August (7 years), most were in September and October. High counts for fall were: 24, November 14, 1972; 40, November 9, 1981; 58, November 1, 1984; 70, October 13, 1985; 81, November 9, 1986; 63, November 4, 1991; 73, November 2, 1995; and 47, November 10, 2000. On November 3, 2000 at Sangchris there were four Red-tails hunting in a cooperative manner on a large flock of blackbirds and starlings. Winter numbers also increased especially after 1981, when this hawk began to adapt to roadsides (for carrion) and urban areas. In harsh winters they came into the city for rats, pigeons and squirrels and foraged near bird feeders. Other foods taken were snakes, starlings, ducks, robins, opossums, chipmunks, and Franklin's ground squirrels. They also set up winter territories at Lake Springfield where one was seen stealing a fish from crows on January 16, 2001. High counts for winter were: 13, January 7, 1990; 15, February 18, 1995; 34, January 31, 1998; 30, February 12, 1999; and 28, February 17, 2002. Some of these hawks started returning for spring in February. High counts for spring were: 69, March 22, 1978; 123, March 12, 1979; 122, March 21, 1981; 48, April 12, 1983; 68, March 28, 1987; and 34, March 3, 2001. Most adult migrants were gone by late March, and the immatures which came through in April left by mid-May. Although the summer numbers were low on the BBS they were increasing toward the end of that study. In the summer of 2002, I found 28 pairs of Red-tailed Hawks in Sangamon County and that was not nearly all of them. Summer high daily counts were 13, June 25, 2000 and 10, July 12, 2002. By the end of winter (late February), many of the local hawks were paired and copulation was seen February 18 to March 21. Nest building was noted from February 2 to March 1, and the nest was usually

quite high in a large tree like a sycamore, cottonwood, or a conifer. Adults were seen on the nest (presumedly with eggs) from February 25 to April 28. Young were observed in the nests April 12 – May 24, and fledged young were seen from May 25 to August 5 with most in June and July. Most often this buteo was seen in open country with a few trees, but it was in woodland and edge also. The majority of the Red-tailed Hawks in the county and the breeding subspecies is the eastern *B. j. borealis*. The Kriders Hawk (photographs – on file ISM) is considered a light morph of *borealis* and is rare, being seen in the non-breeding season. In migration and winter both *B. j. calurus* (Western Red-tail) and *B. j. harlani* (Harlan's Hawk) occurred (photographs – on file ISM) and were occasional and rare (see Table 14). Also whitish hawks occurred, one striking looking with many white feathers was south of Lake Springfield from October 30, 2008 to November 11, 2009 (photograph - on file ISM).

Documentation: Specimens = 4) IL. Sangamon Co., ISM# 603964 adult \bigcirc , 6 mi west Spfld, November 3, 1939, coll. by W. Boardmen; ISM# 608807 immature \bigcirc , Sangamon Co. April 17, 1981, coll. by H. Davis, wt. = 935.5 gms, testes = 9 mm (has whitish tail); ISM# 606452 immature \bigcirc , Chatham, December 8, 1975, coll. by D.Wuellner, ovary = 10 mm, gizzard with mouse, shrew, rabbit; ISM# 660412 immature sex?, northeast Spfld, November 13, 1990, coll. by C. Meyer.

Highest # Days/Season

Spring85 (1999)Summer56 (2000)Fall110 (2006)Winter85 (2003)

Highest # Birds/Season

Spring538 (1999)Summer160 (2000)Fall646 (2000)Winter675 (1997)

ТҮРЕ	NUMBER	ARRIVAL & DEPARTURE	% of TOTAL
"Normal" <i>B.j. borealis</i>	25612	all year	99.0%
Dark morph <i>B.j. calurus</i>	166	October 6 – April 18	1.0%
Harlan's <i>B.j. harlani</i>	44	October 12 – April 6	0.2%
Krider's B.j. borealis	39	October 6 – April 4	0.2%
Rufous morph B.j. calurus	10	October 21 – April 2	0.04%
Leucistic	5	October 13 – March 31	0.02%
TOTAL	25,876		

Tuble 14. Red tuned Hawk Types in Bungamon County.	Table 14.	Red-tailed Hawk Types in Sangamon County.
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Rough-legged Hawk

Buteo lagopus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	155/91 (24)	0/0	108/89 (31)	302/203 (33)	565/383
Average/day	1.70		1.21	1.49	1.48
Average/season	6.46		3.48	9.15	

Status: Occasional Migrant and Uncommon Winter Resident

Dates:

- Fall:Earliest arrival = October 12, 1998 dark phase Berry
Average arrival (35 years) w/range October 12 December 7 = November 10
- Spring: Average departure (35 years) w/range January 20 April 21 = March 17 Latest departure = April 21, 1990 two light phase east Springfield

This buteo from the Arctic and Subarctic had a light and dark phase and some were intermediate. It was usually found in very open areas of the county. Though fairly large sized, this hawk had a relatively small bill and feet, since they specialized in small rodents. The legs were feathered to the toes. They used the hover and pounce method in which to catch prey. Rough-legs usually perched in the very tops of trees or on telephone poles or they sat on the ground. The occurrence of these buteos was somewhat cyclic, even though they were seen every year, the numbers varied greatly. Years of peak numbers were 1977, 1978, 1981, 1985, 1990, 1997, and 2003. Low numbers were seen in 1972, 1976, 1979, 1988, 1993, 1996, 2001, and 2002 (see Figure 16). Besides the record above, other early fall arrivals were October 20, 1985 east of Rochester and October 21, 1991 at the Sediment Retention. High counts for all seasons of observation were: 4, November 9, 1981; 6, January 19, 1991; 10, February 21, 2004; and 4, March 27, 2004. The light phase birds almost always out- numbered the dark phase birds. A northward spring flight of eight light phase occurred along the South Fork March 12, 1979 along with many other hawks. Areas in which these hawks were found include Pleasant Plains, Capitol Airport, Sangchris, Marsh Road, east of Auburn, and Nipper Prairie, but they could be about anywhere. Another late spring date of departure was April 16, 1975. The winter of 2008-09 (in the addendum) was a fairly good year for these hawks, but most did not arrive until mid-January. There were three January 28, 2009 and four February 1, 2009. The subspecies in North America is B. l. sanctijohannis.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 606058 \bigcirc , Springfield, December 6, 1974, coll. by R. Brest, ovary = 8 mm.

Highest	# Days/Season	Highest	Highest # Birds/Season		
Spring	13 (1986)	Spring	29 (1979)		
Fall	10 (1991)	Fall	11 (1986)		
Winter	20 (1985)	Winter	31 (2003)		

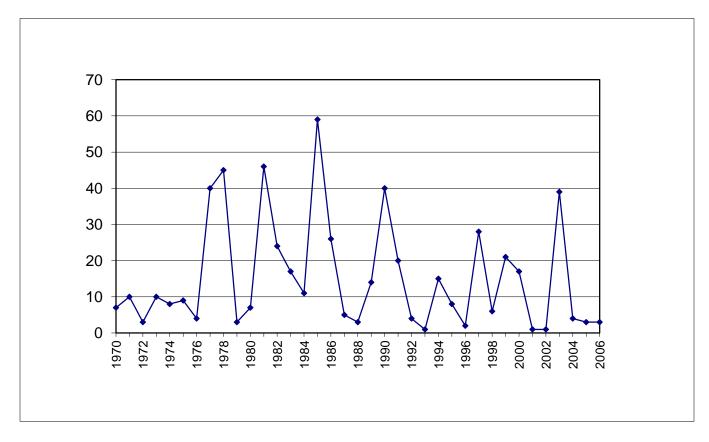


Figure 16. Rough-legged Hawk Numbers by Year (Fall, Winter, Spring).

Golden Eagle

Aquila chrysaetos

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	16/16 (11)	0/0	13/13 (12)	5/5 (4)	34/34
Average/day	1.0		1.0	1.0	1.0
Average/season	1.45		1.08	1.25	

Status: Rare Migrant and Very Rare Winter Resident

Dates:

- Fall:Earliest arrival = October 15, 2004 adult Washington ParkAverage arrival (14 years) w/range October 15 December 8 = November 7
- Spring: Average departure (15 years) w/range February 20 April 2 = March 14 Latest departure = April 2, 1979 immature Spfld & 1991 adult Lake Springfield

Most Golden Eagles observed in this study were in flight and actively migrating. There were 19 adults and 15 immatures, plus two immatures seen in the addendum 2007 and 2008 (see Table 15). Usually good views were obtained by using a scope to see the wings and tail for white areas, and the nape for the golden coloration. Also noted were more of a dihedral in flight, and a less heavy bill than that of the Bald Eagle. The first record was an immature east of Springfield on October 18, 1973. Although most were seen at Lake Springfield and Sangchris, three were noted over Washington Park: an immature November 9, 1973; an immature October 30, 1990; and the one above. One immature seen March 16, 1972 avoided the city of Springfield by migrating east via the South Fork. The best months for sightings were March and October/ November. Occasionally, this eagle was seen perched or sitting on the ground: immature perched in large dead tree at Sangchris February 20, 2006 and immature east of New City, March 6, 2007 along the roadside on the ground eating a road-killed raccoon. The Golden Eagle breeds in Alaska and northern Canada and the western US. Although observed in December and February in this study, there were no records for January indicating most were migrants. It does winter in Southern Illinois and to some extent along the Illinois River, and these individuals could drift into this county to hunt in winter. The subspecies in North America is A. c. canadensis.

Documentation: Specimen = 1) IL. Sangamon Co., ISM # 605911 immature \bigcirc ? Illinois, Sangamon Co. 2 mi east Mechanicsburg, October 18, 1973, wt. = 8lbs 4oz.

Highest	# Days/Season	<u>Highest # Birds/Season</u>		
Spring	3 (1979)	Spring	3 (1979)	
Fall	2 (1973)	Fall	2 (1973)	
Winter	2 (2005)	Winter	2 (2005)	

1973October 18 November 9immature immatureeast of Springfie Washington Par1978March 18immatureWest of Springfie Washington Par1978March 6adultLake Springfiel1979March 23adultLake Springfiel	rk
1978March 18immaturewest of SpringfMarch 6adultLake Springfiel1979March 23adultLake Springfiel	
March 6adultLake Springfiel1979March 23adultLake Springfiel	
1979March 23adultLake Springfiel	
1 8	
	d
April 2 immature Springfield	
1980March 15adultSouth Fork	
1981March 15adultSouth Fork	
March 21 adult South Fork	
1982March 16immatureSouth Fork	
March 27 immature Sangchris	
1984November 17adultLake Springfiel	d
1985 March 20 immature Lake Springfiel	
1986 November 9 adult Lake Springfiel	d
March 10 adult Horse Creek	
1988 October 24 adult Springfield	
1989 November 11 adult North side Sew	er Pond
1990 October 30 first year immature Washington Par	rk
1991April 2adultLake Springfiel	d
1992November 4adultLake Springfiel	d
February 25 adult South Fork	
19951 columny 25adultSouth Fork1995November 11adultLake Springfiel	d
1997November 8immatureSangchris	
Eebruary 28 adult south of Lake S	pringfield
1998 December 2 adult Sangchris	
1999 October 22 immature Sangchris	
March 14 adult Marsh Road	
2001 March 28 immature Buckhart	
November 17 immature Jefferies Orchar	rd
2003 March 9 adult Sangchris	
2004October 15adultWashington Par	rk
March A immature Buckhart	
1005	d
2005 December 8 immature Lake Springfiel	

Table 15. Records of Golden Eagles in Sangamon County

Addendum:

2007	March 6	immature	New City
2008	March 2	immature	Lake Springfield

American Kestrel

Falco sparverius

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	3507/1579 (37)	2069/848 (36)	5467/2230 (37)	4998/1550 (37)	16041/6207
Average/day	2.22	2.44	2.45	3.22	2.58
Average/season	94.78	57.47	147.76	135.08	

Status: Fairly Common Migrant and Winter Resident and Uncommon Summer Resident

Dates:

(see text)

When the study began, this small falcon had very low numbers (probably due to DDT) and was missed in the summer of 1970; otherwise it was seen in every season (147). There was some migration observed, usually mid-February to mid-April in spring and early September to early November in fall. Most of the migration was subtle, and migrants seen were following creeks and the Sangamon River just above the tree tops. Numbers in fall were 1.6 times those in spring, which not only suggested that production of young caused more numbers, but migrants were coming in for the winter. Note that the winter population was 2.4 times the summer population. By 1980, the numbers had increased significantly and kept on increasing to about 1998 when they leveled off. High counts for spring were: 10, March 24, 1984; 13, March 14, 1999; 16, March 3, 2001; and 16, March 17, 2002. The American Kestrel was recorded in summer in 13 years on the BBS, and more were observed toward the present time. I found it nesting in the county by 1976. This small falcon was noted as being paired between January 27 – February 21, and copulation was seen from February 9 to April 6. Most fledged young were seen in June and July, but specifically from June 7 to August 13. In the summer of 2002, I located 39 pairs of kestrels in Sangamon County and was sure there were more. Sometimes, many were found together like 12 at the airport on July 5, 1992. This bird also nested within the city of Springfield, and a pair was at the State Capitol Building at least from 1976 to 1995. Molt was seen from July 4 to August 29. Food items noted were grasshoppers, mice, starlings, Rock Pigeon, kinglet, young passerine, and a warbler. The warbler was an orange-crowned that was feeding along a hedge, and the kestrel flew along the opposite side until even with the warbler, then flipped over the top of the hedge and drove the warbler down to the ground. High counts for **fall** were: 12, September 19, 1982; 15, September 27, 1986; 20, November 1, 1998; and 15, November 28, 1999. In winter, they were in open areas usually with some low cover such as grassy fields, and "clover leafs" along the highways were especially favored by them. Also, they were associated with buildings, silos, old barns and roadside signs, and used some of them as nest sites. High counts in winter were: 14, December 7, 1985; 17, February 17, 1991; 17, January 29, 1994; 23, January 24, 1999; 27, January 13, 2001; 28, February 17, 2002; and 18, January 8, 2006. The subspecies in the county is the widespread nominate form.

Documentation: Specimens = 14) IL. Sangamon Co., $\bigcirc \bigcirc \bigcirc = 7$, Springfield (5) & Chatham & New Berlin, January 29 – December 7, wts. = 66.7 – 128.3 gms, testes = 3 – 7mm (2 juveniles = June 24 & August 17); $\bigcirc \bigcirc = 7$, Spfld (5) & Berlin & west Pawnee, January 25 – October 10, wts. = 96.1 – 171.1 gms, ovaries = 4.5 – 8 mm.

Highest # Days/Season

Spring78 (2001)Summer51 (2002)Fall110 (2000)Winter75 (2001)

Highest # Birds/Season

Spring254 (2002)Summer207 (2000)Fall367 (2000)Winter421 (2001)

Merlin

Falco columbarius

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	31/30 (14)	0/0	130/123 (31)	20/19 (7)	181/172
Average/day	1.03		1.06	1.05	1.05
Average/season	2.21		4.19	2.86	

Status: Rare Spring Migrant and Winter Resident and Occasional Fall Migrant

Dates:

Spring: Earliest arrival = March 11, 1990 ♀ Lake Springfield (arbitrary due to WR) Average arrival (12 years) w/range March 11 – May 8 = April 9 Average departure (12 years) w/range April 21 – May 13 = May 1 Latest departure = May 13, 2006 Lake Springfield

Fall: Earliest arrival = August 14, 2005 ♀ Berry Average arrival (31 years) w/range August 14 – October 17 = September 19 Average departure (31 years) w/range September 21– November 27 = October 22 Latest departure = November 27, 1986 west Springfield (arbitrary due to WR)

The Merlin was very rare when I started the study, and the first one was seen October 1, 1972. It remained a fall phenomena until a winter Merlin was seen December 2, 1982. This small falcon was not observed in spring until May 6, 1989. It, like other falcons, was adversely affected by DDT and may still be recovering its range. I am not sure why they were so difficult to see in spring, unless they overflew this area; Sharp-shinned Hawks were also few at this season. The only day in spring that two were seen was April 20, 2000. The break down by month for spring was: 7 in March, 18 in April and 6 in May. Other late departures were May 6, 1989, 1993 & 2009 and May 8, 1998. The Merlin breeds in Alaska and Canada and some of the northern tier states in the US. In the fall, it was usually seen from September to November, but I had three August records plus one in the addendum, the one above; a female, August 27, 2000 at Lake Springfield; a male, August 22, 2004 at UIS; and one August 30, 2009 at Buckhart. The best way to detect this small falcon in flight was the reaction of a flock of birds to "ball up" in the sky, and then spot the nearby falcon to which the passerines had reacted. I had noted the Merlin chasing swifts, shorebirds, blackbirds, House Sparrows, starlings, Horned Larks, and terns. On September 19, 1993 one caught a Cedar Waxwing and then striped the feathers off the wings before eating it. On October 7, 1997 at Sangchris a Merlin knocked a Spotted Sandpiper into the water, but the falcon would not take the shorebird from the water. The sandpiper sat on the water for a while then flew in to shore. On September 18, 2008 a Merlin caught a Monarch butterfly in its talons, but then delicately released it unharmed. Fall numbers were 4.2 times the spring numbers. High counts were two: October 1, 1992; September 20, 1996; November 23, 1998; September 15 & 22, 2000; October 14, 2003; September 16, 2005; and October 12, 2009. Winter Merlins were scarce, but if found they kept coming back to the same spot because they maintained hunting territories at that season. They were seen in places such as: Adams Sanctuary, two on December 15, 1999; Lake Springfield (sat on the ice), January 12 - 17, 1999; Roselawn Cemetery (B.Dyer), January 11 – 17, 2004; UIS campus January 29 – February 20,

2006; Bunn Park, January 5 – 15, 2007; and near the South Fork January 2 – February 14, 2010. They liked rather open areas with scattered trees perching in the very tops, but they also occurred in very open areas perching on telephone poles. This falcon winters as far south as northern South America. The nominate (taiga) subspecies occurred here and also the prairie subspecies from the northern Great Plains, *F. c. richardsonii*, which was lighter colored. I took photographs of the prairie form at the Buffalo sewer pond on December 28, 2003 and one was chasing longspurs at Sangchris on January 14, 2009. Plus, there was a \bigcirc *richardsonii* specimen from just outside the county (not counted in the totals) from Waverly, Morgan County on January 1, 1991, with wt. 232.1 grams.

Documentation: Specimen = 1) IL. Sangamon Co., ISM # 603598 $\stackrel{<}{\bigcirc}$, April 8, 1940, coll. by G. Wright; plus photographs by HDB – on file ISM.

Highest # Days/Season

Spring4 (1999 & 2006)Fall9 (1998 & 2004)Winter5 (2005)

Highest # Birds/Season

 Spring
 4 (3 years)

 Fall
 10 (1998 & 2000)

 Winter
 5 (1998 & 2005)

Gyrfalcon

Falco rusticolus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1/1 (1)	0/0	4/4 (1)	1/1 (1)	6/6
Average/day	1.0		1.0	1.0	1.0
Average/season					

Status: Very Rare Migrant and Winter Resident

Dates: Three Records: dark phase, Lake Springfield, March 31, 1980; immature gray phase, Sangchris, February 25, 1984; immature gray phase, Sediment Retention, October 20 – 24, 1987. Plus one in addendum: immature? gray phase, Sangchris, February 9, 2008.

These large northern falcons breed in the Arctic and could appear in one of three phases. The gray phase or morph was most often seen in Illinois. The Lake Springfield falcon, however, was mostly dark and it made a pass at resting gulls. The October falcon (gray phase) was the only one that stayed any length of time and was in an area with large numbers of waterfowl. It was seen chasing a Snow Goose, a Great Blue Heron and blackbirds. This falcon was seen later by many observers and photographed. The wing beats of this large bird were rather shallow, and the falcons flew close to the ground or water in most cases. All the Gyrfalcons were found near or at bodies of water, where waterfowl were available for prey. Two of these falcons landed on electric poles in open areas and one sat on the ground. The 2008 falcon was sitting on a mudflat and flew south. I was barely able to get a couple of blurry photographs.

Documentation: Photographic: IL. Sangamon Co., DO & HDB, plus written descriptions HDB all on file ISM.

Peregrine Falcon

Falco peregrinus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	35/33 (16)	6/6 (5)	106/99 (28)	13/13 (9)	160/151
Average/day	1.06	1.0	1.07	1.0	1.06
Average/season	2.19	1.20	3.79	1.44	

* # includes some introduced peregrines

Status: Rare Spring Migrant, Occasional Fall Migrant and Very Rare Summer and Winter Resident

Dates:

Spring:	Earliest arrival = March 7, 2007 adult Sangchris
	Average arrival (17 years) w/range March 7 – May 13 = April 25
	Average departure (14 years) w/range May $1 - 28 = May 10$
	Latest departure = May 28, 2005 adult Buckhart (also see SR)

Fall: Earliest arrival = July 1, 1992 adult Cinder Flats
Average arrival (29 years) w/range July 1 – October 10 = September 9
Average departure (27 years) w/range September 15 –November 28 = October 11
Latest departure = November 28, 1999 adult Marine Pt. (also see WR)

The first Peregrine Falcon seen in the study was an immature on October 6, 1973 at Lake Springfield. This was after the extinction of the eastern population of the subspecies F. p. anatum in the 1960s due to DDT and before the introduction of released birds of combined subspecies. The Arctic subspecies F. p. tundrius migrated through this area in spring and fall, one adult was observed perched May 5, 1996 and an immature was sitting on a mudflat October 15, 1988. After 1988, this falcon became fairly regular, though in small numbers. In spring it passed through quickly and was usually seen near areas with water especially when shorebirds or waterfowl were present. The only counts in spring over one were two adults April 27 & 29, 2006. One adult was eating a scaup on Lindsay Bridge on March 11, 2008. In the spring of 1994, a pair of the introduced birds attempted to nest in downtown Springfield. All summer records in June and July were of the introduced birds from 1992 to the end of the study. One immature on August 28, 2007 at the Cinder Flats had been banded as a nestling at Gary, Indiana on May 21, 2007. Most fall migrant falcons arrived in late August or September and fall birds out numbered spring birds three to one. Two was the highest fall daily count: September 25, 1984; September 29, 1985; October 4, 1986; September 27, 1996; August 27, 2003; and August 31, 2006. All winter records were of single birds and most were the introduced variety. The first winter record was an immature on December 28, 1986, and by 2007-08 four sightings were made from December 6 to February 17. I saw an immature knock a cormorant into the water at Lake Springfield on September 14, 2003. On September 24, 1997 a falcon was mobbed by 100 swifts over Lake Springfield. One subadult was roosting on a telephone pole in an open agricultural area on November 23 & 24, 2007 (photograph). Peregrine Falcons winter south as far as southern South America.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

Highest # Days/Season

Spring5 (2004)Summer2 (2005)Fall12 (2003)Winter3 (2003)

Highest # Birds/Season

 Spring
 5 (2004)

 Summer
 2 (2005)

 Fall
 13 (2003)

 Winter
 3 (2003)

Prairie Falcon

Falco mexicanus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	0/0	0/0	5/5 (4)	5/5 (4)	10/10
Average/day			1.0	1.0	1.0
Average/season			1.25	1.25	

Status: Very Rare Fall Migrant and Winter Resident

Dates:

- Fall:Earliest arrival = October 11, 1983 immature Woodside BridgeAverage arrival (6 years) w/range October 11 January 7 = November 21
- Spring: Average departure (4 years) w/range January 7 February 10 = January 21 Latest departure = February 10, 1989 west Berlin

This was a western North American falcon that strayed east in fall and winter. I had nine records and one during the addendum (see Table 16). This light-colored falcon was usually found in open barren areas and was first observed in the study east of Buffalo on November 22, 1980. They sat on the ground or perched in trees or on telephone poles. I had noted these falcons chasing starlings, pigeons, and waterfowl and harassing a Red-tailed Hawk and displacing a kestrel. They did not stay in view for very long, but some seemed to be holding winter territories and some could have been returning birds from the year before. Locations of occurrence were near Buffalo, near Berlin and the Sediment Retention. The last record during the study was at Jefferies Orchard on January 16, 2007 (with KB).

Documentation: Notes and drawings: IL. Sangamon Co., HDB – on file ISM.

1980	one	east of Buffalo, November 22
1983	immature	Woodside Bridge, October 11
1987	one	Sediment Retention, November 9
1988	one	Sediment Retention, December 4
1989	one	west of Berlin, February 10
1990	one	east of Buffalo, November 15 – 17
1991	one	north of Buffalo, January 19
2006	one	near Island Grove, January 7
2007	one	Jefferies Orchard, January 16

Addendum:

	2008	one	east of Lake Springfield, December 11	
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Ring-necked Pheasant

Phasianus colchicus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	4676/1682 (37)	1386/511 (37)	2137/872 (37)	1180/394 (37)	9379/3459
Average/day	2.78	2.71	2.45	2.99	2.71
Average/season	126.38	37.46	57.76	31.89	

Status: Introduced, now Uncommon Permanent Resident

The cock pheasant, a colorful bird, has a warm brown and coppery golden breast, blue-green head, red wattle around the eyes and white neck band, while the hen appears mostly brown. However beautiful, this introduced bird should be considered an invasive species that increased at the expense and the extirpation of the native Greater Prairie-Chicken, Tympanuchus cupido, in this county (and almost all of Illinois). If the Ring-necked Pheasant could be allowed to die out (without further introductions) from the county, the prairie-chicken could then be reintroduced. The pheasant was released in Illinois in the 1890s (Long, 1981), at the same time the prairiechicken went from peak numbers in Illinois in 1860 to the verge of extinction shortly after 1900 (Ridgway, 1915). The two species could not apparently coexist due to the pheasant laying its eggs in the prairie-chicken's nest, much like the cowbird does with songbirds. The pheasant seemed no better than the introduced House Sparrow or starling or honeysuckle, all invasive organisms, except the pheasant could be directly shown to have caused the near loss in Illinois of the prairie-chicken. The pheasant was recorded in all 148 seasons of the study, though some seasons the numbers were quite low. Numbers in the late 1970s and early 1980s dropped because of severe winters. I remember seeing pheasants sitting, frozen to death, in plowed fields in winter at that time. They inhabited open areas along roadsides and agricultural fields as well as grassland and weedy fields, woodland edge and brushy areas. Spring had the highest numbers that were 2.2 times the fall numbers mostly due to calling birds. However, pheasants were constantly being released, so there was no natural population. High counts for spring were: 18, May 4, 1974; 18, April 4, 1984; 17, March 15, 1998; and 16, March 3, 2001. The loud calling of the cocks started in spring between February 6 and March 7, and I noted fighting over territories March 18 and April 9. The pheasant ranked 24th on the BBS and was recorded every **summer**. One nest with 18 eggs was found May 10, 1974 at Carpenter Park. Of 52 broods and young, the earliest was May 7 with 13 downy young and the latest was September 6 with 3 half grown young. The numbers of broods were 7 in May, 16 in June, 15 in July, 13 in August, and 1 in September. Calling continued until July 15, with none calling in August, and then some in September to the 20th in 2000. Occasionally, I found this bird in unusual places, for instance a hen at Washington Park on October 25, 1989 seemed odd (probably released). High counts for fall were: 14, August 29, 1971; 15, August 27, 1975; 24, November 5, 1983; 20, November 4,199; and 16, September 6, 1993. In winter, pheasants came up by the roads to feed when there was deep snow, and sometimes they would roost in low trees. High counts for winter were: 30, January 6, 1974; 20, February 18, 1977; 20, December 27, 1989; and 13, December 24, 2000. The pheasant in Illinois is from mixed ancestry of four subspecies (Warner, 1981) P. c. colchicus, P. c. torquatus, P. c. mongolicus, and P. c. versicolor.

Documentation: Specimens = 5) IL. Sangamon Co., $\bigcirc \bigcirc = 5$, February 2 – December 20, wts. = 1220.2 - 1353.0 gms & (juvenile August 27 = 186.6 gms); testes = 9 - 11mm.

Highest # Days/Season

Spring83 (1994)Summer34 (2000)Fall57 (1989)Winter21 (1990)

Highest # Birds/Season

Spring232 (1998)Summer78 (1970)Fall138 (1970)Winter92 (1977)

Wild Turkey Meleagris gallopavo

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1084/287 (15)	211/82 (12)	433/83 (12)	668/62 (12)	2396/514
Average/day	3.78	2.57	5.22	10.77	4.66
Average/season	72.27	17.58	36.08	55.67	

Status: Natural Population Extirpated; Reintroduced, now Uncommon Permanent Resident

When I began this study in 1970, I did not have the remotest idea that I would ever see the turkey in Sangamon County. This bird must have been shot out early in Sangamon County by the late 1800s, as it was extirpated in Illinois by 1910. I could not find any specimens of the original population, or other early records for this game species in the county, except for early written accounts. My first sighting was one near the Buffalo sewer pond May 10 – June 1, 1986, but whether this was a wild bird was not certain. The next sighting was November 19, 1992 at Sangchris, and they did not become regular until 1994 and 1995. From the spring of 1997, they were seen every season to the end of the study (winter 2006-07). High counts were: 28, December 28, 1995; 30, March 13, 1996; 33, March 6, 1998; 35, February 8, 1999; 27, January 29, 2002; 40, March 10, 2002; 30, February 14, 2003; 17, August 30, 2005; and 34, January 6, 2006. I made no special effort to search for turkeys as they were counted along with every other bird species. Turkey hunters and certainly IDNR biologist would have a better understanding of the numbers. Most sightings started at Sangchris, but by the end of the study turkeys were all over the county. Gobbling was heard from February 14 to July 13, but mostly in March and April. Displaying by males was observed in February and March. On 17 occasions young were seen from June 14 to September 21 with most in July and August. Near Lake Springfield in June 2008, a hen was sitting on a nest in a flower box. Turkeys roost in trees, sometimes fairly high, which I noted in January and March. On April 13, 2006 one was dust bathing at Carpenter Park. Turkeys were usually seen in open areas in woodland, but were seen in heavy woods on occasion and in agricultural fields. The population was still increasing at the end of the study. The subspecies in this county was the eastern M. g. silvestris.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

Highest # Days/Season

Spring36 (2005)Summer18 (2004)Fall21 (2006)Winter18 (2006)

Highest # Birds/Season

Spring188 (1998)Summer52 (2004)Fall104 (2005 & 2006)Winter212 (2006)

Northern Bobwhite

Colinus virginianus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	4591/1397 (37)	5948/1229 (37)	4438/1054 (37)	1703/207 (35)	16680/3887
Average/day	3.29	4.84	4.21	8.23	4.29
Average/season	124.08	160.76	119.95	48.66	

Status: Fairly Common Permanent Resident

If one had really good data from early times to the present on the numbers and distribution of this quail in Sangamon County, one could probably draw concentric circles of extinction radiating out from the center of the city of Springfield. The drop in numbers was apparent for the severe winters of the late 1970's to 1980, and was especially noticeable in spring and winter. The breakup of coveys in spring occurred between March 17 and April 23, usually near March 20; and calling began between March 12 and April 5. Calling probably accounted for summer having the highest numbers. The bobwhite ranked 8th in the BBS with higher numbers early, except in years following severe winters, and was moderately lower more recently. The only egg dates I had were June 21 and 22. Fledged young were noted from June 24 to as late as October 31 with the most in July and August. The late calling dates varied from August 22, 2004 to September 16, 2005. Coveys were formed in fall from September 1 to October 29. High counts were: 35, December 17, 1972; 57, June 22, 1976; 30, January 14, 1977; 30, February 25, 1978; 25, October 18, 1998; 33, July 12, 2001; and 33, August 8, 2004. This quail was found in agricultural land with grass and brushy borders and woodland edge. Quail were difficult to find in winter, but they sometimes came up to the roads when it snowed. It had, during the study, disappeared from considerable areas as with most ground nesting species. This was probably due to nest and young predation, both wild and domestic, and the destruction and disruption of habitat by humans and their destructive machines. Also, unknown was the amount of released quail and the effect these had on the wild populations. The subspecies in this county is the nominate form.

Documentation: Specimens = 18) IL. Sangamon Co., $\Im \Im = 14$, one juvenile, Sangchris, July 16, 1987, wt. = 69.2 gms, testes = 2.5 mm, gizzard with Hemiptera (Miridae), caterpillars, sow bugs, Curculionidae, & Ephemeroptera; $3 \Im \Im (erythristic)$, south of Spfld (2) & near New City, May 9 – November 29, (one May 22 w/ wt. = 192.3 gms & testes = 12 mm); other $10 \Im \Im$, Spfld (3)& south Spfld (3)& Sangcris (2) & Rochester & LSpfld, February 19 – December 21, wts. = 148.8 – 206.5 gms, testes = 3 - 9 mm; $\Im \Im = 4$, LSpfld (2) & Spfld & New City, February 7 – November 23, wts. = 153.9 - 203.2 gms, ovaries = 11 - 13 mm, (one \Im June 8 with egg in oviduct).

Highest # Days/Season

Spring73 (1998)Summer54 (1993)Fall54 (1998)Winter17 (1970)

Highest # Birds/Season

Spring314 (1998)Summer329 (1998)Fall249 (1998)Winter213 (1970)

Yellow Rail

Coturnicops noveboracensis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	26/24 (12)	0/0	5/5 (4)	0/0	31/29
Average/day	1.08		1.0		1.07
Average/season	2.17		1.25		

Status: Very Rare Migrant

Dates:

- Spring: Earliest arrival = March 29, 1977 Sangchris Average arrival (12 years) w/range March 29 – May 3 = April 12 Average departure (7 years) w/range April 14 – May 11 = April 27 Latest departure = May 11, 1975 Sangchris
- Fall: Earliest arrival = September 27, 1972 ♂ tv kill east of Springfield Average departure (4 years) w/range September 29 – October 24 = October 10 Latest departure = October 24, 1971 ♀ tv kill east of Springfield

A small buff-brown rail that was difficult to find in wet, grassy fields. Early in the study on April 16, 1972, by chance, I flushed this rail in a grassy field at Sangchris, and this area was the place for all the spring records. The white patch in the wings was very obvious, and they usually did not fly very far. Thus, if carefully approached, the rail could be viewed on the ground. Although, on April 13, 1979 I noted that they ran upon landing, which was contrary to what I had read. On two occasions there were two, April 18, 1972 and April 24, 1975. The last one I found was May 3, 1992, although, one pair of wings (in ISM coll.) was found April 5, 1994 in the field and the rail had apparently been eaten by a predator. In the last 12 years, even though I thoroughly searched the field, it did not produce any of these rails. However, the field had been altered and used for recreation. The Yellow Rail breeds in the northern US and Canada and probably had nested in Illinois in earlier times. There were fewer rails counted in fall, partly because of detection in dense vegetation, and perhaps due to usually dryer conditions at that season. In fact, most records in fall were from tv tower kills (see below). The only fall sight record was from Lick Creek, October 11, 1979. Either the conditions had changed or the population of this rail was much less as was the case in all rails. The subspecies in the US is the nominate form and it winters along the Gulf Coast.

Documentation: Specimens = 4) IL. Sangamon Co., all from tv tower east Springfield all in fall, $2 \Im \Im \& 2 \Im \Im$, September 27 – October 24, wts. = $\Im \Im 56.7 - 60.6$ gms $\& \Im \Im 41.6 - 51.3$ gms (note: both $\Im \Im$ had darker backs and white spotting on the crown that the $\Im \Im$ did not have. This could be due to age and/ or sex differences?). Also, there is an old specimen: ISM# 600623 \Im , Salisbury, October 3, 1899, coll. by J.W. Nash.

Highest	<u>Hi</u>	
Spring	4 (1972 & 1975)	Sp
Fall	2 (1972)	Fa

Highest # Birds/SeasonSpring5 (1972 & 1975)Fall2 (1972)

Black Rail Laterallus jamaicensis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1/1 (1)	0/0	0/0	0/0	1/1
Average/day	1.0				1.0
Average/season	1.0				

Status: Very Rare Spring Migrant

Dates: One Record: Sangchris, May 19, 1987.

This secretive rail of diminutive size was very difficult to find and observe. They probably occurred every migration season, but I saw it only once in the county. At Sangchris I flushed a small all dark rail at my feet that flew across a narrow inlet with dangling legs. It was in cattails and sedges at the lake edge, and I think the only reason that it flushed was I had walked a narrow peninsula and it had no choice once the vegetation ended. This rail almost certainly occurred in fall and probably bred in the county in the past before all the prairie sloughs were drained. Though this rail has distinctive calls I have never had it respond to calls or tapes. The Black Rail is an Illinois Endangered Species. The subspecies in Sangamon County is the nominate form which winters in southern US coastal areas.

Documentation; Written description: IL. Sangamon Co., HDB - on file ISM.

King Rail

Rallus elegans

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	20/19 (8)	5/5 (3)	2/2 (2)	0/0	27/26
Average/day	1.05	1.0	1.0		1.04
Average/season	2.50	1.67	1.0		

Status: Very Rare Migrant and Summer Resident

Dates:

Spring: Earliest arrival = April 6, 1974 Sangchris Average arrival (8 years) w/range April 6 – May 19 = April 28

Fall:Average departure (4 years) w/range July 29 – August 29 = August 14Latest departure = August 29, 1994 Sangchris

The King Rail was the largest rail in the county and had become very difficult to find. The last record in the study was an adult at the south end of Lake Springfield on July 17, 1996. This rail is on the Illinois Endangered Species List, due to low populations and few nesting sites. It should not under any circumstances be a hunted species. Spring migration accounted for most of my sightings of this chicken-sized bird, but its ability to hide in marsh vegetation made it difficult to find. It had a loud clacking call which helped to locate it. Another early arrival, besides the one above, was April 10, 1978 when one landed in a backyard in Springfield (see male specimen). Other spring records were May 6, 1973 at Sangchris, April 18, 1982 at Sangchris, and May 4, 1987 at Cinder Flats. Areas where it occurred and probably nested were: Sangchris (April 6 – 16, 1974; May 6 – 8, 1993 & July 8 – 31, 1996), south end of Lake Springfield (May 19 – August 27, 1985), and the Cinder Flats (May 3 - 19, 1985). The only multiple count was two on May 19, 1985. Most spring dates were in April or May, but one was found road killed southwest of Springfield on June 1, 1995. A juvenile was seen August 27, 1985 at the south end of Lake Springfield. Sometimes, they came out in the open as did an adult at Sangchris July 29, 1970, which I noted as follows: "I watched the bird for 15 minutes. It stayed along the lake bank, but occasionally stepped into the water which came up to its belly and would thrust its whole head into the water. It was feeding and I watched as it took an inch long fish and probed in some grass and found a large insect. The bird hardly made any attempt to conceal itself and when I left it was still standing in the open with the sun shinning on its orange breast." Fall migration data was meager and, in this area, consisted of summer birds leaving. These birds must have suffered a lot of kills along the roads considering I had salvaged three specimens of this rare species, including one at Sangchris August 29, 1994. Based on the specimens, males looked quite a bit larger than females (contra the weights below, but the male was emaciated). There were old nesting records from Sangamon County (see DuBois, 1921) and much of Illinois, indicating this rail was once common and lately had become rare. King Rails winter in the Gulf States and northeast Mexico. The subspecies is the North American nominate form.

Documentation: Specimens = 2) IL. Sangamon Co., ISM# 606734 \Diamond , Spfld, April 10, 1978, coll. by VK, wt. = 193.4 gms, testes = 16 mm; ISM# 660423 \heartsuit , west side Spfld, May 19, 1996, coll. by HDB, wt. = 213.3 gms, ovary greatly enlarged.

Highest # Days/Season

Spring7 (1985)Summer3 (1996)Fall1 (1985 & 1994)

Highest # Birds/Season

 Spring
 8 (1985)

 Summer
 3 (1996)

 Fall
 1 (1985 & 1994)

Virginia Rail

Rallus limicola

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	165/128 (35)	12/6 (2)	32/30 (17)	10/9 (4)	219/173
Average/day	1.29	2.0	1.07	1.11	1.27
Average/season	4.71	6.0	1.88	2.50	

Status: Occasional Spring Migrant, Rare Fall Migrant and Very Rare Summer and Winter Resident

Dates:

Spring:	Earliest arrival = March 19, 1987 Cinder Flats
	Average arrival (36 years) w/range March 19 – May 6 = April 16
	Average departure (27 years) w/range April 26 – May 24 = May 9
	Latest departure = May 24 , 1984 Cinder Flats (arbitrary due to SR)

Fall: Earliest arrival = August 13, 1970 Sangchris
Average arrival (11 years) w/range August 13 – October 3 = September 16
Average departure (11 years) w/range September 5 – December 1 = October 26
Latest departure = December 1, 2000 Sangchris (also see other WR)

The Virginia Rail was, no doubt, once common in this county, but even during this study numbers dropped significantly. The early draining of sloughs and wet fields had continued and by the year 1999 I was lucky to see one per year. It usually arrived in **spring** in April, but in three years it arrived in March, see above, March 23, 1979, and March 24, 2004. Plus, once it was not found until May 6 (1988). Like most secretive birds it was not recorded in large numbers, and it was found in places that have been destroyed or altered such as the Cinder Flats, Sediment Retention, Williamsville pond, and Sangchris. High spring counts were three: April 22 & 29, 1978; May 10, 1984; May 2, 1987; May 1, 1996. One migrant "walked" into the Research and Collection Center (B.Dyer) April 29, 2005; and I released it later at Buckhart. Most migrants had gone north by mid-May. In summer these birds were usually associated with cattail marshes. They nested at the Cinder Flats in 1983 when three young were seen June 19, and in 1984 when an adult and young were there June 21 and two juveniles were seen on July 7. Also, one was calling at the Cinder Flats April 24, 1994, but apparently did not nest. Most of these rails breed in the northern US and southern Canada. Fall migration was sketchy at best as they were very difficult to locate because of the more dense vegetation; some of the records were tv kills and road kills. Nine of the eleven fall arrival dates were in September. Some other fall arrivals were: September 9, 1971 at Sangchris; September 1, 1985 on east Lake Drive; and September 15, 1987. There were not any seen in the study in fall after 1998, when two occurred September 17. Late records were: November 12, 1972 a tv kill and November 29, 1985 at the Cinder Flats. Winter records for the county were: 1, December 8, 1984 and 2, January 3, 1985 at Cinder Flats; December 8, 1985 at Cinder Flats; December 9 & 14, 1989 at Cinder Flats; and December 1, 2000 at Sangchris. The Virginia Rail is a good candidate for the Endangered Species List. Most of these rails winter in the Gulf States south to Mexico and Guatemala. The subspecies is the nominate form in North America.

Highest # Days/Season

Spring12 (1987)Summer3 (1983 & 1984)Fall4 (4 years)Winter5 (1984)

Highest # Birds/Season

 Spring
 17 (1987)

 Summer
 7 (1983)

 Fall
 5 (1983)

 Winter
 6 (1984)

Sora Porzana carolina

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	2362/740 (37)	13/11 (8)	572/314 (36)	1/1 (1) sp mig	2948/1066
Average/day	3.19	1.18	1.82	1.0	2.77
Average/season	63.84	1.63	15.89	1.0	

Status: Fairly Common Spring Migrant, Uncommon Fall Migrant and Rare Summer Resident

Dates:

- Spring: Earliest arrival = February 28, 1997 adult Sangchris Average arrival (37 years) w/range February 28 – April 24 = April 3 Average departure (37 years) w/range April 29 – May 28 = May 17 Latest departure = May 28, 1981 Cinder Flats
- Fall: Earliest arrival = July 21, 1982 adult Cinder Flats
 Average arrival (36 years) w/range July 21 September 21 = August 16
 Average departure (35 years) w/range September 2 October 25 = October 6
 Latest departure = October 25, 1985 Lincoln Gardens

This was the most numerous and easiest of the secretive rails to find, in part, because of its distinctive whinnying call. Migrant numbers of Soras plummeted in the spring in 2000 and in the fall in 1992. The best areas for this rail were Sangchris, the Cinder Flats, and the Sediment Retention. I very seldom used tapes to call these birds and most were seen by walking the habitat. The early spring date of February 28, 1997 was a surprise, but I am certain it did not winter at Sangchris because the area was dry and frozen all winter. I suppose it could have wintered elsewhere a little further south. Other early dates for spring arrival were March 12, 1977 and March 15, 1983, both at Sangchris. High counts for spring were: 17, May 6, 1978; 18, April 23, 1984; 30, May 2, 1987; 22, May 9, 1987; and 19, April 26, 1993. Several were noted to hold feeding territories in April and early May at a small pond at the Cinder Flats, and would chase off other Soras. In summer, nesting was noted in the county from 1981 to 1984 and maybe later, mostly at the Cinder Flats. Soras were observed June 3 – July 23, 1982 at the south end of Lake Springfield, and a young bird unable to fly was seen June 20, 1983 at the Cinder Flats. Possible breeders were seen in 1985, 1988, (when three were seen July 27), and 1994 at the Cinder Flats. Also, one was calling, and I photographed it on July 18, 2008 at Marsh Road, but the status was uncertain. Some fall migration began in late July, but the numbers of Soras were much less in fall than spring (1 to 4.1). Fall arrivals occurred in July (five times), with July 22, 1980 another very early date. Most fall arrivals were found in August (24 times) and September (7 times). None were seen in fall in 2004. The low fall counts might be attributable to more places to land and the much thicker vegetation at that season, and also less vocalizations. High counts for fall were: 8, September 27, 1972 (tv kills); 7, September 5, 1976; 9, August 23 & 27, 1982; and 22, September 18, 1988. Other late departures were October 23, 1983 at Cinder Flats and October 23, 1989 at Washington Park. Many Soras were killed on the roads, but the main

factor for the survival of this rail was undisturbed marsh habitat, of which this county had little. The Sora winters from the Gulf Coast south to northern South America.

Documentation: Specimens = 40) IL. Sangamon Co., Spring = 10, $\Im \Im = 7$, April 23 – May 13, wts. = 69.2 – 83.1 gms, testes = 5 – 14 mm; $\Im \Im = 3$, Sangamon Co. April 26 – May 24, wts. = 57.6 – 72.0 gms, ovaries = 12 – 13.5 mm (sexual dimorphism in this small sample was obvious with $\Im \Im$ having more black on the face and throat, and the black being thicker and extending to the breast on most $\Im \Im$; Fall = 30, adult $\Im \Im = 7$, Sangamon Co., August 23 – September 29, wts. = 71.4 – 92.2 gms, testes = 3 – 5 mm (all with black on throat); immature $\Im \Im = 11$, August 28 – October 4, wts. = 56.2 – 96.3 gms, (no black on throat, two with gray on breast); adult $\Im \Im = 2$, Sangamon Co., July 22 – September 2, wts. = 51.7 – 62.7 gms, ovaries = 13 – 15 mm, (some black on throat, but less than $\Im \Im$); immature $\Im \Im = 10$, Sangamon Co., August 13 – October 17, wts. = 51.8 – 92.2 gms, (two with small patch of black on throat and three with gray on breast)

Highest # Days/Season

Spring47 (1986)Summer3 (1982)Fall27 (1987)Winter1 (1996)

Highest # Birds/Season

Spring207 (1987)Summer3 (1982 & 1988)Fall60 (1987)Winter1 (1996)

Purple Gallinule

Porphyrio martinica

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	2/2 (1)	0/0	0/0	0/0	2/2
Average/day	1.0				1.0
Average/season					

Status: Very Rare Spring Migrant

Dates: One Record: adult, downed in Springfield and released at Lincoln Gardens, seen April 28 & 29, 1973.

This colorful rail rarely over-flew its breeding grounds in the southeastern US in spring, and on this occasion one landed in a backyard in Springfield. These birds could be quite secretive and difficult to detect because they hid in thick, aquatic vegetation. The Sangamon County individual stayed at Lincoln Gardens along the lake for several days. Other gallinule overmigrants had been recorded in Illinois, some represented by specimens (see Bohlen, 1989). A very small breeding population of the Purple Gallinule had occurred in extreme Southern Illinois at least since 1963. The Purple Gallinule winters from the Gulf Coast south to South America.

Documentation: Photographic: IL. Sangamon Co., of above, in "Illinois State Journal" April 28, 1973 (staff photo – on file ISM).

Common Moorhen

Gallinula chloropus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	80/68 (16)	63/52 (6)	42/37 (4)	0/0	185/157
Average/day	1.18	1.21	1.14		1.18
Average/season	5.0	10.50	10.50		

Status: Occasional Migrant and Very Rare Summer Resident

Dates:

Spring: Earliest arrival = April 11, 1985 Cinder Flats Average arrival (16 years) w/range April 11 – May 27 = May 6

Fall:Average departure (4 years) w/range September 4 – October 13 = September 25Latest departure = October 13, 1985 immature Williamsville

Though widespread, this marsh species in this county was difficult to find because of the lack of habitat. They were much shyer than coots, and stayed more in the aquatic vegetation. I saw the first one at Sangchris May 5, 1973. However, they were most numerous from 1981 to 1994, from which the population declined. The moorhen was recorded in only 17 of the 37 years of the study. It was last recorded at Buckhart on May 22, 2006. This species and most other strictly marsh dwellers have been eliminated from the county and the Common Moorhen is considered threatened in Illinois. Other spring records were: April 29, 1978 at Sangchris; April 17, 1986 at Cinder Flats; April 28, 1989 at Cinder Flats; and May 7, 1990 at Sediment Retention. Most records and high counts of this species were two in April and May, with a pair, May 27, 1984 and 2, May 12, 1990. In summer there were 3, June 16, 1987 at the Cinder Flats. The moorhen nested at the Cinder Flats in 1983, 1984, and 1987 and may have nested there in 1981, 1985, 1986, and 1988. It attempted to nest in 1996, but the pond dried up. It also nested at Williamsville in 1985, and probably nested at Sangchris in 1988 and 1992 when one was seen there until June 18th. Between 1988 and 1991 they were seen in spring at the Sediment Retention but none were recorded in summer. All of these areas, as of 2010 had changed, and were no longer suitable for nesting. Moorhens need emergent vegetation, usually cattails, in which to hide and nest. Immatures were seen August 23, 1983 at the Cinder Flats and August 24, 1988 at Sangchris, plus note the October immature at Williamsville. Fall records of moorhens were meager, mostly in September- see specimen below, and one at the Cinder Flats September 23, 1983. There was only one October date- see above. Moorhens winter in the coastal US and south to South America. The subspecies in North America is G. c. cachinnans.

Documentation: Specimens = 1) IL. Sangamon Co., ISM# 607125 immature \bigcirc , Loami, September 29, 1979, coll. by T.Musser, wt. = 289.9 gms, ovary = 16 mm.

Highest # Days/Season

Spring16 (1985)Summer18 (1987)Fall29 (1983)

Highest # Birds/Season

Spring21 (1985)Summer22 (1987)Fall34 (1983)

American Coot

Fulica americana

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	262676/2727 (37)	1841/574 (35)	316465/2810 (37)	26668/1827 (37)	607650/7938
Average/day	96.32	3.21	112.62	14.60	76.55
Average/season	7099.35	52.60	8553.11	720.76	

Status: Very Common Migrant, Uncommon Winter Resident and Occasional Summer Resident

Dates:

- Spring: Earliest arrival = January 23, 1999 (arbitrary due to WR) Average arrival (37 years) w/range January 23 – March 20 = February 24 Average departure (37 years) w/range May 6 – 31 = May 20 Latest departure = May 31, 1986 & 2006 (arbitrary due to SR)
- Fall: Earliest arrival = August 16, 1980 Cinder Flats (arbitrary due to SR)
 Average arrival (37 years) w/range August 16 September 27 = September 10
 Average departure (37 years) w/range November 9–December 26 = November 24
 Latest departure = December 26, 1970 (arbitrary due to WR)

Most observations, of this interesting member of the rail family, came from the larger lakes in which these birds sat in large, tight flocks during migration. Coots also came up on land and grazed on lawns, running around on their peculiar green legs with lobed toes. The numbers increased early in spring, and was the best way to determine coots were migrating. All migration was nocturnal, and a flock of high flying coots in daylight was never seen. On April 2, 1995 I watched coots start migration at Lake Springfield at dusk, each one flying into the darkening sky. I was surprised that it was an individual effort and not as a flock (see Bohlen, 1995). High counts for spring were: 1,000, April 6, 1976; 2,000, April 11, 1985; 1,600, March 31, 1995; 1,800, April 7, 1996; and 2,250, April 6, 2000. Usually by May, only small groups or a few individuals remained; and soon nearly all had gone on north. However, a few usually stayed for summer and they were recorded every summer but two (1973 and 1984). The coot changed habitat for breeding and needed marsh with emergent vegetation to nest. They were most numerous when the Sediment Retention was active in 1987 and 1988, until dogs started marauding through the habitat. Copulation was noted on March 17, 1985 and April 14, 1988 at the Cinder Flats in which the male chased the female, jumped on her back, and copulated while pushing her head under water and pecking her on the nape and head. Evidence coots nested in the county were: 1978 - 3young at the south end Lake Springfield July 25 and adult and young near Loami September 4; 1985 - 3 to 4 pair with young at Williamsville June 29; 1987 – adults on nests April 30 – May 6 with 6 broods (4,6,5,2,5,4 young) at the Cinder Flats June 1 and adults feeding young algae June 21; and 1988 – several pair and 2 young at the Cinder Flats May 22, plus young June 10. High counts for summer were: 15, July 20 & 27, 1985; 15, June 7 & 30, 1987; 40, June 15, 1988; and 11, June 2, 2000. Determining **fall** arrival was by increased numbers and different locations. These increases could occur in late August, but were usually in September. High counts for fall were: 3,000, November 4, 1974; 6,000, November 7, 1978; 3,000, October 29, 1997; 3,200,

November 4, 2000; and 1,600, October 29, 2006. Fall departure was difficult to distinguish because of **wintering** birds, and some years the numbers did not decrease until December depending on the weather. Usually, less than a hundred wintered at Lake Springfield; and a few may have stayed at Sangchris and Buckhart until freeze up. High counts for winter were: 100, December 19, 1976; 100, February 28, 1990; 150, December 12, 1994; 100, January 5, 2001; 100, February 1, 2003; and 130, January 15, 2007 (some numbers could contain migrants). I noted an increase in mid-winter on January 21, 1974 and wondered if these coots migrated at night even when it was very cold. If so, the lingering question is why? Maybe these were birds from further north trying to move south? A mostly white coot was photographed at Lake Springfield on October 16, 2004 (photograph on file ISM). The American Coot in North America is the nominate form.

Documentation: Specimens = 17) IL. Sangamon Co., $\bigcirc \bigcirc = 8$, April 3 – November 13, wts. = 418.4 – 571.0 gms, testes = 4 – 13 mm; $\bigcirc \bigcirc = 5$, Sangamon Co. March 5 – September 24, wts. = 313.4 – 411.4 gms, ovaries = 14 – 24 mm; sex? = 4, Sangamon Co., April 2 – November 10, wts. = 443.3 – 720.0 gms.

Highest # Days/Season

 Spring
 92 (2000 & 2006) maxed

 Summer
 53 (1987)

 Fall
 99 (1983)

 Winter
 84 (2005)

Highest # Birds/Season

Spring16193 (1997)Summer615 (1988)Fall21132 (1978)Winter1895 (2002)

Sandhill Crane

Grus canadensis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	31/9 (9)	0/0	8/3 (2)	0/0	39/12
Average/day	3.44		2.67		3.25
Average/season	3.44		4.0		

Status: Rare Spring Migrant and Very Rare Fall Migrant

Dates:

- Spring: Earliest arrival = March 12, 1999 three Lake Springfield Average arrival (9 years) w/range March 12 – May 9 = March 29 Latest departure = May 9, 1993 adult south of Curran
- Fall: Earliest arrival = November 11, 1984 six north of Dawson
 Average arrival (3 years) w/range November 11 20 = November 16
 Latest departure = November 28, 1983 adult northwest of Springfield

Sandhill Cranes were usually seen in migration, where they sometimes flew at very high altitudes and were difficult to see and hear. When at lower altitudes, the distinctive bugling calls and the out-stretched neck helped to identify these birds. The migration path was north and east of Sangamon County. Few were seen here, but with the correct winds they sometimes drifted into this area. Mid-March was the best time in spring and early November was best for scanning the sky in fall. The high counts for spring were 8, March 15, 1983 (also the first record) and 7, March 13, 2005 (but see 2008 below). Single cranes appeared later in spring: adult, May 9, 1993 south of Curran; adult bugling at low altitude, May 1, 1995 at Sangchris; and one flying just above the treetops, April 11, 2002 at Carpenter Park. The high count for fall was 6, November 11, 1984. One adult was present for several days with domestic fowl northwest of Springfield from at least November 20 - 28, 1983 (K.Veara). The only other fall record was one at Lake Springfield (photograph) on November 17, 2007. The spring of 2008 (in the addendum) produced more of these cranes than all other years combined. This was probably caused by east and northeast winds drifting the flight westward and cold temperatures grounding the cranes. They first occurred March 13 when a flight of 13 and then 7 birds flew over Buckhart. Then a flock of 12 stayed north of New City from March 14 - 17 (only 5 were seen on the 17^{th}); and 26 were again at Buckhart on March 19. This was a total of 87/6. They were feeding in flooded corn-stubble fields, and I also saw them doing the jump up and down dancing display. Sandhill Cranes nest in northern Illinois and north to the Arctic. They winter in the southern US and Mexico. The subspecies occurring here is G. c. tabida.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

<u>Highest</u>	# Days/Season	Highest	# Birds/Season
Spring	1 (all years)	Spring	8 (1983)
Fall	2 (1983)	Fall	6 (1984)

Table 17.	SHOREBIRDS (Charadrii) ranked by numbers-highest to lowest
((1970–2006)

SPECIES	NUMBERS	%
Killdeer	107496	34.4
Pectoral Sandpiper	66593	21.3
Least Sandpiper	30831	9.9
Semipalmated Sandpiper	25789	8.3
Lesser Yellowlegs	21213	6.8
Spotted Sandpiper	9441	3
Wilson's Snipe	9100	2.9
Semipalmated Plover	5600	1.8
Greater Yellowlegs	5587	1.8
Dunlin	5445	1.7
American Golden-Plover	5008	1.6
Solitary Sandpiper	4739	1.5
Short-billed Dowitcher	3171	1
Stilt Sandpiper	3049	1
Long-billed Dowitcher	2043	0.7
White-rumped Sandpiper	1621	0.5
American Woodcock	1167	0.4
Baird's Sandpiper	553	0.2
Willet	486	0.2
Sanderling	482	0.2
Black-bellied Plover	410	0.1
Western Sandpiper	398	0.1
Upland Sandpiper	347	0.1
Buff-breasted Sandpiper	337	0.1
American Avocet	334	0.1
Wilson's Phalarope	279	0.1
Ruddy Turnstone	182	0.1
Hudsonian Godwit	115	0.03
Red-necked Phalarope	104	0.03
Marbled Godwit	90	0.02
Piping Plover	31	0.009
Red Knot	18	0.005
Red Phalarope	12	0.004
Ruff	7	0.002
Black-necked Stilt	3	0.0009
Snowy Plover	1	0.0003
Whimbrel	1	0.0003

Black-bellied Plover

Pluvialis squatarola

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	216/83 (27)	7/5 (4) fall mig	187/133 (27)	0/0	410/221
Average/day	2.60	1.40	1.41		1.86
Average/season	8.0	1.75	6.93		

Status: Occasional Migrant

Dates:

- Spring: Earliest arrival = April 25, 1990 two adults Cinder Flats Average arrival (27 years) w/range April 25 – May 25 = May 13 Average departure (27 years) w/range May 11 – 31 = May 23 Latest departure = May 31, 1992 Cinder Flats
- Fall: Earliest arrival = July 17, 1991 adult Buckhart
 Average arrival (26 years) w/range July 17 October 13 = September 4
 Average departure (23 years) w/range August 27 November 12 = October 17
 Latest departure = November 12, 1971 juvenile Sangchris

This large plover was an ephemeral migrant in the county, only seen by persistence or chance and was missed ten years in both spring and fall. It occurred in flooded fields and on extensive mudflats, rarely in other areas such as the Cinder Flats or Sangchris. By the time they arrived in spring, most were in breeding plumage, and if seen well made them one of our most beautiful shorebirds. Occasionally, one would still be in non-breeding plumage such as one May 26, 1987. This plover could be easy to identify by its flight call and its black axillaries, but care should be taken with standing birds in non-breeding plumage. The shorebird that resembles it, the American Golden Plover was much more numerous (see Table 17). I had only three arrival dates in late April of the Black-bellied Plover: see above; April 30, 1982, and April 27, 1991. The other arrival dates were in May. High spring counts were: 9, May 21, 1978; 10, May 21, 1996; and 9, May 25, 2002. These plovers must have passed through in a short period of time, because they migrated north before June. They breed in the High Arctic. Like most shorebirds, in fall migration the adults came back south earlier than the young of the year. If I missed the adults, my arrival dates were later, and if I missed the juveniles, my departure dates were earlier. Of the birds I aged, adults were seen from July 17 – September 9; and juveniles from August 23 – November 12. Other early fall arrivals were three adults, July 31, 1985; adult, July 22, 1990; and adult, July 25, 2004. High counts for fall were: 5, November 3, 1971; 6, October 8, 1984; and 6, October 30, 1989. Besides the late record above, there were juveniles at Lake Springfield November 10, 1983 and at Sangchris November 2, 1989. Numbers of this plover appeared to be dropping late in the study. The last fall records were in 2005, and my last spring records were singles on May 5, 2007 at Buckhart and May 21, 2009 east of Lake Springfield. The Blackbellied Plover winters in coastal areas from the US to southern South America.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

Highest # Days/Season Spring 10 (2000)

 Spring
 10 (2000)

 Summer
 2 (1991)

 Fall
 26 (1989)

Highest # Birds/Season

Spring32 (1988)Summer3 (1985)Fall47 (1989)

American Golden -Plover

Pluvialis dominica

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	3768/219 (36)	68/67 (11)	1172/195 (33)	0/0	5008/481
Average/day	17.21	1.01	6.01		10.41
Average/season	104.67	6.18	35.52		

Status: Fairly Common Spring Migrant, Uncommon Fall Migrant and Rare (nonbreeding) Summer Resident

Dates:

- Spring: Earliest arrival = March 13, 1995 Berry Average arrival (36 years) w/range March 13 – April 27 = March 28 Average departure (34 years) w/range April 2 – June 14 = May 7 Latest departure = June 14, 1987 Cinder Flats
- Fall: Earliest arrival = June 26, 1979 & 1986 both adults Cinder Flats Average arrival (27 years) w/range June 26 – September 18 = August 20 Average departure (31 years) w/range September 12 - November 13 = October 12 Latest departure = November 13, 1991 Sangchris

Although Illinois was in the migratory pathway of this highly migrant species, Sangamon County appeared to be toward the western edge, the center of abundance being more north and east and coinciding with the Grand Prairie. Therefore, numbers of this plover in the county varied markedly. Also, this species had an elliptical migration route being more numerous in spring (3.2 times fall); plus usually individuals traveled by age groups. All of these factors made the assessment of migration for this species difficult and the average dates somewhat less accurate. The above dates were all groups combined and can be misleading since some age groups were occasionally missed usually due to lack of habitat. This plover was missed entirely in the **spring** of 1974. There seemed to be two populations that passed through in spring, one that arrived early most or all in basic plumage and another population that arrived in May most of which were in alternate plumage. Apparently, most of these plovers attained breeding plumage in late April or early May. Open wet fields were the best habitat in spring, but I have seen them in dry fields also, as well as following the plows. On April 23, 2002 several plovers were west of Chatham in a field eating earthworms like robins. These shorebirds were fast flyers, and upon landing their cryptic plumage rendered them almost invisible on the ground. Other early spring arrivals were March 16, 1986 and March 18, 1982, 1990, and 1992. High counts for spring usually occurred in the earlier flight: 100, April 3, 1982; 115, April 7, 1984; 125, March 30, 1997; 90, April 23, 2002; and 64, May 18, 1977. Although nearly all left by the end of May, there were late departures in June: adult, June 9, 1990; adult, June 11, 1997; and adult, June 12, 2007. Additionally there were at least two summer records: an adult at the Cinder Flats from June 11 -July 16, 1985 and an injured adult at the Sediment Retention on June 9, 1990. This species breeds in the Arctic. In fall adults preceded juveniles and in Sangamon County it was easy to miss either group or both. They were missed in fall in four years (1972, 1973, 1975, and 2003). The adults could be found in July and August, but if this plover was not found until October they

were probably juveniles. I found that adults were usually at mudflats, while juveniles were usually in fields. Both groups can be found at sod fields and other open expanses of short grass. Some adults were starting to show body molt such as one August 6, 1989 at the Sediment Retention, though some (age?) still had a small amount black on the belly as late as September 30, 1989. The maximum fall counts were smaller than spring and usually occurred in late September. These were: 77, September 27, 1987; 70, September 30, 1989; and 60, September 30, 1990. Recently, since the year 2000, numbers dropped, but hopefully this was just a local phenomenon. The American Golden Plover winters mostly in southern South America.

Documentation: Specimens = 2) IL. Sangamon Co., ISM# 608584 adult \mathcal{Q} , north end Lake Springfield at Cinder Flats, July 12, 1986, coll. by HDB, wt. = 108.0 gms, ovary = 11 mm, gizzard with small snails; ISM# 661928 juvenile \mathcal{Q} ?, Sangamon Co. near athletic field at UIS, September 24, 2006, coll. by HDB, wt. = 127.5gms (wing, tail & tarsus only).

Highest # Days/ Season

Spring16 (1988 & 1990)Summer18 (1985)Fall17 (1992)

Highest # Birds/ Season

Spring318 (1983)Summer18 (1985)Fall214 (1987)

Snowy Plover

Charadrius alexandrinus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1/1 (1)	0/0	0/0	0/0	1/1
Average/day	1.0				1.0
Average/season	1.0				

Status: Very Rare Spring Migrant

Dates: One Record: adult, Cinder Flats Lake Springfield, May 7, 1986. Plus, a second record in the addendum: adult, Southwind Park, June 4, 2007.

After looking for this small plover for years, I finally connected with it at the Cinder Flats. The light- colored back made this plover immediately noticeable. The broken black neckband, black band on the forehead, longer black bill, and dark legs helped identify this small plover. It would dart around on the flat, running, and then stop to feed, picking up small flying insects. This plover crouched down and froze in reaction to presumed danger. This was the first Snowy Plover recorded in Illinois. It only stayed one day, but was later photographed and observed by several birders (see Bohlen, 1986). This bird was either an overmigrant from the Gulf Coast or a stray from the inland population further west. I found a second plover (in the addendum) and photographed it at the construction site of Southwind Park, which at that time was a muddy, grassy field with some standing water. It was with late spring migrant Semipalmated Sandpipers. These were the only county records of this plover. The subspecies in North America is *C. a. nivosus*, but the all white lores of the June 4th bird suggests the subspecies *C. a. tenuirostris* (if recognized) from the Gulf Coast. These Snowy Plovers winter on the Gulf Coast and south to Central America and the Greater Antilles.

Documentation: Photographic: IL. Sangamon Co., DO & HDB – on file ISM.

Semipalmated Plover

Charadrius semipalmatus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	3971/549 (37)	223/115 (29) mig	1406/518 (37)	0/0	5600/1182
Average/day	7.23	1.94	2.71		4.74
Average/season	107.32	7.69	38.0		

Status: Fairly Common Spring Migrant and Uncommon Fall Migrant

Dates:

Spring: Earliest arrival = April 10, 1990 Sangchris Average arrival (37 years) w/range April 10 – May 14 = April 29 Average departure (36 years) w/range May 19 – June 15 = May 30 Latest departure = June 15, 1992 Cinder Flats (also see below)

Fall: Earliest arrival = July 5, 1984 Cinder Flats
Average arrival (37 years) w/range July 5 – August 25 = July 29
Average departure (37 years) w/range August 20 – October 28 = September 25
Latest departure = October 28, 1995 Sangchris

This was the darker backed, small plover, with orange-yellow legs and "chuwee" call note. Best numbers were in spring, which were 2.8 to one over fall numbers. Besides the very early bird above, which was calling and sitting on the flat, there were 15 on April 17, 1977 at Sangchris and one April 15, 1992 at the Sediment Retention. Sometimes, they displayed by dipping and fanning their tails as one did at the Sediment Retention on May 16, 1992. High counts for spring were: 55, May 11 & 23, 1988; 65, May 15, 1992; and 64, May 10. In 14 years, the spring migration extended into June, with other late dates of June 12, 1985 and June 13, 2009, with 5 birds, June 4, 1988. This plover nests in the Arctic and Subarctic regions of North America. Nearly all the summer data was from either spring or fall migration. However, one June 18, 1978 at the Cinder Flats was difficult to call, though it was probably a very late spring migrant. Adults preceded young of the year and fall migration began in either July (25 times) or August (12 times) and probably depended on the habitat available. Other early fall arrivals were: July 13, 1970; July 9, 1979 and July 15, 1998. High counts for fall were: 14, August 29, 1981; 20, September 7, 1987; 15, August 29 & September 21, 1989; and 14, August 18, 2002. Many years, there was little habitat in fall unless the lake was low or flooding had occurred (also, note that numbers were higher when the Sediment Retention was active). Other late dates besides the one above were October 23, 1987 and October 22, 2005 both at the south end of Lake Springfield. This plover winters coastally from the southern US to South America.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 607134 immature 2?, Toronto Road, September 5, 1979, coll. by K.Watt, wt. = 44.4 gms.

Highest # Days/Season Spring 33 (2000)

 Spring
 33 (2000)

 Summer
 13 (2002)

 Fall
 58 (1989)

Highest # Birds/Season

Spring836 (2000)Summer28 (2002)Fall373 (1989)

Piping Plover

Charadrius melodus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	15/14 (5)	9/9 (5) fall mig	7/7 (5)	0/0	31/30
Average/day	1.07	1.0	1.0		1.03
Average/season	3.0	1.8	1.4		

Status: Rare Migrant

Dates:

- Spring: Earliest arrival = April 16, 1990 Sediment Retention Average arrival (6 years) w/range April 16 – May 5 = April 28 Average departure (6 years) w/range April 27 – May 10 = May 3 Latest departure = May 10, 1989 Sediment Retention
- Fall: Earliest arrival = July 10, 2000 adult beach at Lake Springfield Average arrival (9 years) w/range July 10 – August 26 = July 30 Average departure (6 years) w/range July 11 – September 28 = August 11 Latest departure = September 28, 1972 juvenile Lake Springfield

This pale, little plover was found at sandy beaches and mudflats and is federally endangered. I had 19 records of the Piping Plover, 9 for spring and 10 for fall (see Table 18). It was most numerous and regular when the Sediment Retention Facility provided habitat, but during the study it was always rare. Other areas of habitat included the beach at Lake Springfield, the Cinder Flats, Sangchris and Buckhart (Sand & Gravel sand alluviums). High counts for **spring** were only two: April 17, 1990 and May 1, 2007. The longest staying birds in spring were only 3 to 6 days. To feed this plover runs, stops, probes and then repeats it. The Piping Plover breeds in the interior northern Great Plains, the Great Lakes area and on the northern East coast. It rarely breeds along Lake Michigan in Illinois. In **fall** adults arrived first from July 10 – August 1, usually in late summer, later the juveniles passed through from August 13 – September 28. All fall sightings were of single individuals, but four stayed two days and one stayed three days. The subspecies in the interior is *C. m. circumcinctus*, which winters on the Gulf and southern Atlantic coasts.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

Spring		
1981	April 25 – 27	Cinder Flats
1989	May 5 – 10	Sediment Retention
1990	April 16 two, April 17 May 6	Sediment Retention Sediment Retention Sediment Retention
1991	April 27 May 4	Sediment Retention Sediment Retention
2000	May 1	Sangchris
2007	two, May 1	Buckhart (addendum)
Fall		
1970	adult, July14	Sangchris
1972	juvenile, September 28	Lake Springfield
1978	adult, July 24	Cinder Flats
1979	adult, August 1	Sod field
1983	juvenile, August 18	Cinder Flats
1985	adult, July 14 – 15	Cinder Flats
1988	adult, July 28 – 30	Sediment Retention
2000	adult, July 10 – 11	Beach at Lake Springfield
2002	juvenile, August 13 – 14	Buckhart
2004	juvenile, August 26 – 27	Cinder Flats

 Table 18.
 Piping Plover Records in Sangamon County 1970–2009

Killdeer

Charadrius vociferus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	16321/2663 (37)	28533/1634 (37)	59920/3583 (37)	2722/632 (37)	107496/8512
Average/day	6.13	17.46	16.72	4.31	12.63
Average/season	441.11	771.16	1619.46	73.57	

Status: Common Spring Migrant, Very Common Fall Migrant and Summer Resident and Occasional Winter resident

Dates:

Spring: Earliest arrival = January 26, 2002 three Lake Springfield & Sangchris Average arrival (37 years) w/range January 26 –March 16 = February 18

Fall:Average departure (37 years) w/range November 25 – January 7 = December 17Latest departure = January 7, 2003 (arbitrary due to WR)

This plover was the most numerous (23rd of all birds, see ranking) shorebird in the study and also was seen on more days (17th of all birds) than any shorebird. The Killdeer was the one shorebird that had best adapted to humans and had learned to use gravel, asphalt, and concrete to its advantage as nesting and foraging sites. It also needed mudflats, fields, pond edges and short grassy places such as golf courses and athletic fields in which to live. The Killdeer was the earliest returning shorebird, just edging out the woodcock. Most returning dates in spring were in February (29 years) with three in January and four in March. High counts for spring were: 100, March 29, 1975; 95, April 10, 1982; 90, March 5, 2001; and 73, March 26, 2002. Most migrants were gone by the end of March or mid-April. The BBS in summer showed that this bird was observed in 27 of the 31 years, was ranked 31st in that study, and numbers increased from 1990 to the present. Killdeer copulated by the male standing on the back of the female and were noted doing so from March 5 to June 18, no matter what the weather. There were 16 nests found, each a depression in the gravel, most with four eggs from March 27 to July 2. Fledged voung were seen from April 26 to July 31, suggesting two broods. Many young were run over on the roads, but some survived considering that flocks of killdeer began to be noticed in June, but especially in July. Numbers in late summer flocks totaled: 130, July 21, 1993; 208, July 23, 1999; 168, July 4, 2002; and 150, July 16, 2006. Some of these could have been fall migrants. High numbers in August and the rest of fall were: 106, August 12, 1995; 132, August 29, 1999; 114, October 15, 2000; 158, September 8, 2001; 207, August 4, 2003; and 167, September 1, 2004. Numbers in fall were 3.7 times higher than in spring probably due to production of young. By late November, numbers had usually dropped off, but the last birds almost always left in December or January. Every winter had Killdeer, but many of these were early and late migrants and there were few that truly wintered. Numbers were very low in 1971-72, 1972-73, 1974-75, 1977-78, 1985-86, 1988-89, 2006-07. High counts for winter were: 9, January 1, 1983; 26, December 10, 1994; 63, December 9, 2001; and 51, February 25, 2001. The best areas in winter were the Cinder Flats and Dam at Lake Springfield, Sangchris, and some sewer ponds. A mostly white Killdeer was at Buckhart July 9 - 13, 2002 (photographed); and one with a chestnut belly was at Sangchris on July 11 - 26, 2005. The subspecies in the US is the nominate form.

Documentation: Specimens = 3) IL. Sangamon Co., ISM# 660497 \Diamond , east Rochester, May 27, 1997, coll. by HDB, wt. = 98.5 gms, testes = 4.5 mm; ISM# 660286 \heartsuit , northwest Berry, March 28, 1992, coll. by HDB, wt. = 96.3 gms, ovary = 11 mm; ISM# 660740 juvenile \heartsuit , southwest Spfld, August 5, 2004, coll. by HDB, wt. = 102.5 gms, ovary = 7 mm.

Highest # Days/Season

 Spring
 92 (2000 & 2001) maxed

 Summer
 61 (3 years) maxed

 Fall
 120 (2002)

 Winter
 61 (1999)

Highest # Birds/Season

Spring979 (2000)Summer3135 (2002)Fall4127 (2002)Winter437 (1999)

Black-necked Stilt

Himantopus mexicanus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	3/2 (2)	0/0	0/0	0/0	3/2
Average/day	1.50				1.50
Average/season					

Status: Very Rare Spring Migrant [plus in addendum: also Very Rare Summer Resident and Fall Migrant]

Dates: Two Records: ♀ Sangchris, April 26, 1998; ♂♀ north of Sangchris May 5, 2004 (but see below).

Females had a somewhat browner back than males in this large black and white shorebird with pink legs. In the late 1980s this species from the southern and western US suddenly began to appear in Illinois. Following the floods of 1993 and more recent flooding, the numbers increased across the state. The Black-necked Stilt eventually nested in several locations in the central and southern parts of Illinois. Both of my Sangamon County spring sightings (above) were at mudflat areas with grassy patches, and though they seemed to feed, none stayed. Then in the summer of June 2008, I found several birds in eastern Sangamon County in flooded fields. A pair first appeared along the South Fork on June 6 and again June 9, but they left. Then at Berry, there were three birds June 10; and I watched a male build a nest of corn stalks and grasses. By June 12, there was two pair followed by a high count of five birds on June 14, when one bird gave a distraction display. On June 16 at Berry, I found a nest with four eggs (photograph on file ISM) in a soybean field. By that time the water in the field was already drying and only one pair of stilts was left. I observed the nest from about a quarter mile away until June 23, and only a male was present by that time. On June 24, there were no adults and the bean field was completely dry, I waited, went away, and came back. Still there were no adults, I waited and watched. Finally, I went out to the nest, the eggs were somewhat scattered and one was gone. The birds did not come back, so I salvaged the eggs. There was a female four miles to the north of Buckhart on June 24, 2008 (see Bohlen, 2010). On April 30, 2009, two females were spring migrants at the Cinder Flats. Later a female and four juveniles were there July 16, 2009; they were either the first **fall** migrants or had nested locally (where?) in the county. [The new totals = Spring 5/3; Summer 46/18 =total 51/21.] The subspecies in North America is the nominate form. Stilts winter from the Gulf Coast south to Central and South America.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM, [plus an empty egg shell from Berry, IL. Sangamon Co. June 24, 2008 – ISM Collection.].

American Avocet

Recurvirostra americana

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	147/19 (12)	34/11 (10) all mig	153/45 (18)	0/0	334/75
Average/day	7.74	3.09	3.40		4.45
Average/season	12.25	3.40	8.50		

Status: Occasional Migrant

Dates:

- Spring: Earliest arrival = April 14, 1990 seven Sediment Retention Average arrival (12 years) w/range April 14 – May 9 = April 22 Average departure (5 years) w/ range April 21 – May 17 = May 2 Latest departure = May 17, 2000 four Marine Pt.
- Fall: Earliest arrival = June 30, 1998 adult Marsh Road
 Average arrival (25 years) w/range June 30 November 3 = August 22
 Average departure (10 years) w/range July 26 November 11 = October 4
 Latest departure = November 11, 1970 Sangchris

Although this large, showy shorebird was not common, I was surprised at the number that occurred here. They were found at Lake Springfield (actually swimming on the lake in several instances), especially at the Cinder Flats, beach area, and Marine Pt, and at Sangchris, Buckhart, sewer ponds, flooded fields, and the Sediment Retention. When they arrived in spring, with the orange head and breast, they were usually in a flock, but occasionally single birds were seen. My first spring record did not occur until April 18, 1982 when two were at the Cinder Flats. Other early spring arrivals were April 15, 1988 & 1998. High spring counts were: 12, April 21, 1982; 23, April 23, 1983; 21, April 15, 1990; 17, April 20 & 21, 1993; 16, April 25, 2006; and 51, May 1, 2007 (at Cinder Flats). One in breeding plumage was at Berry on June 15, 2008 with the nesting Black-necked Stilts for which the status was unknown – possibly a very late Spring Migrant. Avocets migrate to the Great Plains to breed. They were somewhat more regular in fall, but erratic in their arrival dates probably due to the missing of different age classes. The adults arrived earliest. Avocets were recorded in the first fall of the study (1970) when three were seen November 3 at Sangchris. Other early fall records were: 3 adults, July 5, 1985; adult, July 7, 1987; and adult July 4, 1988. Avocets fed by sweeping their long bills back and forth through shallow water and also probed in the mud or water sometimes up to their bellies. Adults in fall had gray heads, and the females had more upturned bills than males. High counts for fall were: 21, October 31, 1976; 20, September 15, 1977; 11, July 26, 1985; and 15, September 11, 2007. These birds in both spring and fall were forced down in this area by rain on some occasions. Besides the late record above, there were three at Lake Springfield on November 3, 1995 and two at the south end of Lake Springfield on November 1, 2007. The American Avocet winters from the very southern coastal US to Mexico.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

Highest # Days/Season Spring 4 (2000)

 Spring
 4 (2000)

 Summer
 2 (1985)

 Fall
 18 (1987)

Highest # Birds/Season

Spring34 (1993)Summer14 (1985)Fall38 (1987)

Spotted Sandpiper

Actitis macularius

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	4883/1232 (37)	2211/1031 (36)	2333/1170 (37)	14/14 (2)	9441/3447
Average/day	3.96	2.14	1.99	1.0	2.74
Average/season	131.97	61.42	63.05	7.0	

Status: Common Spring Migrant, Fairly Common Fall Migrant and Summer Resident and Very Rare Winter Resident

Dates:

Spring:	Earliest arrival = March 30, 1993 Sangchris
	Average arrival (37 years) w/range March 30 – April 28 = April 17

Fall:Average departure (37 years) w/range September 17– November 20 = October 13Latest departure = November 20, 1998 Lincoln Gardens (also see WR)

This small sandpiper was very distinct with its bobbing motion and choppy flight and was one of the few shorebirds that nested in Sangamon County. All the spring arrival dates were in April except for the March date (see above). Also, an April 5, 2005 bird at the Lake Springfield beach was early. Occasionally in spring, they were seen in loose flocks with high counts being: 25, May 10, 1986; 31, May 4, 1991; 32, May 17, 1997; and 27, May 5, 2004. At the lake beach one of these sandpipers was jumping up 2-3 feet to catch gnats (?) that were swarming over the sand. Spring numbers were over two times more than fall numbers. It was difficult to assess when the migrants left in spring, but the last week in May was noted in six years. These birds were present all summer and nested at the Cinder Flats, Buckhart, Sangchris, all of the sewer ponds, Camp Lincoln Ponds, Sediment Retention, airport pond, Sangamon River sandbars, and near a sod field. Copulation was seen from May 21 - 25. A nest with four eggs was at the Cinder Flats July 3, 1993. Many young were noted, but not every year, with dates ranging from June 12 – August 3 with the majority in July. The precocial young were sandy-colored with a dark stripe running the length of the dorsum and a dark line through the eye. The adults were seen brooding the young, e.g. at the Cinder Flats on July 9, 2008. Fall migration started as early as July 7, but most dates were for later in July. Many times, arrival in fall was obscured by summer residents. High counts in fall were usually below 10, but highest were 14, July 17, 1999 and 17, August 1, 2006. Fall migration was rather slow with this shorebird, and it usually was separated from the other shorebirds at the lake beach or Marine Pt. because it liked sand and rocks. However, it was more steady in numbers, because it was not dependent on mudflats. Besides the late record above there was one November 5, 2001 at Marine Pt. and one October 29, 2005 south of Loami. There were two winter records, both below the dam at Lake Springfield, which always had some open water: one January 25 – February 15, 2000 and one December 9 – 14, 2000. The Spotted Sandpiper normally winters from the southern US to Central and South America.

Documentation: Specimen = 1) IL. Sangamon Co., ISM # 660670 adult \bigcirc , Cinder Flats, July 19, 2003 coll. by HDB, wt. = 53.5 gms, ovary = 8 mm.

Highest # Days/Season

Spring50 (1996)Summer51 (1979 & 2003)Fall55 (1976 & 1983)Winter11 (1999)

Highest # Birds/Season

Spring290 (1999)Summer184 (1979)Fall139 (1976)Winter11 (1999)

Solitary Sandpiper

Tringa solitaria

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	2023/689 (37)	1138/363 (37)mig	1578/730 (37)	0/0	4739/1782
Average/day	2.94	3.13	2.16		2.66
Average/season	54.68	30.76	42.65		

Status: Common Migrant

Dates:

- Spring: Earliest arrival = March 21, 1999 near New City Average arrival (37 years) w/range March 21 – April 23 = April 12 Average departure (37 years) w/range May 6 – June 5 = May 20 Latest departure = June 5, 1984 south of Lake Springfield
- Fall: Earliest arrival = June 28, 1980 Buffalo sewer pond &1994 southwest of Spfld Average arrival (37 years) w/range June 28 July 30 = July 9
 Average departure (37 years) w/range September 1–November 1 = September 28
 Latest departure = November 1, 2006 Riverside Park

This shorebird was appropriately named since it was usually found away from other sandpipers and on the edges of woodland pools as well as grassy mudflats. The rather dark coloration of the upperparts and the distinctive barring of the tail in flight made this species easy to identify. They occasionally held their wings in the up position when they landed. Although it usually arrived in spring in April, it was found March 24, 1988, March 21, 1999, and March 30, 2004. High spring counts were: 18, April 28, 1977; 26, April 30, 1989; 20, May 8, 1994; 23, April 27, 2000; and 18, April 30, 2006. This sandpiper usually went on north by late May, and there was only one early June departure date (see above). All of the other numbers from the summer season were actually fall migrants. Other late departure dates were May 31, 1987 & 1992 and May 30, 1995 & 2009. The Solitary Sandpiper breeds in the coniferous zone mostly in Canada and Alaska, where it nests in trees using old songbird nests. It was one of the earliest returning shorebirds in fall. I had six late June fall arrival dates, (see two above) with the others being June 29, 1986 and June 30, 1992, 1998, & 2003. Occasionally in fall, I saw them on sandbars in the Sangamon River. One was migrating at 1330 hours over Oak Ridge Cemetery on September 12, 1989. One was seen eating a dragonfly nymph at Sangchris on August 31, 2000. High counts for fall were: 23, July 28, 1976; 20, July 29, 2002; and 21, August 2, 2008. It lingered late some years; with other dates besides the November record being: October 27, 1986 and October 23, 1996. Of the two subspecies, most seen here were T. s. solitaria including the three specimens below, however, T. s. cinnamomea the western subspecies has been recorded in Illinois. The Solitary Sandpiper winters from southern Florida and Texas south to Peru and Argentina.

Documentation: Specimens = 3) IL. Sangamon Co., ISM# 606584 \bigcirc , 2 mi southwest Spfld, May 14, 1977, coll. by HDB, wt. = 58.3 gms, ovary = 10 mm, gizzard with crustaceans and other arthropods; ISM# 661898 \bigcirc , 1 mi north Pleasant Plains, May 10, 2008, coll. by Dr. J. Bohlen,

wt. = 50.0 gms, ovary = 7 mm; ISM# 607189 \bigcirc , Riverton, July 26, 1980, coll. by HDB, wt. = 69.1 gms, ovary = 6 mm.

Highest # Days/Season

Spring32 (2000)Summer28 (2002)Fall50 (2006)

Highest # Birds/Season

Spring214 (2000)Summer174 (2002)Fall177 (2006)

Greater Yellowlegs

Tringa melanoleuca

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	4012 / 780 (37)	213/106 (28)	1361/610 (37)	1/1 (1)	5587/1497
Average/day	5.14	2.01	2.23	1.0	3.73
Average/season	108.43	7.61	36.78	1.0	

Status: Common Spring Migrant and Uncommon Fall Migrant

Dates:

- Spring: Earliest arrival = March 3, 2000 Woodside Bridge Average arrival (35 years) w/range March 3 – April 10 = March 26 Average departure (37 years) w/range April 20 – June 11 = May 19 Latest departure = June 11, 1972 two Lake Springfield & 2008 Berry
- Fall: Earliest arrival = June 24, 1980 Buffalo sewer pond Average arrival (37 years) w/range June 24 – September 17 = July 24 Average departure (35 years) w/range September 22 –December 3 = November 6 Latest departure = December 3, 1987 Woodside Bridge

One of the larger shorebirds, the Greater Yellowlegs looked similar to the Lesser Yellowlegs, but it had a larger bill and different calls. It was 2.6 times more numerous in spring than fall, probably due to available habitat. These birds arrived early in **spring** and could be found at mudflats, pond edges, and overflow areas sweeping their bills from side to side to catch prev (small fish and insects) in shallow water. Other dates of early arrival were: March 9, 1979; March 11, 2006; and March 6, 2009. High counts for spring were: 43, May 2, 1987; 70, April 27, 1989; and 70, May 1, 1991. Most of these yellowlegs left in May, but in seven years they stayed into June: (see two above); June 5, 1995 at Berry; June 1, 1998 at Sangchris; June 4, 1999 at Buckhart; June 6, 2000 at Lake Springfield; June 5, 2002 north of New City. Greater Yellowlegs breed in the coniferous zone in bogs and at ponds in southern Alaska and central Canada. Fall migration began early, when adults sometimes returned in late June, with records (see above); June 30, 1998; and June 27, 2008. However, most fall arrivals were in July (26 years) with some years in August (5 years) or even September (4 years). The later arrivals were probably because lack of habitat, but I wonder about a different route in fall? High counts for fall were: 14, October 23, 1983; 15, October 28, 1989; 21, October 25, 1991; and 17, August 18, 2002. Most departure dates were in early November (25 years), with later ones being November 19, 1984 at the Cinder Flats; November 16, 1997 and 2009 Lake Springfield; and November 24, 2004 Marine Pt. Some migrants in late fall could be seen and/or heard flying over, moving before severe cold fronts. The only record into winter was December 3, 1987, and it was a very late fall migrant. Greater Yellowlegs winter along the coasts in the US south to southern South America.

Documentation: Specimens = 2) IL. Sangamon Co., ISM# 605906 \bigcirc , Sangchris, April 21, 1974, coll. by HDB, wt. = 163.8 gms, testes = 7 mm; ISM# 606074 \bigcirc , east Spfld, April 25, 1974, coll. by W.Stanbeck, wt. = 147.7 gms, ovary = 15 mm.

Highest # Days/Season Spring 45 (2000)

Spring45 (2000)Summer21 (1987)Fall53 (1976 & 1989)Winter1 (1987)

Highest # Birds/Season

Spring410 (1989)Summer69 (1987)Fall161 (1976)Winter1 (1987)

Willet

Tringa semipalmata

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	455/94 (31)	20/12 (10) fall mig	11/8 (7)	0/0	486/114
Average/day	4.84	1.67	1.38		4.26
Average/season	14.68	2.0	1.57		

Status: Uncommon Spring Migrant and Rare Fall Migrant

Dates:

- Spring: Earliest arrival = April 9, 1977 Sangchris Average arrival (32 years) w/range April 9 – May 12 = April 28 Average departure (27 years) w/range April 22 – May 29 = May 11 Latest departure = May 29, 1985 Cinder Flats
- Fall: Earliest arrival = June 19, 2009 adult Cinder Flats
 Average arrival (12 years) w/range June 27 August 19 = July 20
 Average departure (8 years) w/range July 11 September 19 = August 15
 Latest departure = September 19, 1997 beach area

These shorebirds were fairly large and mostly grayish brown, but in flight the black wings with bold white wing stripe made them unmistakable. Willets were like yellowlegs but stockier, had a thicker bill and gray legs. The name Willet was derived from their calls. I did not record this bird until May 1, 1974 when there was a flock of 19 near New City. Since then, I have seen them every year except two (1975 and 1993), plus I saw them the three years of the addendum (2007 -2010). Spring Willets usually came through in flocks in a short span of time. Some of these spring records were: 19, April 29, 1982; 17, April 30, 1985; 23, May 5, 1989; 25, April 26, 1991; 20, April 24, 1994; 43, April 26, 1996; 69, May 1, 2007; and 14, May 9, 2008. The 69 birds in 2007 were forced down at the Cinder Flats by a storm along with 51 avocets, which made for quite a sight for this area. Storms frequently produce fallouts of shorebirds. Willets breed in the prairies of the interior west. All of the summer season numbers (above) represent early returning adult Willets for fall migration. All fall arrivals were in June or July, and most were still in alternate plumage. Other early arrivals were: June 27, 1983 & 2008 and June 29, 1980 & 1990. There were many fewer birds in fall, suggesting an elliptical migration route through the interior in spring and probably coastal in fall. The high count for fall was only three on July 11, 1984. Willets were only recorded in 13 years in fall. As in most shorebirds the adults arrived before the immatures. Some adult Willets in fall were in worn plumage, and I have a photograph of one at the Cinder Flats on July 26, 2006. Most fall records in this study were of June – August birds, and there were only two September records. Besides the one above, there were two juveniles at the Cinder Flats on September 1, 2003. Good areas in which to find Willets were Lake Springfield, Sangchris, Buckhart, and occasionally flooded fields. The subspecies occurring in the county is T. s. inornatus, the Western Willet. The eastern subspecies is coastal. The Willet winters from southern coastal US to northern South America.

Documentation: Photographic: IL. Sangamon Co., HDB - on file ISM.

Highest # Days/Season Spring 9 (1989)

 Spring
 9 (1989)

 Summer
 2 (1984 & 1990)

 Fall
 2 (1997)

Highest # Birds/Season

 Spring
 63 (1989)

 Summer
 5 (1996)

 Fall
 2 (4 years)

Lesser Yellowlegs

Tringa flavipes

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	13903/1144 (37)	2352/434 (35)mig	4954/1060 (37)	4/3 (3) sp mig	21213/2641
Average/day	12.15	5.42	4.67	1.33	8.03
Average/season	375.76	67.20	133.89	1.33	

Status: Common Spring Migrant and Fairly Common Fall Migrant

Dates:

- Spring: Earliest arrival = February 25, 1977 two Woodside Bridge Average arrival (37 years) w/range February 25 – April 20 = March 25 Average departure (37 years) w/range May 10 – June 7 = May 26 Latest departure = June 7, 1985 Cinder Flats & 2000 Sangchris
- Fall: Earliest arrival = June 20, 1988 two Sediment Retention Average arrival (37 years) w/range June 20 – August 29 = July 9 Average departure (37 years) w/range September 1 – November 12 = October 16 Latest departure = November 12, 1984 south end Lake Springfield

The Lesser Yellowlegs was a smaller version of the Greater Yellowlegs, with a smaller and straighter bill and different call notes. For any numbers of these and other shorebirds, available habitat was essential; no habitat, no birds. In spring they were usually found in wet fields and open flooded bottomlands. On May 7, 1989, one was uncharacteristically feeding in a clover field. Besides the early spring arrival above, one was at Sangchris February 27, 1996 and another at the Rochester sewer pond February 29, 2000. High spring counts were usually in late April to early May: 80, April 22, 1973; 103, May 5, 1990; 189, May 6, 1991; 135, April 24, 1999; and 245, April 21, 2000. There were eleven years in which spring migration extended into June. Some other records include: June 5, 1979 & 1995 and June 4, 1983, 1990, 1999 & 2005. This sandpiper breeds in northern Canada and Alaska on the tundra and in open coniferous areas. In eleven years, fall yellowlegs returned by late June. Adults preceded juveniles, and some of the very early birds could have been non-breeding wandering birds rather than fall migrants. Other early fall arrivals were June 24, 1980 & 1986 and June 25, 1991. High counts for early fall were: 55, July 31, 1986; 50, July 18, 1987 & 1988; and 31, July 8, 2000 & July 15, 2003. I recorded higher numbers in spring (1.9 to 1 in fall) and the seasonal numbers varied greatly (from 5 to 587) in fall with low years being 1972, 1977, 1996, and 2003, probably because of local conditions. High counts for fall were: 70, August 1, 1979; 75, September 12, 1981; and 64, August 8, 1987. In fall these sandpipers were usually found at the edges of drying ponds, lakes and sloughs. Many times there was no habitat. Occasionally in late fall, these birds migrated diurnally, as did one at Carpenter Park in early afternoon, when it circled and then migrated on south on October 16, 1975. Other late dates of departure were: November 3, 1970 at Sangchris; November 3, 1983 at Woodside Bridge; November 8, 1989 at Sangchris; and November 5, 2006 at the Cinder Flats. The Lesser Yellowlegs winters from southern coastal US south to southern South America.

Documentation: Specimens = 3) IL. Sangamon Co., ISM# 606565 \Diamond , 2 mi southwest Spfld, April 26, 1977, coll. by HDB, wt. = 88.8 gms, testes = 8 mm,gizzard with Hydrophilidae, Curculionidae, Anthicidae (Malporus); ISM# 607709 immature \Diamond , Woodside Bridge, September 24, 1983, (shot illegally), wt. = 96.9 gms; testes = 3 mm; ISM# 607710 immature \heartsuit , Woodside Bridge, September 24, 1983, (shot illegally), wt. = 119.0 gms, ovary = 2.5 mm.

Highest # Days/Season

Spring58 (2000)Summer32 (1987)Fall79 (1983)Winter1 (1976, 1995, 1999)

Highest # Birds/Season

 Spring
 1554 (2000)

 Summer
 667 (1987)

 Fall
 587 (1987)

 Winter
 2 (1976)

Upland Sandpiper

Bartramia longicauda

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	96/58 (29)	71/37 (23)	180/58 (25)	0/0	347/153
Average/day	1.66	1.92	3.10		2.27
Average/season	3.31	3.09	7.20		

Status: Rare Spring Migrant and Summer Resident and Occasional Fall Migrant

Dates:

Spring: Earliest arrival = April 6, 1982 near Refuge Average arrival (29 years) w/range April 6 – May 7 = April 23 Average departure (11 years) w/ range April 16 – May 26 = May 6 Latest departure = May 26, 1976 two Sangamon Co (arbitrary due to SR)

Fall: Earliest arrival = July 11, 2003 Sangchris Average arrival (26 years) w/range July 11 – August 28 = July 31 Average departure (22 years) w/range August 4 – September 8 = August 21 Latest departure = September 8, 1976 Sangamon Co

The Upland Sandpiper, a shorebird of the prairies, was extirpated as a breeding species in Sangamon County during the period of this study. It was common even after the original prairie was destroyed, since it used pastures and other fallow fields. Eifert (1945) stated, "Common in sunny fields and uplands. Often seen on telephone poles. Summer resident. April- September." By 1970 when I started this study they were not common and there were only a few areas where they potentially nested. It was then on the Illinois Endangered Species List. In spring (and rarely in fall), they occasionally could be heard flying over giving a mellow whistle of "will-o- wit". Other early **spring** arrivals were April 12, 1981 & 1986. The numbers for spring were meager with the high count of 5, April 28, 1985. Three were downed by cold weather May 1, 1996. While they liked pastures, I had seen them in freshly plowed fields, but only for feeding. On the breeding grounds, they gave a long wolf whistle which helped in locating them. Although they probably nested intermittently at Capitol Airport (1987 – 1991); west of Sangchris (1971 – 1976); and south of Curran (1974 – 1984), the only consistent place for these birds in summer was two miles east of Buffalo (1982 - 1990). It was there that I saw three birds, (potentially two pair), June 11 – July 16, 1983, and three birds on June 1, and four, July 7, 1985 some of which were fledged young. Unfortunately, I found a road killed Upland Sandpiper there June 1, 1985 (see below). One with some wing molt was noted July 5, 1987 at Buffalo. By 1991, at most, I could not find any breeders in the county. A prairie species that had endured for millennia had stopped nesting in Sangamon County. Their demise was probably a combination of factors including land use, increased predation (especially coyotes), and road kills. In early fall, these sandpipers staged in open short grassy fields and did so at Capitol Airport for years, though not recently. High counts for fall were: 16, August 6, 1989; 13, August 1, 1992; and 10, August 10, 1999. Occasionally they were seen on athletic fields and sod fields. Other late departures were September 4, 1984 at Knapp Lake and September 6, 2004 at Buckhart. Recently, I saw very few

with zero to one or two a year. One of the later records was at Buckhart on August 12, 2008. This sandpiper winters in South America.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 607946 \Diamond , 2 mi east Buffalo, June 1, 1985, coll. by HDB, wt. = 129.8 gms, testes = 12 mm, gizzard with Hymenoptera (wasp),Coleoptera, Hemiptera, and Lepidoptera (adults & caterpillars).

Highest # Days/Season

Spring5 (1976,1986,1996)Summer4 (1982 & 1983)Fall6 (1989)

Highest # Birds/Season

Spring11 (1985)Summer8 (1982)Fall52 (1989)

Whimbrel

Numenius phaeopus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1/1 (1)	0/0	0/0	0/0	1/1
Average/day	1.0				1.0
Average/season	1.0				

Status: Very Rare Spring Migrant

Dates: One Record: adult, Cinder Flats, May 18, 1987. Plus a second record in the addendum: adult, South Fork, May 18 – 21, 2009.

This was the only one of these large shorebirds I saw in 37 years! It was at the Cinder Flats, an industrial area at Lake Springfield. I had only been watching it for a short time when the bird was chased off by a truck. It flew northwest giving a series of short sharp notes. I had observed a large gray-brown shorebird with a long down-curved bill. It had head stripes and darkish legs. This sighting exemplifies the ephemeral nature of trying to see volatile birds in a crowded and noisy environment. I would have missed this rare bird a couple of minutes later. On May 18 - 21, 2009 (in the addendum) I discovered another Whimbrel in a flooded field in the valley of the South Fork east of Lake Springfield. It was feeding on earthworms, and though it was wary, several photographs were secured. The Whimbrel usually migrates along the coasts and the Great Lakes. This shorebird breeds in Alaska and northern Canada in Arctic areas and winters from the southern US to southern South America. The subspecies in this area is *N. p. hudsonicus*. Note that the other three subspecies have white rumps.

Documentation: Photographic: IL. Sangamon Co., & notes HDB – on file ISM.

Hudsonian Godwit

Limosa haemastica

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	93/31 (14)	1/1 (1) sp mig	21/16 (3)	0/0	115/48
Average/day	3.0	1.0	1.31		2.40
Average/season	6.64	1.0	7.0		

Status: Occasional Spring Migrant and Rare Fall Migrant

Dates:

- Spring: Earliest arrival = April 25, 2009 Cinder flats Average arrival (14 years) w/range May 3 – 21 = May 12 Average departure (8 years) w/range May 13 – June 7 = May 23 Latest departure = June 7, 1978 Cinder Flats
- Fall: Earliest arrival = August 3, 2006 adult Buckhart
 Average arrival (2 years) w/range August 3 September 9 = August 22
 Average departure (2 years) w/range October 31 November 15 = November 8
 Latest departure = November 15, 1989 Sangchris

This large shorebird was first detected in the study when five were north of the Sangamon River off Rt. 29 on May 19, 1973. There were a total of 33 records, 29 (including two in addendum) for spring and only four in fall (see Table 19). In the **spring**, they came through in a short span of time and usually, if they landed, they stayed only a briefly. During the period when the Sediment Retention flourished (1988 – 1992) the most records occurred. Other areas that occasionally provided the expanse of shallow water and flats needed were Sangchris, Buckhart, Cinder Flats and overflow or flooded areas. When feeding, they used their long slightly upturned bills to probe in the mud or sand; sometimes submerging their heads in water in the process. Most birds arrived in dark, brick red alternate plumage. The males tended to precede the females, though I had seen both sexes in the same flock. High counts in spring were: 8, May 16, 1983; 25, May 14, 1988; and 9, May 15, 1988. There was only one June record (above). The Hudsonian Godwit breeds on the tundra in spotty locations in Alaska and northern Canada. Like most shorebirds, this godwit had an elliptical migration route, in spring up the midsection of North America and in fall out to the east coast followed by a long flight to South America. Most birds in fall probably went toward the east coast north of Sangamon County. Plus, habitat was lacking most years, so that fall numbers were low. The plumage in fall was gravish and white with some black feathering on the back and wing coverts. High count for fall was six adults, September 9, 1989. One bird stayed at Sangchris from November 2 to 15, 1989, which was unusual. The last fall record was an adult at Buckhart on August 3, 2006.

Documentation: Photographic: IL. Sangamon Co., HDB & DO – on file ISM.

Highest # Days/Season Spring 7 (1992)

 Spring
 7 (1992)

 Summer
 1 (1978)

 Fall
 14 (1989)

Highest # Birds/Season

Spring41 (1988)Summer1 (1978)Fall19 (1989)

1981 5 1982 01 1983 01 1983 01 1988 01 1988 01	$\begin{array}{c c} & & \\ \hline \\ \hline$	May 19May 21June 7May 9May 16May 31May 9May 15May 16	Rt.29 Bridge northwest of SpringfieldCinder FlatsCinder FlatsLincoln Land pondCinder FlatsCinder FlatsWest of Illiopolis
1978 or 1981 5 9 1982 or 1983 or 1983 6 1988 2 01 3	ne P P P P P P P P P P P P P	May 21 June 7 May 9 May 16 May 31 May 9 May 15	west of Springfield Cinder Flats Cinder Flats Lincoln Land pond Cinder Flats Cinder Flats west of Illiopolis
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1983 8 01 1988 2 01	ne	•	-
1988 22	ne	May 16	-
1988 2 or			east of Rochester
1988 ථ or	2	May 3	Cinder Flats
1988 2 or	ر ر	May 9	Sediment Retention
1988 2 or	9	May 13	Cinder Flats
	5	May 14	Sediment Retention
8	ne	May 15	Cinder Flats
	3	May 15	Sediment Retention
(2	May 18	Sediment Retention
1000	2	May 20	south of Springfield
1989	5	May 25	Sediment Retention
1990 or	ne	May 3	Sediment Retention
1991 4	1	May 13	Sediment Retention
1992	3	May 5 – 13	Sediment Retention
1994 01		May 12	Buckhart
1007 01	ne	May 9	Sangchris
1997 of	ne	May 18	Sangchris
1000			beach at
	ne	May 15	Lake Springfield
2006 2 0	38	May 18	Buckhart
2006 2 9	22	May 21	Buckhart
Addendum:			
2009	ne	April 25	Cinder Flats
2009	···	r	Cinder Flats

Table 19. Hudsonian Godwit Records in Sangamon County 1970–2009

FALL			
1989	6	September 9	Sediment Retention
1989	one	November $2 - 15$	Sangchris
1996	one	October 31	Sangchris
2006	adult	August 3	Buckhart

Marbled Godwit

Limosa fedoa

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	79/22 (8)	0/0	11/9 (6)	0/0	90/31
Average/day	3.59		1.22		2.90
Average/season	9.88		1.83		

Status: Occasional Spring Migrant and Rare Fall Migrant

Dates:

Spring:	Earliest arrival = April 7, 1980 Sangchris
	Average arrival (8 years) w/range April 7 – May 9 = April 23
	Average departure (7 years) w/range April 22 – May 15 = May 5
	Latest departure = May 15, 1981 Cinder Flats

Fall: Earliest arrival = August 3, 2006 Buckhart
Average arrival (5 years) w/range August 3 – 30 = August 15
Average departure (5 years) w/range August 5 – September 20 = August 25
Latest departure = September 20, 1988 Sediment Retention

This large teal-sized buffy shorebird with a long upturned, pinkish bill and brownish tail was only a sporadic migrant in the county. There were a total of 24 records, 15 for spring (plus one in the addendum) and 8 for fall (see Table 20). It was interesting to note that this godwit was most regular when the Sediment Retention Facility provided an excellent stop-over habitat for this species. The present lack of wetland habitat in this county makes finding this unique shorebird very difficult. Conditions such as winds, flooding, and timing of migrants were also critical in finding this shorebird. Other areas where it was seen were Sangchris, Cinder Flats, Buckhart, and Marsh Road. It fed by probing with its long bill and usually wading up to its belly in shallow water. I did not record this bird until April 7, 1980 at Sangchris. Sometimes fair sized flocks occurred in **spring**. High counts for spring were: 13, April 21, 1981; 20, April 14, 1990; 16, April 22, 1992; and 7, May 1, 2000. The last record in spring was April 22, 2009 north of New City. The Marbled Godwit breeds on the northern Great Plains. All of the **fall** records were of one or two birds, with two on August 9, 1981 at Marsh Road and August 5, 1987 at the Sediment Retention. The subspecies in the county is the nominate form. This godwit winters along the coasts of North and Central America.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

Highest	# Days/Season	Highest #	# Birds/Season
Spring	6 (1990)	Spring	26 (1990)
Fall	3 (1981)	Fall	4 (1981)

Spring			
1980	one	April 7	Sangchris
1001	13	April 21	south of Springfield
1981	one	May 15	Cinder Flats
1989	one	April 27 – May 9	Sediment Retention
	19	April 14	Sediment Retention
	one	April 14	Sangchris
1990	2	May 3	Sediment Retention
	one	May 4	Sangchris
	one	May 5 – 7	Sediment Retention
1002	4	April 19	Sangchris
1992	16	April 22	Sediment Retention
1995	one	April 24 – 25	Sangchris
1997	2	May 9	Sangchris
2000	7	May 1	Sangchris
2000	one	May 5 – 6,	Marine Pt.
		-	
Addendum:			
2009	one	April 22	north of New City
Fall	4.0		
1981	24	August 9	east of Rochester
	one	August 11 – 13	east of Rochester
1982	one	August 30	Cinder Flats
1987	one	August 4	Sediment Retention
1707	2	August 5	Sediment Retention
1988	one	September 20	Sediment Retention

August 28

August 3

Table 20. Marbled Godwit Records in Sangamon County 1970–2009

1989

2006

one

one

Sediment Retention

Buckhart

Ruddy Turnstone

Arenaria interpres

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	140/53 (25)	12/7 (6)	30/24 (11)	0/0	182/84
Average/day	2.64	1.71	1.25		2.17
Average/season	5.60	2.0	2.73		

Status: Occasional Spring Migrant and Rare Fall Migrant

Dates:

Spring:	Earliest arrival = May 5 , 2005 Buckhart
	Average arrival (26 years) w/range May 5 – 31 = May 21
	Average departure (15 years) w/range May 22- June 15 = May 30
	Latest departure = June 15 , 1976 Cinder Flats

Fall: Earliest arrival = July 27, 2003 adult Buckhart
Average arrival (12 years) w/range July 27 – September 1 = August 9
Average departure (6 years) w/range August 11 – September 26 = September 3
Latest departure = October 25, 2009 juvenile Cinder Flats

In **spring** the bright "calico" colors of this distinctive shorebird made it easy to identify. Turnstones were typically late in the season and sometimes passed through near the end of spring. There were many more at Lake Michigan, and they probably entered the state from both the east and west with just a few migrating from the south. I usually saw them at the dam, Cinder Flats or the beach at Lake Springfield, but they occasionally occurred at mudflats as well. They preferred to forage in sandy areas with rocks. They gave a low staccato call in flight and sometimes were seen in flocks. The next earliest arrival dates were not until May 16 in four years (1980, 1997, 2001, & 2006). High spring counts were: 11, May 20, 1985; 9, May 25, 1990; and 26, May 26, 1994. Besides the date above, other late spring stragglers were June 3, 2003 & 2008 at Lake Springfield and June 14, 1987 at the Cinder Flats. These birds nest in the High Arctic. There were many fewer in **fall** (4.6 in spring to 1 in fall), maybe suggesting that they migrated to coastal areas from further north (Great Lakes). As in most shorebirds adults arrived earlier in July and August, with the juveniles later. Other early fall arrivals were July 30, 1979, 1984, & 2004 and July 28, 2007. High counts for fall were: 5, September 1, 2003 and 5, July 30, 2004. The latest record of a juvenile occurred from October 18 - 25, 2009 at the Cinder Flats (photograph). Other late departures were September 26, 1970 and September 19, 1988. The subspecies found in the county is A. i. morinella. Ruddy Turnstones winter from southern coastal areas in the US south to coastal southern South America.

Documentation: Photographic: IL. Sangamon Co., HDB on file ISM.

Highest # Days/Season

 Spring
 6 (1990)

 Summer
 2 (2003)

 Fall
 7 (1975)

Highest # Birds/Season

Spring26 (1994)Summer5 (2004)Fall7 (1975 & 1988)

Red Knot

Calidris canutus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	16/2 (2)	0/0	2/2 (2)	0/0	18/4
Average/day	8.0		1.0		4.50
Average/season	8.0		1.0		

Status: Very Rare Migrant

Dates:

- **Spring:** Earliest arrival = **May 10**, 1988 adult Sediment Retention Latest departure = **May 23**, 2000 fifteen Cinder Flats
- Fall:Earliest arrival = July 28, 2009 adult Cinder FlatsLatest departure = October 25, 1985 juvenile Woodside Bridge

This plump shorebird with a short, stout bill and robin red breast was very difficult to find in this county. I had only four records during the study, plus one in the addendum. See the records above, except an adult at the Springfield sod field, August 1, 1979. Red Knots usually occurred on extensive mudflats, but this county only occasionally had that habitat. The sod field where I saw the first bird later became a housing area – part of the west end sprawl of Springfield. All were single birds except the fifteen, which was the high count for the county. The May 10th Red Knot was feeding with dowitchers. In fall the adults preceded the juveniles. The July adult was probably forced down during migration by a heavy rain. Juveniles were mostly gray, but note the short bill and tail pattern. This interesting shorebird nests in the Arctic and winters on both coasts to the tip of southern South America. The subspecies was probably *C. c. rufa*, from the central area of the Arctic, which shows the palest underparts and the most white on the belly of the subspecies. Some authors consider the Red Knot monotypic.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

Sanderling

Calidris alba

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	132/53 (23)	61/25 (16) mig	289/170 (30)	0/0	482/248
Average/day	2.49	2.44	1.70		1.94
Average/season	5.74	3.81	9.63		

Status: Occasional Migrant

Dates:

Spring: Earliest arrival = April 15, 1990 Sediment Retention Average arrival (23 years) w/range April 15 – May 31 = May 15 Average departure (22 years) w/range May 16 – June 7 = May 27 Latest departure = June 7, 1990 six Sediment Retention

Fall: Earliest arrival = July 13, 1996 Clear Lake Average arrival (30 years) w/range July 13 – October 11 = August 13 Average departure (27 years) w/range August 14 – November 1 = September 26 Latest departure = November 1, 1984 Woodside Bridge

The Sanderling was a small, light-colored shorebird usually seen at the seashore running before the waves. In this county, it was recorded in small numbers usually at the beach at Lake Springfield or the Cinder Flats. In Illinois it was much more numerous along Lake Michigan, while difficult to record here. The Sanderling went unrecorded 12 seasons in spring and 6 seasons in fall. In **spring** most birds were in rufous (alternate) plumage; but sometimes they were still in basic (white) plumage (April 24 – June 4). Other early spring arrivals were April 24, 1988 and April 27, 1995. High spring counts were: 8, May 31, 1979; 20, June 3, 1981; 22, May 28, 1984; and 8, May 23, 2001. All summer numbers refer to either late spring or early fall migrants. Other late spring departures were: June 6, 1978, 2007 & 2009. This sandpiper breeds in the Arctic. Other early fall arrivals were an adult, July 15, 1985 and an adult, July 16, 2001. As in most shorebirds adults returned first in fall, and arrivals and departures depended on observing both age classes, which was not always the case in this study because of lack of habitat. Many of the early adults in fall were still in breeding plumage. High counts for fall were: 6, September 11, 1987; 6, September 16, 1989; 7, September 1, 2003; and 10, September 10, 2008. A small influx of juveniles from September 4 - 14, 2008 fed at Marine Pt. (photographs). This sandpiper was found at sandy beaches (at Buckhart late in the study), and to a lesser extent on mudflats in fall. Besides the late record above, birds were seen: October 21, 1973 at Sangchris; October 23, 1987 at Sediment Retention; and October 27, 2002 at Buckhart. The Sanderling winters in coastal North and South America.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

Highest # Days/Season Spring 8 (1990)

 Spring
 8 (1990)

 Summer
 4 (2001)

 Fall
 27 (1989)

Highest # Birds/Season

Spring25 (1984)Summer20 (1981)Fall61 (1989)

Semipalmated Sandpiper

Calidris pusilla

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	14746/612 (37)	3639/456 (37) mig	7404/910 (37)	0/0	25789/1978
Average/day	24.09	7.98	8.14		13.04
Average/season	398.54	98.35	200.11		

Status: Common Spring Migrant and Fairly Common Fall Migrant

Dates:

Spring: Earliest arrival = April 16, 2004 Buckhart Average arrival (37 years) w/range April 16 – May 16 = May 4 Average departure (36 years) w/range May 25 – June 21 = June 10 Latest departure = June 21, 1982 Cinder Flats & 1990 four Sed Ret

Fall: Earliest arrival = July 2, 2003 Cinder Flats
Average arrival (37 years) w/range July 2 – September 6 = July 19
Average departure (37 years) w/range August 26 – October 31 = September 21
Latest departure = October 31, 1984 Cinder Flats

This was one of the small sandpipers referred to as "peep", all of which were difficult to separate from other small shorebirds. Much of the migration of the Semipalmated Sandpiper for both the spring and fall actually occurred during the summer period. It arrived in spring 10 times in April and 27 times in May, but always later than the Least Sandpiper. Another early spring arrival was April 17, 1971 at Sangchris. High spring counts were: 200, May 27, 1985; 300, May 22 & 24, 1988; and 210, May 28, 2005. All departures were in June except for three in May (1970, 1974, 1996). On May 24, 2001, I noted that this species could feed on top of algae on Lake Sangchris without falling through. At times in mid-June it was difficult to distinguish between spring and fall migrants, and one adult June 21, 2001 at the Cinder Flats was uncertain. High counts during the summer were: 82, June 4, 1972; 65, June 1, 1985; 85, June 2, 1998; 65, June 4, 2003; and 55, July 30, 2004. This species breeds in the Arctic. There were fewer birds in **fall** (two times less than spring), but they were seen on more days, which meant there were smaller flocks in fall. Shorebird habitat in fall in Sangamon County was less reliable. This species was found on mudflats and rarely in wet grassy places. In fall, adults preceded juveniles and usually arrived in July. When arrival occurred later, it was because there was not any suitable habitat. What little data I had suggested the juveniles arrived in mid-August. High Counts for fall were: 50, August 10 & 29, 1981; 125, August 2, 1986; 80, September 7, 1987; and 50, August 30, 1989. Other late departures were 4, October 14, 1970; one, October 19, 1973; one, October 13, 1987; and one, October 14, 2007. On June 1, 1979, I saw a color marked and banded Semipalmated Sandpiper at the Cinder Flats, which on inquiry had been banded along the Atlantic Coast in Surinam near Paramaribo in northern South America in spring 1977. This shorebird winters in Central and South America and the West Indies.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 608504 3, 2.5 mi south Spfld, May 26, 1986, coll. by HDB, wt. = 21.6 gms, testes = 5 mm.

Highest # Days/Season Spring 29 (2000) Summer 28 (1985 & 2002) 60 (1989) Fall

Highest # Birds/Season

Spring 1959 (1988) Summer 309 (1979) Fall 1086 (1989)

Western Sandpiper

Calidris mauri

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	113/50 (23)	95/54 (17) mig	190/102 (25)	0/0	398/206
Average/day	2.26	1.76	1.86		1.93
Average/season	4.91	5.59	7.60		

Status: Occasional Migrant

Dates:

- Spring: Earliest arrival = April 16, 1992 Sediment Retention Average arrival (26 years) w/range April 16 – June 9 = May 15 Average departure (24 years) w/range April 24 – June 10 = May 25 Latest departure = June 10, 1976 & 1980 Cinder Flats
- Fall: Earliest arrival = July 8, 1979 two adults Buffalo sewer pond Average arrival (28 years) w/range July 8 – September 5 = July 31 Average departure (27 years) w/range July 30 – October 31 = September 6 Latest departure = October 31, 1989 Sediment Retention

This peep was difficult to find, and if not one of the longer billed birds, difficult to identify because few were seen in the distinctive breeding plumage. Though usually not heard, the thin high call notes set it apart from other peep. In this area, the Western Sandpiper was usually found at mudflats and pools of water, but these habitats were not always available; and it was missed 12 spring seasons and 8 fall seasons. Despite the earliest **spring** arrival date (the only April sighting), it was one of the latest shorebirds to arrive in spring; and it was seen into June in four years. High counts for spring were: 10, May 27, 1979; 8, June 3, 1979; 6, May 30, 1981; and 6, June 3, 1988. It breeds in the Arctic in northwestern Alaska. All summer numbers listed above were migrants, and like a lot of shorebirds they arrived in **fall** in July. It was somewhat more numerous in fall, but high counts were about the same as spring counts: 4, August 27, 1978; 4, August 25, 1987; 5, September 6, 1989; and 8, September 4 & 6, 1990. Another late fall date was October 16, 1987 at the Sediment Retention. This species was much less numerous in fall after 1990 because the Sediment Retention was closed and the Cinder Flats were degraded. It winters on both coasts in the US and south to northern South America.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

Highest # Days/Season		Highest # Birds/Season			
Spring	8 (1979)	Spring	39 (1979)		
Summer	8 (1986 & 1987)	Summer	22 (1988)		
Fall	24 (1989)	Fall	43 (1989)		

Least Sandpiper

Calidris minutilla

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	13853/794 (37)	6491/695 (37)mig	10476/1618 (37)	11/6 (3)	30831/3113
Average/day	17.45	9.34	6.47	1.83	9.90
Average/season	374.41	175.43	283.14	3.67	

Status: Common Migrant

Dates:

- Spring: Earliest arrival = March 25, 2006 Sangchris Average arrival (37 years) w/range March 25 – May 8 = April 17 Average departure (37 years) w/range May 16 – June 15 = May 25 Latest departure = June 15, 1992 Cinder Flats
- Fall: Earliest arrival = June 17, 2009 adult Cinder Flats Average arrival (37 years) w/range June 21 – July 21 = July 2 Average departure (37 years) w/range September 9 – December 15 = October 26 Latest departure = December 27, 2009 Cinder Flats

This was the smallest sandpiper and the most numerous peep. The Least Sandpiper was usually a rich brown with yellowish legs, but non-breeding or worn individuals could appear more grayish. Arrival in **spring** was variable depending on the weather and habitat, with April (28 years) the commonest arrival time, with March (5 years) and May (7 years) more unusual. The earliest arrival oddly showed mostly blackish legs, but it was studied at close range and photographed. Other early arrivals were: April 3, 1986; March 31, 1990; and March 30, 1999 & 2009. These sandpipers were usually at mudflats or wet, short grassy areas. Sangchris and the Cinder Flats were the sites that were most often used by this species. High counts for spring were: 150, May 10, 1980; 100, May 4-7, 1988; 280, May 10, 2000; and 135, May 8, 2004. Numbers fell off in late May and migration continued into June in only five years, with records: June 5, 1988; June 3, 1997; June 9, 1999; and June 8, 2006. This shorebird breeds in Alaska and northern Canada. Nearly all the numbers in the summer season were fall migrants, since this was one of the earliest shorebirds to arrive. In fact, it had arrived in fall 17 times in June; and it was always the adults that arrived first with the juveniles about a month later (July 28). There was as many as 13 on June 28, 1988 at the Sediment Retention. Fall numbers were 1.2 times higher than spring, but production of young and possibly longer length of stay could account for the difference. High counts for fall were: 75, September 5, 1983; 122, July 17, 1999; and 200, July 30, 2004. Departures in fall were usually in October (18 times), but also occurred in November (11 times); September (5 times); and December (3 times). This was one of the few shorebirds I recorded into winter and these were all late fall migrants in December: 3, December 2 & 2, December 15, 1981; one, December 1, 2004; one, December 1, 2005 and 5, December 9, 2009. The Least Sandpiper winters in the southern US south to Chile.

Documentation: Specimens = 4) IL. Sangamon Co., ISM# 608112 \bigcirc , Buffalo sewer pond, July 21, 1985, coll. by HDB, wt. = 20.1 gms, ovary = 4 mm, some molt; ISM# 609789 \circlearrowright , Sangchris,

July 28, 1989, coll. by HDB, wt. = 29.5 gms, testes 1.5 mm; ISM# 606462 \bigcirc , Knapp Lake, October 2, 1976, coll. by HDB, wt. = 22.2 gms, ovary = 2 mm; ISM# 606463 sex?, Knapp Lake, October 2, 1976, coll. by HDB, wt. = 20.8 gms, gizzard with Coleoptera – Heteroceridae, Diptera – Ceratopogonidae.

Highest # Days/Season

Spring40 (1990)Summer33 (2005)Fall83 (2004)Winter4 (1981)

Highest # Birds/Season

Spring2330 (2000)Summer670 (2002)Fall633 (1989)Winter9 (1981)

White-rumped Sandpiper

Calidris fuscicollis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1157/307 (37)	444/108 (28) mig	20/18 (6)	0/0	1621/433
Average/day	3.77	4.11	1.11		3.74
Average/season	31.27	15.86	3.33		

Status: Uncommon Spring Migrant and Rare Fall Migrant

Dates:

- Spring: Earliest arrival = April 24, 2004 Camp Lincoln Ponds Average arrival (36 years) w/range April 24 – May 25 = May 9 Average departure (37 years) w/range May 16 – June 21 = June 6 Latest departure = June 21, 1982 Cinder Flats
- Fall: Earliest arrival = June 24, 2006 worn adult Cinder Flats Average arrival (7 years) w/range June 24 – July 31 = July 10 Average departure (6 years) w/range October 3 – November 15 = October 20 Latest departure = November 15, 1991 Marine Point

A large "peep" with long wings, the White-rumped Sandpiper had a white rump patch in all plumages. It had one of the longest migrations of any shorebird, from the breeding grounds in the Arctic to the wintering areas at the southern tip of South America. The route in **spring** was through the Great Plains and that was the season that many more numbers were recorded (80 times more than fall) in the county. I had five arrival dates in April: see above; April 25, 1985; April 30, 1986; April 28, 1989; and April 29, 1990, but most were in May. In 2009, in the addendum, I did not record them until June 3rd, which meant they over flew this area or migrated further west that spring. High spring counts were: 20, May 29, 1972; 40, May 24, 1988; 21, May 25, 1989; and 24, May 15, 1996. Plus, there were several years in which there were more seen in June than in May (1976, 1978, 1998, 2002, and 2005). High counts in June were 40, June 1, 1988 and 20, June 16, 2002. Some June records might represent non-breeding summer residents, rather than spring departures. In the fall, most birds went to the Atlantic Coast, so few were seen in the county. I recorded them in only eleven years in fall while in spring they were seen every year. Other early fall arrivals were: July 5, 1990 at Sediment Retention; June 30, 1998 east of Rochester; and two adults, June 30, 2005 at Cinder Flats. The high count for fall was only three, October 18, 1989. Other late fall departures were October 31, 1984 at Cinder Flats and October 25, 1989 at Sediment Retention.

Documentation: Specimens = 2) IL. Sangamon Co., ISM# 605186 \mathcal{E} , 2 mi southwest Spfld, May 30, 1972, coll. by HDB, wt. = 44.2 gms, testes = 6 mm; ISM# 606450 \mathcal{E} , 2 mi east Pawnee, July 28, 1976, coll. by HDB, wt. = 38.6 gms, testes = 3 mm.

Highest # Days/Season Spring 23 (2000)

Spring23 (2000)Summer11 (1988)Fall8 (1990)

Highest # Birds/Season

Spring279 (1988)Summer145 (1988)Fall8 (1989 & 1990)

Baird's Sandpiper

Calidris bairdii

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	77/44 (17)	5/4 (4) fall mig	471/271 (35)	0/0	553/319
Average/day	1.75	1.25	1.74		1.73
Average/season	4.53	1.25	13.46		

Status: Rare Spring Migrant and Uncommon Fall Migrant

Dates:

- Spring: Earliest arrival = March 8, 2006 Sangchris Average arrival (14 years) w/range March 8 – May 4 = April 8 Average departure (14 years) w/range April 12 – May 28 = May 4 Latest departure = May 28, 2000 Sangchris
- Fall: Earliest arrival = July 24, 2002 adult Rt. 29 north of Springfield Average arrival (34 years) w/range July 24 – September 16 = August 20 Average departure (30 years) w/range August 19 – November 23 = September 28 Latest departure = November 23, 2006 Cinder Flats

One of the larger peep, the Baird's Sandpiper was buffy, had long wings and a scaly back. Due to the migration route, very few were seen in spring as most went north through the Great Plains. It was missed in 20 spring seasons and twice in the addendum. Other fairly early spring arrival dates besides the one above were: March 26, 1977, March 27, 1996, and March 20, 2007, all at Sangchris. High spring counts were: 3, April 7, 1977; 4, April 27, 1995; and 5, April 19, 2004. Most left fairly early in spring; six years in April, and eight years in May. Other late spring departures were May 18, 1971 at Sangchris and May 27, 1985 at the Buffalo sewer pond. However, none straggled into summer. The Baird's Sandpiper breeds in the High Arctic. In the fall, this sandpiper was 6.1 times more numerous than spring, but it was missed in two years (1994 and 1995). However, it was seen in all three years of the addendum. Adults arrived first, as early as July, but juveniles were more numerous and lingered in some areas such as the Cinder Flats, which seemed to select for this species. Other early fall arrivals were July 26, 1985; July 31, 1986 and July 27, 1987. High counts for fall were: 9, September 18, 1976; 9, September 27, 1986; and 10, September 2, 1987. They were found at mudflats and also liked grassy areas such as sod fields and pastures. Besides the above, other late fall departure dates were: November 8, 1970 at Sangchris, November 4, 1979 at the Buffalo sewer ponds, and November 5, 2007 at the Cinder Flats. A very long distant migrant, this shorebird winters in southern South America.

Documentation: Specimens = 2) IL. Sangamon Co., ISM# 607127 juvenile \bigcirc , Buffalo sewer pond, November 4, 1979, coll. by HDB, wt. = 35.9 gms, ovary = 4 mm; ISM# 606240 juvenile \bigcirc , 2 mi east Pawnee, August 17, 1975, coll. by HDB, wt. = 41.3 gms, testes = 2 mm, gizzard with Chironomidae larva, Coleoptera mostly adults.

Highest # Days/Season Spring 5 (3 years)

Spring5 (3 years)Summer1 (4 years)Fall30 (1987)

Highest # Birds/Season

 Spring
 15 (1983 & 2004)

 Summer
 2 (1987)

 Fall
 103 (1987)

Pectoral Sandpiper

Calidris melanotos

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	45556/1223 (37)	3696/361 (34)mig	17341/1392 (37)	0/0	66593/2976
Average/day	37.25	10.24	12.46		22.38
Average/season	1231.24	108.71	468.68		

Status: Very Common Spring Migrant and Common Fall Migrant

Dates:

Spring: Earliest arrival = March 6, 1992 Sed Ret & 2006 two Sangchris Average arrival (36 years) w/range March 6 – April 7 = March 21 Average departure (37 years) w/range May 4 – June 20 = May 25 Latest departure = June 20, 2002 three southwest of Chatham

Fall: Earliest arrival = June 17, 1999 Marsh Road Average arrival (37 years) w/range June 17 – August 17 = July 13 Average departure (37 years) w/range September 19 –November 18 = October 27 Latest departure = November 18, 1973 Sangchris

The Pectoral Sandpiper was one of the earlier arriving shorebirds and only the Killdeer had more numbers in this study (see Table 17). The main migration was through the interior US, therefore, given the right conditions, this county had fairly good numbers. These birds in spring outnumbered fall birds by two to one probably because more went to the east in fall. Other early spring arrivals were March 8, 2000 & 2003. The primary habitat in spring was flooded fields, which made numbers boom or bust depending on the amounts of precipitation. High counts in spring were: 800, May 5, 1979; 500, April 24, 1983; 650, April 20, 1991; 600, April 23, 1994; and 635, April 24, 1999. Numbers were not as high after the year 2000 indicating that there might be somewhat of a population decline in this species. The males were noticeably larger than females and much chasing and aggression could be seen in spring. They had a distinct grating flight call, which was useful in identification. Most of these shorebirds went on north by the end of May, but in eight years spring migrants were seen into June. Some records were: 4, June 5, 1979; 2, June 7, 1988; 5, June 5, 1995; plus: June 16, 2008 and June 14, 2009 in the addendum. They nested in the High Arctic in northern Alaska and Canada. Adults came back first in fall, usually in July, but in five years it was in June (1980, 1987, 1988, 1990, 1999). It took constant monitoring to assess the timing of their arrival. One bird was a summer resident at the Cinder Flats June 16 – 25, 1976. Early fall high counts were: 150, July 30, 1981; 200, July 31, 1986; and 150, July 29, 2002. Other areas used for habitat were lake edges, sod fields, and pastures. High counts for fall were: 130, August 26, 1976; 350, August 15, 1981; 100, September 7, 1987; 200, August 8, 1988; and 150, August 2, 2006. Though in a few fall seasons, they left as early as September (3 years), usually due to lack of habitat, the majority left in October (19 years) or November (15 years). Other late dates of departure were November 14, 1979 & 1982 and November 16, 1991. Occasionally, I saw them standing on the ice in early spring or late in fall. The Pectoral Sandpiper winters in southern South America.

Documentation: Specimens = 4) IL. Sangamon Co., ISM# 605159 \bigcirc , 8.5 mi east Springfield, May 3, 1972, coll. by HDB, wt. = 97.4 gms, testes = 5 mm.; ISM# 660419 \bigcirc , Sediment Retention, May 30, 1988, coll. by HDB, wt. = 54.0 gms, testes = 6mm; ISM# 607121 \bigcirc juvenile, Cinder Flats, October 3, 1979, coll. by HDB, wt. = 53.9 gms, testes = 2 mm; ISM# 606075 \bigcirc juvenile, 2 mi east Pawnee, October 6, 1974, coll. by HDB, ovary = 3 mm.

Highest # Days/Season

Spring75 (2000)Summer38 (2002)Fall83 (1976)

Highest # Birds/Season

Spring6886 (2000)Summer757 (2002)Fall3041 (1981)

Dunlin

Calidris alpina

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1799/296 (35)	13/6 (4) sp mig	3626/428 (36)	7/6 (3) fall mig	5445/736
Average/day	6.08	2.17	8.47	1.17	7.40
Average/season	51.40	3.25	100.72	2.33	

Status: Uncommon Spring Migrant and Fairly Common Fall Migrant

Dates:

- Spring: Earliest arrival = March 25, 1995 Sangchris Average arrival (33 years) w/range March 25 – May 21 = April 28 Average departure (35 years) w/range May 16 – June 6 = May 26 Latest departure = June 6, 1991 Sediment Retention
- Fall: Earliest arrival = September 25, 1986 two south end Lake Springfield Average arrival (36 years) w/range September 25 – November 4 = October 10 Average departure (35 years) w/range October 16 – December 12 = November 13 Latest departure = December 12, 1970 Sangchris

The Dunlin was a rather small sandpiper with a long, down-curved bill. They were found on mudflats and grassy pools in fields. Sometimes Dunlins arrived early in spring (see record above), but there were only two March records; the other was March 30, 1999 at Sangchris. There were 15 April arrivals and 18 May arrivals. They were missed two springs (1973 and 1974) as well as once in the addendum (2008). Some of the early birds in spring were still in non-breeding plumage; this was seen on individuals from March 25 – May 2. High spring counts were: 107, May 25, 1972; 95, May 26, 1990; 90, May 17, 1996; 50, May 23, 2000; and 53, May 18, 2006. Most left in late May, but they occurred into June in four years: June 1, 1974; (3) June 3, 1979; see above; June 4, 2003. This sandpiper breeds in the Arctic. In fall, this was a latearriving shorebird with only five arrivals in late September, and the other 31 years being in October, except one (2006) in November. Other early dates were: September 27, 1976 & 1988; September 29, 1981; and September 28, 2004. Some years, they could be seen migrating diurnally in a general movement such as on October 20, 1982 at Lake Springfield. Usually in fall, they were in gravish-brown plumage (basic?), but occasionally one would show some black spotting on the belly like one at the Cinder Flats on October 30, 2002. High counts for fall were: 76, October 13, 1973; 60, November 4, 1984; 60, November 4, 1987; and 88, October 29, 1991. Besides the late date above, there were two other records into winter: 2, December 1, 1984 at Woodside Bridge and one, December 5, 1999 at Lake Springfield. Fall numbers usually exceeded spring numbers (exactly two times), but the numbers were lower the last few years of the study, indicating a decline in this shorebird. The one specimen and probably the only subspecies found here is the eastern C. a. hudsonia. This bird winters on the East and Gulf Coasts.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 605184 \bigcirc , 2 mi southwest Spfld, May 25, 1972, coll. by HDB, wt. = 61.0 gms, testes = 11 mm, gizzard with mostly Chironomidae larva and seeds of Chenopodium, Setaria, & Polygonum, (bill length = 37.2 mm).

Highest # Days/Season

Spring24 (2000)Summer3 (1979)Fall37 (1989)Winter4 (1999)

Highest # Birds/Season

Spring365 (1990)Summer10 (1979)Fall731 (1989)Winter4 (1999)

Stilt Sandpiper

Calidris himantopus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	176/89 (29)	378/134 (27)mig	2495/557 (37)	0/0	3049/780
Average/day	1.98	2.82	4.48		3.91
Average/season	6.07	14.0	67.43		

Status: Occasional Spring Migrant and Uncommon Fall Migrant

Dates:

Spring: Earliest arrival = April 2, 1978 Buckhart Average arrival (29 years) w/range April 2 – May 25 = May 10 Average departure (29 years) w/range May 9 – June 1 = May 19 Latest departure = June 1, 1983 adult Cinder Flats

Fall: Earliest arrival = June 27, 1986 adult Cinder Flats
Average arrival (36 years) w/range June 27 – September 3 = July 21
Average departure (37 years) w/ range August 24 – November 1 = September 29
Latest departure = November 1, 1984 south end Lake Springfield

This medium-sized shorebird inhabited extensive mudflats where it probed for food in shallow water. The key to it being present was habitat, without the mudflats the Stilt Sandpiper was rarely found. In flight, it had a distinctive hump-backed appearance, and on the ground (in juvenile or basic plumage) it resembled a yellowlegs, but had a slightly down-curved bill and was smaller. In alternate plumage, it was much easier to distinguish with much barring ventrally and chestnut on the face. In spring, they were mainly a Great Plains migrant with few passing through this area, and it was missed in seven springs. Arrival was usually in May (23 years), but it was in April six years. The earliest date of April 2nd (above) was much earlier with the others being in late April. High counts at that season were low with 8, May 23, 1988 the highest. I have only one June departure date for spring (see above). Other late spring departures were May 27, 1982, 1985 & 1989 and May 28, 2000. Stilt Sandpipers nest on the tundra in northern Canada and Alaska. This sandpiper was much more numerous in fall than spring (16.3 to 1) indicating that there was an elliptical route in which they moved south further east at that season. As with most shorebirds in fall, adults preceded juveniles and many of the adults arrived in colorful breeding plumage. Other early fall arrivals were an adult, June 28, 1980 at the Buffalo sewer pond and an adult, July 3, 1987 at the North sewer pond. Most fall arrivals were in July (25 years). High counts for fall were: 25, September 7 & 14, 1980; 35, September 20, 1983; 35, August 4, 1987; 40, September 24, 1988; and 24, July 30, 2004. On September 15, 2002 there were 20, all immatures, at the Cinder Flats after being downed by a hard rain. Other late records besides the above were: one, October 21, 1973 at Sangchris; 3, October 25, 1983 at Woodside Bridge; 5, October 22, 1988 at Sediment Retention; one, October 28, 1989 at Sediment Retention; one, October 22, 1990 at Sangchris; and 5, October 27, 2006 at the Cinder Flats. This shorebird winters from the Gulf Coast south to northern Chile including the West Indies.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

Highest # Days/Season Spring 12 (1988)

Spring12 (1988)Summer15 (1987)Fall62 (1989)

Highest # Birds/Season

Spring31 (1988)Summer126 (1987)Fall414 (1989)

Buff-breasted Sandpiper

Tryngites subruficollis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	2/1 (1)	7/6 (4) all fall mig	328/115 (24)	0/0	337/122
Average/day	2.0	1.17	2.85		2.76
Average/season	2.0	1.75	13.67		

Status: Very Rare Spring Migrant and Occasional Fall Migrant

Dates:

Spring: Earliest arrival = April 26, 1987 two west of Illiopolis (only spring record)

Fall: Earliest arrival = July 28, 1987 Sediment Retention
Average arrival (22 years) w/range July 28 – September 11 = August 19
Average departure (22 years) w/range August 31 – October 8 = September 12
Latest departure = October 8, 1983 Buffalo Sewer Pond

The only **spring** record occurred in a plowed field with a small puddle. The two Buff-breasted Sandpipers were with golden plover and appeared bright buff and the legs were orange-yellow. Almost all of these sandpipers in spring migrated north through the Great Plains, and breed in the High Arctic. Buff-breasted Sandpipers in fall were found in very open areas with short grass such as sod fields, pastures, athletic fields, airports, and mud or grass flats. They occasionally came into water, and two were wading at the Cinder Flats on August 13, 1983, and two were taking a bath at the Sediment Retention on September 6, 1990. In a given fall season, I sometimes missed either the adults or juveniles or in 12 years I failed to record them at all. Most of the birds encountered were juveniles. Other early fall arrivals were: July 31, 1976 at Sangchris & (2) 1993 at Buckhart, and July 29, 2002 at Rt.29 Bridge. Most of these birds in fall were seen in August and September. High counts for fall were: 19, September 4, 1977; 13, August 22, 1998; and 35, September 3, 2000. Several times, I had observed them line feeding, such as 14 in a line at the Springfield sod field on August 26, 1977. At Sangchris on September 7, 2006 there were three flying and resting with doves and Killdeer, a behavior that could be dangerous in dove season! Buff-breasted Sandpipers occurred in all three fall seasons of the addendum (2007 – 2010), but in very small numbers and all in early September. The latest bird above was the only record for October. Another rather late record was six, September 26, 1976 at Lake Springfield. This shorebird winters in South America on the pampas.

Documentation: Specimen = 1) IL. Sangamon/Christian Co. line, ISM# 606457 juvenile \bigcirc , 2 mi east of Pawnee, September 5, 1976, coll. by HDB, wt. = 50.4 gms, ovary = 2.5 mm, gizzard with Coleoptera (Staphylinidae and Carabidae), Diptera (Tipulidae), Hymenoptera (wasp).

Highest # Days/Season

Spring1 (1987)Summer2 (1987, 2002)Fall13 (1983)

Highest # Birds/Season Spring 2 (1987) Summer 2 (1987,1993, 2002)

Summer 2 (1987,1993, 200 Fall 86 (1977)

Ruff

Philomachus pugnax

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	0/0	0/0	7/7 (2)	0/0	7/7
Average/day			1.0		1.0
Average/season					

Status: Very Rare Fall Migrant

Dates:

Two Records:

♂ basic plumage, Woodside Bridge area, September 15 – 20, 1976;

∂ basic plumage, Buffalo Sewer Pond, September 11, 1980.

The Ruff, a Eurasian species, has been seen regularly in North America and has nested in Alaska. Illinois has multiple records of this shorebird. These were mid-sized shorebirds larger and bulkier than Pectoral Sandpipers or Lesser Yellowlegs. In flight they showed two white ovals near the base of the tail. The Ruffs had horizontal streaks on the breast and loose feathering on the lower breast and tertials. Both of these birds had yellowish legs, and dark bills which were slightly down-curved. The Ruff at the west end of Lake Springfield was on a mudflat while the bird at the sewer pond was in grass that had grown around a puddle. Both Ruffs were originally found by other observers, but I was able to relocate these rare shorebirds.

Documentation: Drawing and written descriptions: IL. Sangamon Co., HDB – on file ISM.

Short-billed Dowitcher

Limnodromus griseus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1576/204 (34)	393/147 (28) fall	1202/256 (27)	0/0	3171/607
Average/day	7.73	2.67	4.70		5.22
Average/season	46.35	14.04	44.52		

Status: Uncommon Migrant

Dates:

- Spring: Earliest arrival = April 8, 1997 Sangchris Average arrival (35 years) w/range April 8 – May 18 = May 7 Average departure (32 years) w/range May 13 –31 = May 20 Latest departure = May 31, 2006 adult Buckhart
- Fall: Earliest arrival = June 30, 1986 adult Cinder Flats Average arrival (31 years) w/range June 30 – August 12 = July 12 Average departure (32 years) w/range July 21 – October 6 = September 1 Latest departure = October 6, 1970 two Sangchris & 1990 adult worn plumage Sed Ret

These shorebirds, though fairly regular, came through in a short period of time and if the wetland habitat was lacking or too plentiful and widespread they were easily missed. I missed Shortbilled Dowitchers in three springs (1976, 1977, and 2004) and again in 2009 in the addendum. Except for the exceptionally early April date above, all arrivals were in May and all departures were in May as this was not a species that straggled into June. Other early spring arrivals were May 1, 1992 & 2000 and May 2, 1987, 1989, 1994, & 2008. High counts were: 47, May 12, 1980; 65, May 10, 1988; 50, May 16, 1988; 63, May 14, 1996; 73, May 15, 1996; and 39, May 10, 1997. Other late departures were May 29, 1993 at Sangchris and May 29, 2005 at Buckhart. It breeds in southern Alaska and central (hendersoni, west of Hudson Bay) Canada. Amazingly, they returned for fall in July (27 years) with adults preceding juveniles; and one adult arrived in June (above). Other early fall records were: July 5, 1979 Cinder Flats; July 8, 1988 Sangchris; July 2, 2001 Sangchris and July 9, 2009 Buckhart. Based on meager data, juveniles arrived from August 10 – 25. Some fall seasons (1971, 1972, 1978, & 1998), this dowitcher was not recorded and other years either the adults or the juveniles were missed, thus affecting the arrival and departure dates. Most of the high counts for fall came from the Sediment Retention as it was a place of static as opposed to ephemeral wetland habitat. Fall high counts were: 15, July 18, 1987; 34, September 7, 1989; 16, August 31, 1990; and 17, July 10, 1991. They probably normally departed in mid-September, but many falls the habitat was not there to sustain them in the county and in 14 falls they left in July or August. Another late departure was three at the Sediment Retention on October 1, 1989. These dowitchers had long bills with which they probed in to mud for insects and worms. This species winters in the southern coastal US south to coastal Peru and Brazil. The subspecies in the county is L. g. hendersoni (see specimen), and possibly L. g griseus occurred, but I never knowingly saw it.

Documentation: Specimen = 1) IL. Sangamon Co., (partial, wing and tail) ISM# 661927 adult \Diamond , Sangchris, July 10, 1992, coll. by HDB, wt. = 76gms, testes = 3mm, gizzard with fly maggots, Coleoptera, seeds, & gravel.

Highest # Days/Season

Spring15 (1997)Summer18 (1991)Fall60 (1989)

Highest # Birds/Season

Spring213 (1988)Summer82 (1991)Fall741 (1989)

Long-billed Dowitcher

Limnodromus scolopaceus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1028/125 (26)	7/5 (3) fall mig	1006/272 (32)	2/2 (1) sp mig	2043/404
Average/day	8.22	1.40	3.70	1.0	5.06
Average/season	39.54	2.33	31.44	2.0	

Status: Uncommon Migrant

Dates:

- Spring: Earliest arrival = February 23, 1991 Sediment Retention Average arrival (27 years) w/range February 23 – May 5 = April 22 Average departure (23 years) w/range April 27 – May 9 = May 4 Latest departure = May 9, 1984 four Cinder flats
- Fall: Earliest arrival = July 16, 2002 adult Sangchris
 Average arrival (32 years) w/range July 16 October 21 = September 14
 Average departure (31 years) w/range August 11 November 17 = October 21
 Latest departure = November 28, 2009 juvenile Cinder Flats (photograph)

The Long-billed Dowitcher looked very much like the Short-billed, and they were considered a single species at one time. These species were difficult to separate, but their respective call notes were the best indicators. In spring, the Long-billed Dowitcher arrived earliest of the two dowitchers. The February 23, 1991 bird was extremely early (it stayed until April 1) and it was in basic gray plumage, as were three on March 29, 1989 (the next earliest date) at the Sediment Retention. The grey plumage was seen latest on April 9, 2003 at the Rochester sewer pond. High counts were: 21, April 30, 1981; 74, May 5, 1989; 68, May 3, 1990; 75, May 2, 1991; 35, May 2, 1992; and 20, May 1, 2002. These birds passed through in a short span of time usually late April to early May with some, but not much, overlap with Short-billed Dowitcher. Other late departures were May 8, 1989 & 1991. They breed further north than the Short- billed in coastal western and northern Alaska and northwestern Canada. They usually arrived later and stayed later in **fall** than Short-billed, and like most shorebirds, the adults arrived before the juveniles. However, it arrived three years in July see above, plus 2 adults, July 21, 1990 and 2 adults, July 30, 2004. If broken into age classes the adults average arrival (7 years) was August 11 and juvenile arrival (20 years) was October 1. High counts for fall were: 18, October 17, 1988; 19, September 28, 1990; and 12, October 25, 1991. Other late departures besides above, were: four juveniles, November 17, 1987 at the south end of Lake Springfield; juvenile, November 14, 1989 at the Sediment Retention; and juvenile, November 16, 1990 at Sangchris. This dowitcher winters on the coasts of the southern US south to Mexico.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

Highest # Days/Season Spring 26 (1989)

 Spring
 26 (1989)

 Summer
 3 (2002)

 Fall
 45 (1989)

 Winter
 2 (1990)

Highest # Birds/Season

Spring280 (1989)Summer3 (2002)Fall269 (1988)Winter2 (1990)

Wilson's Snipe

Gallinago delicata

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	6567/1123 (37)	5/5 (4) fall mig	2300/788 (37)	228/119 (31)	9100/2035
Average/day	5.85	1.0	2.92	1.92	4.47
Average/season	177.49	1.25	62.16	7.35	

Status: Fairly Common Spring Migrant, Uncommon Fall Migrant and Occasional Winter Resident

Dates:

Spring: Earliest arrival = February 11, 1973 Sangchris (arbitrary due to WR) Average arrival (37 years) w/range February 11- March 30 = March 9 Average departure (37 years) w/range April 23 – May 23 = May 8 Latest departure = May 23, 1978 Sangchris & 1986 Cinder Flats

Fall: Earliest arrival = July 15, 2002 adult Sangchris
Average arrival (37 years) w/range July 15 – October 26 = August 28
Average departure (37 years) w/range November 7–December 17 =November 23
Latest departure = December 17, 1972 Sangchris (arbitrary due to WR)

A medium-sized shorebird, this snipe had a very long bill, stripes on the head and back, and gave a harsh grating call note in flight. They were found in open marshy places, wet grassy areas in pastures and fields, mudflats and along the open edges of lakes and ponds. It was difficult at times to distinguish wintering birds from spring migrants, but some February dates (10 years) I suspected were wintering birds. Numbers in **spring** were 2.9 times that of fall, probably due to more habitat in spring. High counts for spring were: 60, April 9, 1978; 80, April 2, 1995; 65, March 28, 1997; 68, April 5, 2004; and 73, March 29, 2009. Occasionally, snipe were seen migrating diurnally such as a flock at the Buffalo sewer pond on March 21, 1981 or a flock of five over Lake Springfield March 27, 1985. However, most migration probably occurred crepuscularly or nocturnally. I noted on March 27, 1986 and March 29, 2003 that snipe sometimes bounced while feeding, much in the same manner that woodcock did. Some spring migrants were winnowing from March 13 to May 21, but no evidence of nesting was found, but was suspected at Sangchris in the 1970s. These snipe normally nest from northern Illinois to northern Alaska. The only snipe seen during the summer season were early **fall** migrants in July (five records): July 27, 1981 east of Lake Springfield; July 20, 1985 Cinder Flats; July 27 & 29, 1994 Sangchris and above. Most arrivals were in August (20 years), but there were also September (9 years) and even October (4 years) first arrivals. High counts for fall were: 15, October 24, 1971; 20, September 15, 1988; and 17, November 10, 1990. When the snipe did winter (31 years) it was usually in small numbers. There were only five years with 10 or more birds and only two winters (1999-00 and 2001-02) with any numbers (51 & 47). They needed open water in which to probe their long bills for food. This was provided in winter by natural springs, sewer ponds, ditches with running water from houses, Sangchris and other warm water sources. The high count for winter was 13, December 21, 2001. Several times, I had found this bird impaled on barbed wire fences as was one April 23, 1978. The Wilson's Snipe winters as far south as South America.

Documentation: Specimens = 2) IL. Sangamon Co., ISM# 606522 \bigcirc , Chatham, March 21 1977, coll.by K.Watt, wt. = 79.0 gms, ovary = 14 mm; ISM# 606924 \bigcirc , IL. Sangamon Co. 2.5 mi south Salisbury, April 23, 1978, coll. by HDB, wt. = 111.8 gms, ovary = 12 mm.

Highest # Days/Season

Spring57 (2000)Summer2 (1994)Fall64 (1989)Winter19 (1999)

Highest # Birds/Season

Spring536 (2000)Summer2 (1994)Fall303 (1989)Winter51 (1999)

American Woodcock

Scolopax minor

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	840/461 (36)	62/50 (25)	149/136 (33)	116/58 (24) mig	1167/705
Average/day	1.82	1.24	1.10	2.0	1.66
Average/season	23.33	2.48	4.52	4.83	

Status: Uncommon Spring Migrant and Occasional Summer Resident and Fall Migrant

Dates:

Spring: Earliest arrival = February 3, 2006 South Fork Average arrival (37 years) w/range February 3 – March 19 = February 26

Fall:Average departure (33 years) w/range October 16 – November 28 = November 6Latest departure = November 28, 1985 south of Springfield

Like most species that nest on the ground, the American Woodcock declined during the study and numbers were lower in this shorebird by 1995. Since it was nocturnal and displayed crepuscularly, its numbers were difficult to track in this county because night work in a crowded (with humans) countryside was fraught with problems (especially post-911). This was one of the earliest birds to return in the **spring**, but this depended on a warming trend with mild nights. Spring arrivals were in either February or March. In the first half of the study, the average was March 1; and it was February 20 in the last half (because of earlier springs). Other early arrivals were February 10, 1998 at Lake Springfield and February 9, 1999 at Oak Ridge Cemetery. The highest count for these early birds was 6, February 15, 1999. Upon arrival, they almost immediately began displaying, usually along wood edge, and even did so when it was snowing. High counts in spring were: 12, March 12, 1972; 8, April 26, 1981; and 6, May 5, 1984. On April 6, 2001 at Washington Park, a woodcock flew by being pursued by two Cooper's Hawks. Areas of forest and forest edge that had this bird in summer were Sangchris, South Fork, Carpenter Park/Riverside Park, Lake Springfield, Lincoln Gardens, Lick Creek, Irwin Bridge, and Clear Lake. Egg dates (four nests with four eggs) were from April 7 to May 11. Many times when I was near a nest the adult gave a distraction display. Young out of the nest were seen between April 21 and May 15. This species had a whole host of predators. I had seen dogs chasing them, a red fox with a dead one, and many were killed along the roads by vehicles. I often wondered how off-road vehicles affected the nesting of these birds, and they did drop out as summer residents in some areas. Fall migration was much less obvious, and there were 6.4 times more birds in spring than fall. Also, they were missed in fall in four years (1970, 1988, 1997, 2005). Migrants were noted out of usual summer habitat in October and November. Other arrivals in fall were October 18, 1971 & 1995 and October 19, 1989, but one was present at Carpenter Park September 2, 2008, (SR?). The high count for fall was 3, November 9, 1982. All winter numbers referred to spring migrants in February. Woodcocks winter in the southeastern US with some as far north as southern Illinois.

Documentation: Specimens = 9) IL. Sangamon Co., $\bigcirc \bigcirc = 4$, Spfld (3) & northwest Spfld, March 3 – November 8, wts. = 147.3 – 175.9 gms, testes = 4 – 10 mm; $\bigcirc \bigcirc = 5$, Spfld (3) &

Auburn & New City, March 17 – April 25, wt. = 119.5 (very thin) – 216.2 gms, ovaries = 11 - 18 mm. (Of special note is the whitest spots on the tail tips are on the underside of the feathers so when the tail is cocked they show the most vividly in this nocturnal species).

Highest # Days/Season

Spring30 (1979)Summer7 (1982)Fall18 (1976)Winter10 (1975)

Highest # Birds/Season

 Spring
 71 (1979)

 Summer
 9 (1982)

 Fall
 20 (1976)

 Winter
 18 (1975) = spring migrants

Wilson's Phalarope

Phalaropus tricolor

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	142/76 (26)	21/19 (9)	116/90 (15)	0/0	279/185
Average/day	1.87	1.11	1.29		1.51
Average/season	5.46	2.33	7.73		

Status: Occasional Migrant

Dates:

- Spring: Earliest arrival = April 15, 1996 ♂ Rochester sewer pond Average arrival (25 years) w/range April 15 – May 15 = May 3 Average departure (24 years) w/range May 7 – June 5 = May 17 Latest departure = June 5, 2007 ♂ Southwind Park
- Fall: Earliest arrival = June 30, 1986 adult ♀ Cinder Flats Average arrival (18 years) w/range June 30 – August 30 = July 31 Average departure (17 years) w/range July 10 – October 4 = August 27 Latest departure = October 4, 1979 Cinder Flats

In this species of shorebird, the female was brighter-colored than the male and the usual nesting roles were reversed. This phalarope swam and spun in the water when feeding, but also fed on mudflats and at grassy pools. It was mainly a bird of the Great Plains and the West, and only a few were found in the county. Most of the time, they arrived in May, but in seven years were present in April; and it was missed in eleven **springs**. Other early spring arrivals were April 23, 1970 & 1988 and April 21, 1983. High counts for spring were: 7, May 4, 1981; 7, May 10, 1988; 5, May 1, 1991; and 5, May 7, 2008. Other late spring departures were: May 25, 1983 & 1988; May 31, 1992; and May 27, 2008. Wilson's Phalaropes breed in the interior west in the US and Canada, and very rarely in Illinois. All summer numbers through 2006 were **fall** migrants. Although the numbers were nearly equal between spring and fall, this phalarope was missed 19 years in fall. It was most regular in fall and spring when the Sediment Retention Facility was functioning. Other early fall arrivals were: July 8, 1979; July 12, 1983; and July 2, 1987. High counts for fall were: 3, September 6 - 13, 1980 and 3, September 11, 1989. Other late fall departures were September 27, 1989 and September 26, 2005. This phalarope winters in central and southern South America.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

Highest # Days/Season

Spring12 (1988)Summer6 (1987)Fall25 (1989)

Highest # Birds/Season

 Spring
 29 (1988)

 Summer
 6 (1987)

 Fall
 31 (1980 & 1989)

Red-necked Phalarope

Phalaropus lobatus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	18/14 (8)	3/3 (3) sp mig	83/40 (17)	0/0	104/66
Average/day	1.29	1.0	1.69		1.58
Average/season	2.25	1.0	4.88		

Status: Rare Spring Migrant and Occasional Fall Migrant

Dates:

- Spring: Earliest arrival = May 10, 2003 ♀ Cinder Flats & 2008 ♀ Buckhart Average arrival (8 years) w/range May 10 – 23 = May 18 Average departure (11 years) w/range May 13 – June 7 = May 24 Latest departure = June 7, 1990 ♀ Sediment Retention & 1992 ♀ Cinder Flats
- Fall: Earliest arrival = August 12, 1975 two Sangchris Average arrival (17 years) w/range August 12 – September 24 = August 31 Average departure (10 years) w/range August 22 – October 2 = September 16 Latest departure = October 2, 2002 juvenile, Cinder Flats (photograph)

Phalaropes were shorebirds in which the females had the brighter plumage, and males took care of the young. Red-necked Phalaropes swam like small ducks and spun in the water to feed. Sangamon County was not on the main flyaway for this species as they winter at sea and nest in the Arctic and Subarctic. I recorded it eleven times in **spring**, and they usually arrived late and most were females. The highest counts were only two: May 14 -16, 1996 and May 15, 1997. These birds were seen on Lake Springfield, and at mudflats or pools of water at the Cinder Flats, Sediment Retention, and Buckhart. There were three June dates all late spring migrants: female, June 1, 1986 at the Cinder Flats; female, June 7, 1990 at the Sediment Retention; and female, June 7, 1992 at the Cinder Flats. **Fall** birds were 4.4 times more numerous than spring, probably due to juveniles which might not be as accurate in their migrations. Other early fall arrivals were August 17, 1980 and August 15, 1999. The high counts for fall were: 5, September 4, 1980 and 5, September 12, 1987. Several sighting in fall were on sewer ponds. Phalaropes that landed on the lake had to be wary because gulls would attack them. Other late fall departures were: September 21, 2000: September 24, 2005; and September 27, 2009.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 606613 \bigcirc , 2 mi north Springfield along Sangamon River, May 22, 1977, coll. by HDB, wt. = 38.3 gms, ovary = 7.5 mm, gizzard with Coleoptera (Hydrophilidae).

Highest # Days/Season

 Spring
 3 (1996 & 2005)

 Summer
 1 (3 years)

 Fall
 12 (1980 & 1987)

Highest # Birds/Season

 Spring
 6 (1996)

 Summer
 1 (3 years)

 Fall
 35 (1980)

Red Phalarope

Phalaropus fulicarius

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	0/0	0/0	12/10 (9)	0/0	12/10*
Average/day			1.20		1.20
Average/season			1.33		

* = two were phalaropes not identified to species

Status: Very Rare Fall Migrant

Dates:

Fall: Earliest arrival = August 22, 1989 Sediment Retention
Average arrival (8 years) w/range August 22 – September 25 = September 13
Average departure (3 years) w/range October 3 – November 3 = October 19
Latest departure = November 3, 1992 Buffalo Sewer Pond

This was a shorebird that swam on lakes as well as waded on mudflats. The Red Phalarope breeds in the Arctic and winters at sea. I had eight records and two probables, and two addendum records. I put the two probable here because they were seen at a distance on Lake Springfield (dates were September 23, 1975 and September 14, 1979) and these should not be counted as confirmed records. If well seen the gray back, shorter neck and thicker bill will separate the Red from the Red-necked Phalarope. When phalaropes were seen on deeper water they appeared as small, whitish, plump, shorebirds somewhat like miniature gulls, except for their spinning. They flew short distances with zig-zaggy flight and made a small circle upon landing on the water. Many times they were harassed by gulls. One at the sewer ponds fed on water bugs from the surface. The Red Phalarope records were: Cinder Flats, September 11, 1972; Lake Springfield, September 19, 1982; Lake Springfield, October 3, 1982; 2, Lake Springfield, September 13, 1988; Sediment Retention, August 22, 1989; Buffalo sewer pond, October 21, 1990; Buffalo sewer pond, November 3, 1992 (photograph); 2, Lake Springfield, September 9, 2006. The last birds were run over by a jet skier, and one was probably killed, the other flew away. In the addendum two birds were both at Lake Springfield, September 25, 2007 and October 9, 2008.

Documentation: Photographic: IL. Sangamon Co., DO & drawings and notes HDB – on file ISM.

<u>Highest # Days/Season</u>		Highest # Birds/Season		
Fall	2 (1982)	Fall	2 (1982, 1988, 2006)	

Pomarine Jaeger Stercorarius pomarinus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	0/0	0/0	39/30 (4)	0/0	39/30
Average/day			1.30		1.30
Average/season					

Status: Very Rare Fall Migrant

Dates:

Fall: Earliest arrival = September 7, 1983 immature, Lake Springfield
Average arrival (4 years) w/range September 7 – November 8 = September 30
Average departure (3 years) w/range September 12 – November 26 = October 18
Latest departure = November 26, 1996 two immatures, Lake Springfield

In the study, the Pomarine Jaeger seemed to be the most expected one to occur in Sangamon County, and they all were at Lake Springfield. There were four records, with the 1996 records based on three individuals with overlapping dates. Obvious ways to know if a jaeger was present on Lake Springfield was the lack of gulls or finding the gulls cowering in one corner of the lake. Jaegers usually sat on the water, a very dark gull-like bird with long wings angled high in back. When taking flight the white in the underwings flashed. The 1983 September 7 –12 immature jaeger was fairly dark and had blunt tail projections. It was seen chasing Black Terns, an Osprey, crows, gulls and even a Barn Swallow. The 1988 October 6 – 15 jaeger was also an immature which I observed on five days. It had the white crescent on the underwing and spent a lot of time hiding behind the islands. It was eating small shad. The September 8, 1995 jaeger was a light phase adult (because of the light throat and dark breast band), probably in non-breeding plumage. It was seen bullying a thousand gulls into a bay. There were three immature jaegers seen in 1996, with one November 8 - 22, one November 15 - 26 and the last on November 26. These birds showed blunt tail projections, each bird had different lengths, and the double light crescents on the underwing. One bird was darker than the other two. Not all three were seen together but two were observed on nine different days from November 15 - 26, 1996 for a high count. They chased Bonaparte's and Ring billed Gulls; and one jaeger attacked a Herring Gull hitting it on the back and driving it away. The Pomarine Jaeger breeds in the Arctic and usually winters at sea.

Documentation: Photographic: IL. Sangamon Co., the 1988 and 1996 jaegers (DO) and descriptions and notes HDB – on file ISM.

Pomarine Jaegers in Sangamon County (all Lake Springfield)

1983 - immature, September 7 - 12
1988 - immature, October 6 - 15
1995 - adult, September 8
1996 - 3 immatures, November 8 - 26 (for specific dates see above)

Parasitic Jaeger

Stercorarius parasiticus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	0/0	2/2 (1)	2/2 (2) % jaeger sp?	0/0	4/4
Average/day		1.0	1.0		1.0
Average/season					

Status: Very Rare Migrant

Dates: One Record: near adult second/third summer, Lake Springfield, June 22 & 23, 1998; Plus two jaeger species ? probably parasitic? immature, Lake Springfield, November 28, 1973; immature, Lake Springfield, October 2, 1988.

The near adult occurred when Lake Springfield was closed because of Leptospirosis and there was much reduced boat traffic (in fact several interesting birds were seen during this period). The jaeger was a light phase with two short spikes coming off from the middle of the tail and a black cap. The head and bill seemed small in proportion to the bird's size. The jaeger mostly sat on the water, but I saw it chase Ring-billed Gulls and a Forster's Tern; and it ate two fish. The other two probable records were fly-bys, and I could not rule out Pomarine Jaeger, except they did not appear as large and powerful. Immature jaegers are notoriously difficult to identify, and those records should be considered jaeger species? Most jaegers migrated at sea, but a few came south from the Great Lakes in fall. The June record was unique for this study. However, note that an Arctic Tern, another Arctic species was seen in June at Lake Springfield.

Documentation: Drawing and written description: IL. Sangamon Co., HDB - on file ISM.

[Long-tailed Jaeger]

Stercorarius longicaudus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	0/0	0/0	2/2 % jaeger sp?	0/0	2/2
Average/day			1.0		1.0
Average/season					

Status: Hypothetical: Very Rare Fall Migrant?

Dates: Two Potential Records: two jaeger species?probably Long-tailed? immature, Lake Springfield, October 17, 2002; immature, Lake Springfield, October 1, 2004. Plus one potential in addendum: immature, Lake Springfield, September 4, 2008.

The 2008 bird flew by Marine Pt. after chasing up a flock of gulls. It had very little white in the dorsal wing and slightly rounded tail projections, and the plumage was a mixture of grays and browns. Both of the other jaegers were sitting on the water in the evening. The 2002 bird was small with some tail projections. Ring-billed Gulls came and hovered over it, but it never flew. I watched this bird until it was dark. The 2004 bird was small and appeared dark. It flew for a while far out on the lake, but was too distant for positive identification. Long-tailed Jaegers breed in the Arctic and winter at sea.

Documentation: Notes and descriptions: IL. Sangamon Co., HDB – on file ISM.

Laughing Gull

Larus atricilla

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	74/71 (20)	74/66 (18)	89/82 (19)	16/15 (4)	253/234
Average/day	1.04	1.12	1.09	1.07	1.08
Average/season	3.70	4.11	4.68	4.0	

Status: Rare Migrant and Summer Resident (non-breeding) and Very Rare in Winter.

Dates:

- Spring: Earliest arrival = April 7, 1991 adult Sediment Retention Average arrival (20 years) w/range April 7 – May 26 = May 5 Average departure (20 years) w/range May 8 – June 10 = May 27 Latest departure = June 10, 1984 adult Lake Springfield (arbitrary due to SR)
- Fall: Earliest arrival = June 16, 1987 immature Cinder Flats (arbitrary due to SR) Average arrival (23 years) w/range June 16 – October 2 = July 25 Average departure (18 years) w/range August 27 – November 12 = September 27 Latest departure = November 12, 2006 immature Lake Springfield (note WR)

The first Sangamon County record for this primarily coastal gull was May 26, 1971 of an adult at Lake Springfield, which I collected the following day. Why the Laughing Gull wandered inland in fairly large numbers remains unknown, but I had seen it in 29 of 37 years and all three years of the addendum which totaled 113 records (see Table 21). Most years it was missed occurred before 1979, and from 1979 on, I missed this gull only in 1981. This means that occurrences were most likely increasing. Plus in nearly all years observed, it was seen multiple times. This gull was almost always seen at Lake Springfield, except May 25, 1989 and May 1, 2000 at Sangchris. It did not always arrive in spring; there were nine years in which this gull arrived in summer (June or July). Of the 20 **spring** arrival dates, six were in April the rest were in May. One adult with almost a full hood was present until March 9, 2001, but it was a carry over from winter. High counts in spring were: adult and immature, May 7, 1986; two adults, May 26, 1995; and adult and immature, May 11, 2006. An odd individual seen at Sangchris April 11, and then at the Cinder Flats, April 15, 1992, had an orangish bill with a black tip and a hood of mostly gray, was probably a hybrid with Ring-billed Gull. Another similar bird was photographed on March 12, 2008. There have been as many Laughing Gulls in **summer** as spring, including many more immatures and juveniles, which suggested post-breeding dispersal. The most seen in a day in summer was two: July 10, 1985; July 3, 1989; June 8 & 9, 1994; June 16-18, 2003; and July 2, 2004. Molt was noted on an adult losing the dark color of the hood July 19, 1992; and another adult was showing wing molt July 22, 1998. Fall migration also presented a complex pattern for this species with a wide range of dates of arrival and departures. I did not find this gull in fall until 1979 and still missed it nine more fall seasons after that. However, I had more sightings in fall than either spring or summer. The maximum count was 3 immatures at the Cinder Flats on September 12, 1994. On October 31, 1998 an adult in winter plumage at Lake Springfield came to chumming with Ring-billed Gulls. Also one immature was resting with other gulls on the roof of a boathouse October 2, 2005. I never expected to record this gull in winter, but did so in four

years: immature standing on the ice with other gulls, December 13 - 22, 1980; an adult on the ice, January 2, 1989; an adult which came with a warming trend December 29, 1990; and a virtual mid-winter invasion that involved three birds, two winter adults on January 16 and an adult in changing plumage January 23 – February 1, 2001 (all at Lake Springfield). It was difficult to imagine the conditions that triggered this movement. Laughing Gulls winter from the Gulf and southern Atlantic coasts south to the northeast coast of South America.

Documentation: Specimen =1) IL. Sangamon Co., ISM# 604789 adult ♂, Lake Springfield near dam, May 27, 1971, coll. by HDB, testes = 15 mm, plus photographs and drawings – on file ISM.

1971	adult	May 26 – 27	Lake Springfield
1972	adult	April 30 - May 1	Lake Springfield
	adult	May 3 – 25	Lake Springfield
	immature	June 20	Lake Springfield
1979	immature	June 28 – July 12	Lake Springfield
	adult, winter		
	plumage	September 27 – October 3	Lake Springfield
	adult	May 14	Lake Springfield
	second winter	August 23 – 25	Cinder Flats
1980	adult & immature	August 29 – September 3	Cinder Flats
	immature	December 13 – 22	Lake Springfield
	adult	May 15	Cinder Flats
1982	immature	May 17	Cinder Flats
	immature	September 27 – 30	Lake Springfield
1983	second year	July 7	Cinder Flats
	adult	June 10	Lake Springfield
1984	second year	June 17	Cinder Flats
	immature	September 10 – 14	Lake Springfield
	two adults in	July 10	Lake Springfield
1985	worn plumage	5	1 3
	immature	September 2 – 8	Cinder Flats
	adult	April 25	Cinder Flats
1986	adult	May 7 – 12	Lake Springfield
1700	immature	May 7 – 10	Lake Springfield
	immature	September 28 – October 6	Cinder Flats
	adult	May 15	Lake Springfield
1987	adult	May 19	Cinder Flats
1707	adult	June 6 – 7	Cinder Flats
	immature	June 16	Cinder Flats
	adult	May 14 – 15	Sediment Retention Facility
1988	adult	June 18 – 20	Lake Springfield
	immature	September 2 – 25	Lake Springfield
	adult	January 2	Lake Springfield
	adult	April 27	beach Lake Springfield
	subadult	May 19	Sediment Retention Facility
1989	adult	May 25	Sangchris
	adult & immature	July 3	Lake Springfield – w/adult July 5
	two immatures	August 20	Lake Springfield– w/ one to August 27

Table 21. Laughing Gull Records in Sangamon County by Year

	adult	May 7	Cinder Flats
1990	adult	May 21 – 25	Sediment Retention Facility
	winter adult	December 29	Lake Springfield
	adult	April 7	Sediment Retention Facility
1001	adult	May 6 – 11	Cinder Flats
1991	adult	May 18 – 19	Lake Springfield
	adult	May 30 – 31	Sediment Retention Facility
	adult? possible		
	hybrid w/ RB	April 11 – 15	Sangchris & Cinder Flats
	Gull		
	adult	May 19 – 26	Cinder Flats
1992	winter adult	June 6	beach Lake Springfield
	adult starting	July 19	Lake Springfield
	molt		
	immature	September 11	Lake Springfield
	adult	September 18	Cinder Flats
1993	first year	July 8 – 11	Cinder Flats
	adult &	June 8 – 9	Cinder Flats
	immature		
	immature	June 23 – 24	Lake Springfield
1994	immature	August 30	Lake Springfield
	immature	September 5 – 8	Lake Springfield
	three immatures	September 12	Lake Springfield
	adult	May 24 – 28	South Fork – w/ 2 adults May 26
	adult	June 11 & 27	Lake Springfield
1995	immature	June 12	Lake Springfield
1775	immature	September 4 – 23	Cinder Flats
	immature	November 9	Lake Springfield
	adult	May 7 – 8	beach Lake Springfield
1996	adult	August 20	beach Lake Springfield
	adult	May 4	Sangchris
	adult	May 24	beach Lake Springfield
1997	immature	August 21 – 22	Lake Springfield
	immature	September 1 – 17	Lake Springfield
	subadult	June 16	Lake Springfield
	adult	June 20 – 23	Cinder Flats
	immature	June 30	Cinder Flats
1998	adult w/molt in		
	wings	July 22	Lake Springfield
	adult	October 22 – 31	Lake Springfield
	adult	April 20	Lake Springfield
1999	adult	May 11 – 12	Cinder Flats
L	addit		

Table 21. Laughing Gull Records in Sangamon County by Year (continued)

	adult	May 1	Sangchris
	adult	May 11	Lick Creek
2000	adult	May 18	Lake Springfield
2000	immature	June 18 – 19	Lake Springfield
	adult	June 21 – 27	Lake Springfield
	immature	October 7	Cinder Flats
	two winter adults	January 16	Lake Springfield
2001	adult in changing plumage	January 23 – March 9 - (became adult plumaged)	Lake Springfield
2001	adult	May 1	Cinder Flats
	adult	May 20 – 21	Lake Springfield
	adult	June 7 – 9	Cinder Flats
	second year	June 15	beach Lake Springfield
	adult	July 5	Cinder Flats
	adult	June 2	Lake Springfield
2002	non-breeding plumage adult	June 25	Lake Springfield
	adult	July 3 – 5	Lake Springfield
	juvenile	September 4 – 5	Lake Springfield
	non-breeding adult	June 13 – 18	Lake Springfield
	adult	June 16 – 18	Lake Springfield
2003	non-breeding adult	August 4 – 25	Lake Springfield
	non-breeding adult	September 9	Lake Springfield
2004	adult	June 16	Cinder Flats
2004	two adults	July 2	Cinder Flats
2005	adult	May 9	beach Lake Springfield
2003	immature	October 2 – 6	south end of Lake Springfield
	second summer	May 10 – 15	Lake Springfield
2006	adult	May 11 – 18	Lake Springfield
2000	immature	May 30 – June 3	Cinder Flats
	juvenile	August 23 – 30	Lake Springfield
	immature	November 12	Lake Springfield

Table 21. Laughing Gull Records in Sangamon County by Year (continued)

Table 21. Laughing Gull Records in Sangamon County by Year (continued)

Addendum

	adult	April 26	beach, Lake Springfield
2007	adult	May 6	Lake Springfield
	adult	June 28	Lake Springfield
	adult? possible		
	hybrid w/ RB Gull?	March 12	Lake Springfield
2008	immature	May 30	Lake Springfield
	adult	June 1 – 8	Lake Springfield
	juvenile	June 6 – 8	Lake Springfield
	adult	April 23 – May 25	Cinder Flats
2009	adult	June 21	Lake Springfield
	juvenile	September 25 – November 1	Lake Springfield

Franklin's Gull

Larus pipixcan

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	960/241 (33)	269/147 (26)	7766/1207 (37)	18/14 (5)	9013/1609
Average/day	3.98	1.83	6.43	1.29	5.60
Average/season	29.09	10.35	209.89	3.60	

Status: Occasional Spring Migrant, Fairly Common Fall Migrant, Rare Summer Resident (non-breeding) and Very Rare Winter Resident

Dates:

- Spring: Earliest arrival = March 15, 2001 adult Lake Springfield Average arrival (34 years) w/range March 15 – May 27 = April 19 Average departure (33 years) w/range April 18 – June 30 = June 3 Latest departure = June 30, 1982 im. Lake Springfield (arbitrary due to SR)
- Fall: Earliest arrival = July 3, 1992 im. Lake Springfield (arbitrary due to SR) Average arrival (38 years) w/range July 3 – October 21 = August 30 Average departure (38 years) w/range October 15 – December 8 = November 12 Latest departure = December 8, 1998 Lake Springfield (also see WR)

Though this was a Great Plains species, the Franklin's Gull was fairly regular as a migrant in this county. It was missed in only four spring seasons and seen every fall. When adults arrived in spring showing the pink blush (March 15 – April 23), it was the most striking of all the gulls. Arrival times varied with 9 years in March, 15 years in April, and 9 years in May, and probably were associated with the weather, the winds and weather fronts that drifted the gulls eastward. Hence, I used this gull as an indicator that shorebirds could be present because they likewise migrated through the Great Plains in spring. These gulls used the thermals, and there were 17 adults circling and migrating over Springfield on May 5, 2003. Occasionally, they sat in the fields with other gulls as one did on April 12, 2001. High counts for spring were: 26, May 30, 1982; 48, May 17, 1986; 22, May 16, 1996; 32, May 27, 2001; and 26, May 27, 2004. The timing of the end of spring migration was not always clear and immature gulls straggled into June and July. There were definite problems trying to ascertain the status of many of these summer birds: 1977 - immatures July 4 – 6; 1983 - immature June 28 & 29; 1985 - immature July 4 – 15; 1987 - immatures June 10 – July 3; 1988 - two immatures June 5 & 23; 1991 immatures June 23 – July 8; 1996 - immatures June 24 & 25; 1997 - immature July 10. High counts for summer were 13, June 4, 2001 and 11, June 5, 2004. It was best to probably call these birds non-breeding summer residents (or wanderers). This also clouded the fall arrival date with some arriving in July and others in October. There did seem to be a differential migration by age groups, while in spring the adults came first (March, April & early May) and immatures were later (late May & June), in fall the immatures were early (July, August & September and early October) and the flocks of adults were later (October & November). Also, there were juveniles (young of the year), but they were rare, mostly brown plumaged, and one was at Lake Springfield on September 29, 2005. Fall numbers were eight times spring numbers. High counts for fall were: 100, October 20, 1970; 100, October 23, 1979; 66, September 24, 1991; 220,

October 30, 1995; 110, November 1, 1995; 108, October 29, 1996; 130, October 10, 1997; and 80, November 21, 1998. The higher numbers were less recorded in the last few years of the study, and this might be due to so many other large lakes created in central Illinois in recent times. When these gulls came into Lake Springfield they flew around the lake just above the water, weaving in a distinctive flying pattern which was easy to pick out. They left the lake and migrated in kettles on thermals like hawks, i.e. October 3, 1980 and September 24, 1991. Most departure dates were in November (32 years), but three were in October and two were in December (see above and December 2, 1977). **Winter** records at Lake Springfield were: adult in breeding plumage with rosy blush, December 24, 1975 – January 6, 1976; immature, December 21, 1978; and adult, December 30, 1980. These gulls were fairly long distant migrants and winter along the west coast of South America.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

Highest # Days/Season

Spring24 (1996 & 2001)Summer24 (2004)Fall77 (1986)Winter6 (1975)

Highest # Birds/Season

Spring194 (2001)Summer72 (2004)Fall1080 (1995)Winter9 (1998)

Little Gull

Larus minutus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	3/3 (2)	0/0	15/15 (5)	11/11 (2)	29/29
Average/day	1.0		1.0	1.0	1.0
Average/season	1.5		3.0	5.5	

Status: Very Rare Migrant and Winter Resident

Dates:

- Spring: Earliest arrival = April 3, 2000 adult Lake Springfield Average arrival (2 years) w/range April 3 – May 7 = April 20 Latest departure = May 7, 2003 immature Lake Springfield
- Fall: Earliest arrival = September 16, 1994 juvenile Lake Springfield
 Average arrival (5 years) w/range September 16 November 26 = October 20
 Average departure (3 years) w/range October 16 December 20 = November 22
 Latest departure = January 1, 2008 adult Lake Springfield

This small gull was Eurasian in origin, but was Holarctic more recently. The data used here was based on seven records during the study, plus four records in the addendum (see Table 22). The first record for the Little Gull in Sangamon County was an adult November 26 - December 2, 1991, and like all the records for this species it was from Lake Springfield. There were five adults (3 in fall/winter and 2 in spring) and six immatures/juveniles (3 in fall and 3 in spring). One adult in 1992 stayed a month from November 20 to December 20, while all immatures stayed only 1-3 days. The trick to finding this gull was picking them out of flocks of Bonaparte's Gulls. However, the very dark underwings of the adult Little Gull made it relatively easy to spot if in flight. I had also noted that the flight of this more rounded-winged gull was rather floppy suggesting a Short-eared Owl, but not as exaggerated. They also had a fluttering flight at times. Immatures/ juveniles were more problematic, although the black W-pattern and lack of a dark trailing edge on the wings, the dark collar (on juveniles), the small size and small bill, if seen well, helped identify these gulls. I noted that the April 6, 2000 adult was picking food off the water, while in flight. The Little Gull in North America breeds along west Hudson Bay and mostly winters on the coast of the mid-Atlantic States.

Documentation: Photographic: IL. Sangamon Co., HDB & DO - on file ISM.

1991	adult	November 26 – December 2 (photo)
1992	adult	November 20 – December 20
1994	juvenile	September 16
2000	adult	April 3 – 6 (found with B. Dyer)
2003	second summer	May 7
2005	first winter	October 15 – 16 (photo)
2006	juvenile	September 23

Table 22. Little Gull Records in Sangamon County (all from Lake Springfield)

Addendum:

2007	first summer first summer	April 8 – 10 (photo) April 24 (photo)
2007-08	adult	December 13 – January 1 (photo)
2009	adult	April 23

Bonaparte's Gull

Larus philadelphia

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	92640/1548 (36)	53/52 (9)	166561/1900 (37)	68154/959 (36)	327408/4459
Average/day	59.84	1.02	87.66	71.07	73.43
Average/season	2573.33	5.89	4501.65	1893.17	

Status: Very Common Fall Migrant, Common Spring Migrant and Winter Resident and Rare (non-breeding) Summer Resident

Dates:

- Fall: Earliest arrival = July 24, 2003 two adults Lake Springfield
 Average arrival (37 years) w/range August 9 October 19 = September 29
 Average departure (36 years) w/range November 28 January 29 = December 28
 Latest departure = January 29, 2006 two Lake Springfield (arbitrary due to WR)
- Spring: Earliest arrival = January 15, 1999 15 Lake Springfield Average arrival (35 years) w/range January 15 – April 14 = March 12 Average departure (37 years) w/range April 21 – May 28 = May 12 Latest departure = May 28, 1998 immature Lake Springfield (arbitrary due to SR)

This was the common, small gull with a black head in breeding plumage and a light panel on the leading edge of the wing in adults. At the beginning of the study, Bonaparte's Gulls were seen almost exclusively on Lake Springfield. Later other bodies of water attracted them such as Sangchris and Buckhart, and eventually even sewer ponds and wet fields. Fall had the largest numbers with 1.8 to 1 in spring. Fall arrival times varied from July to mid-October. Most of the early gulls were juveniles, and some may disperse before the adults arrive. I first encountered this gull in fresh juvenile plumage (with brown back and crown) on August 23, 1994. The earliest juveniles were August 12, 1996 & 2004 and the latest was November 19, 1996. Also, I photographed another juvenile July 29, 2009 in the addendum at Buckhart. The fall arrival times for the main flight of mostly adults (if juvenile dates were not used) changed over the period of the study. From 1970 to 1988 most arrivals were in early October (average October 4) and from 1989 to 2009 most were in the second or third week of September (average September 24). On October 28, 2000 at Lake Springfield, one adult was oddly in full breeding plumage. One adult in basic plumage had bright pink ventrally on November 14, 1991 at the Cinder Flats. A melanistic adult individual was seen and later photographed (DO) on Lake Springfield from November 22 – December 2, 1991; and this may be the only one recorded (see Bohlen, 1993a). A flock of these gulls were seen harassing an immature Bald Eagle on the lake November 16, 1978, and these gulls typically dived at loons on the water. Occasionally, a flock went into a feeding frenzy with much calling and diving at schools of small fish. High counts in fall were: 500, November 11 – 27, 1991; 1000, November 7, 1992; 700, November 16 & 17, 1993; 500, October 29 - November 11, 1997; and 500, October 21 & 27, 2003. Early in the study, the Bonaparte's Gull usually departed due to the lake freezing in December, but from 1990 (when the numbers went up in winter) to 2006 it was usually January before they left. The winter of 2005-06 they stayed all winter. At times they left en mass with severe cold weather. Most of

these gulls in late fall and winter were adults. High counts for winter were: 400, December 2, 1991; 500, December 1, 1994; 225, February 18, 1998; 500, December 3, 2000; and 500, January 5 & 6, 2007. **Spring** arrivals became earlier, especially by 1996, when the arrival changed from March to February. By the spring equinox, a few of these gulls had attained the black head (alternate plumage), and I had noted rosy blush on three individuals March 24, 1987; March 25, 2003; and April 7, 1998. On April 5, 2004, a flock of these gulls were sitting on power lines over the lake. By 1997, these gulls were feeding in dry fields with Ring-billed Gulls, which I had not seen much before. High counts for spring were: 600, April 3, 1995; 500, March 25 – 28, 2003; 850, April 13, 2005; and 600, April 9, 2006. A few immatures were seen in **summer** in eight years, the first in 1975 and the last in 2006. They usually hung around with other non-breeding gulls at the lake (see Table 23). The most, however, seen in summer were two adults July 24, 2003. This gull nests in coniferous woodland, using the flat branches of spruce trees, in Canada and Alaska.

Documentation: Specimens = 3) IL. Sangamon Co., ISM# 660557 adult \Diamond , LSpfld, December 14, 1999, coll. by HDB, wt. = 209.6 gms, testes = 2.5 mm; ISM# 606572 immature \heartsuit , LSpfld, May 11, 1977, coll. by HDB, wt. = 121.6 gms, ovary = 7 mm; ISM# 661849 immature \heartsuit , LSpfld, November 21, 2006, coll. by HDB, wt. = 144.8 gms, ovary = 11 mm.

Highest # Days/Season	Highest # Birds/Season
Spring 75 (1999)	Spring 11509 (1999)
Summer 28 (2000)	Summer 28 (2000)
Fall 72 (2006)	Fall 16226 (1992)
Winter 78 (2005)	Winter 12464 (2006)

Table 23. Bonaparte's Gull Records in Summer in Sangamon County (all at Lake Springfield)

1975	immature	June 3
1979	immature	June 20 – July 3
1982	immature	July 5
1992	immature	June 1 – 13
1998	immature	June 17 & 21
1999	immature	May 29 – June 3
2000	immature	May 1 – June 30
2003	two adults	July 24
2006	immature	June 21

Mew Gull

Larus canus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	2/2 (2)	0/0	1/1 (1)	0/0	3/3
Average/day	1.0		1.0		1.0
Average/season					

Status: Very Rare Migrant

Dates: Three Records: adult, Sangchris, April 30, 1992; adult, beach Lake Springfield, May 23, 1996; near adult, Lake Springfield, November 10, 1997.

A wanderer from the west or northwestern US, the Mew Gull was most like the Ring-billed Gull; and good views were needed to separate the two species. Field marks to examine on Mew Gull were the darker back, smaller unmarked bill (in adults), the white in the wing tips and the dark eye with the red orbital ring. They had a distinctive wing tip pattern that gave a sock- like effect in flight. Both the spring records were of breeding plumage adults, but the fall bird seemingly was still in some immature plumage with a black tipped bill, and heavy streaking on the head and breast. The remainder of the body looked like a winter adult. All of these gulls were seen fairly close sitting and in flight. Both spring Mew Gulls were somewhat harassed by Ring-billed Gulls. The subspecies is *L. c. brachyrhynchus*.

Documentation: Drawings and notes: IL. Sangamon Co., HDB – on file ISM.

Ring-billed Gull

Larus delawarensis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	923263/2929 (37)	67029/1369 (33)	1374440/3780 (37)	1132145/2237(37)	3496877/10315
Average/day	315.21	48.96	363.61	506.10	339.01
Average/season	24953.05	2031.18	37147.03	30598.51	

Status: Very Common Migrant and Winter Resident and Uncommon (non-breeding) Summer Resident

Dates:

- Spring: Earliest arrival = January 18, 1986 (arbitrary due to WR) Average arrival (18 years) w/range January 18 – March 4 = February 15 Average departure (34 years) w/range April 14 – May 31 = May 14 Latest departure = May 31, 1981 & 1984 (arbitrary due to SR)
- Fall: Earliest arrival = June 24, 1984 three Cinder Flats (arbitrary due to SR) Average arrival (36 years) w/range June 24 – September 14 = July 25 Average departure (10 years) w/range December 18 – January 31 = January 8 Latest departure = January 31, 1979 (arbitrary due to WR)

This was the gull at Lake Springfield, the one at the malls and fast food places, the one in the fields following the tractors, and the one at Washington Park. The Ring-billed Gull had adapted to humans, and humans fed them and watched their antics. It was 3rd in total numbers and 10th in numbers of days observed with most counted by conservative estimates. Early in the study there were not so many, and they usually did not stay for summer, they left in winter when the ice formed, and **spring** migration was more obvious. There had always been a surge in numbers when winter finally broke. High counts for spring were: 2,000, March 25, 1982; 2,500, March 8, 1990; 3,000, March 7, 1991; 5,000, March 19, 1994; 8,000, March 23, 1998; and 10,000, March 29, 2003. Some birds in spring showed a pink blush in their plumage, this usually occurred in mid-March, but was seen from January 29 to April 2. By mid-May (sometimes by April 20), there were far fewer gulls and the ones remaining were immatures. The adults had gone on north to the Great Lakes (including northern Illinois) and Canada to breed. Not surprising some color tagged gulls at Lake Springfield proved that some individuals came from the Chicago area. There were no gulls in summer in 1970, 1973, 1975, and 1976, and numbers were low in summer until about 1982 (see Figure 17). The highest daily summer count was 450, July 16, 2006. Juveniles, birds hatched earlier in the year, had a distinctive plumage. They arrived at Lake Springfield on average July 11 (26 years of sightings) with extremes of June 22 and July 25. Adults also began to return in **fall**, and the gulls fell into a pattern of dispersing in the morning to fields and other places away from the lake, and then coming back in the evening to roost near the islands in the largest bay. So all day, there may be only a few gulls on the lake and in the evening thousands streamed in from several directions in variable sized flocks. By late fall, they formed a large white crescent on the lake in the evening with some puddle ducks associated with them, but the loons, grebes, and diving ducks usually sat outside the gull flock. High counts for fall were: 800, November 1, 1971; 1,000, October 26, 1977; 1,500, November 13, 1982; 2,500, November

16, 1986; 10,000, November 21, 1992; 1,200, September 29, 1993; and 5,000, November 21, 2004. Winter numbers used to fluctuate dramatically, but since 1991 the Ring-bills stayed all winter no matter what the weather. The last year when numbers dropped really low in winter was 1984. These minimum numbers usually occurred in January with maximum ice. High counts in winter were: 1,000, December 4, 1976; 2,500, December 4, 1980; 2,000, February 14, 1984; 5,000, December 13, 1991; 8,000, December 5, 1994; 6,000, February 24, 1998; and 5,000, January 20 & 30, 2005. Sometimes, I thought that there were so many Ring-billed Gulls that they excluded other species of gulls. Most of the gulls in winter were adults. Several leucistic gulls were seen: one all white, November 17 – 28, 1984; one mostly white with tan wing tips December 5, 1995; another that gave the impression of Kumlien's Gull January 1 & 8, 1994; one all white with brownish tail February 28, 1994; and an adult with white wing tips December 3, 2005. These gulls ate about anything and liked to steal fish from coots, diving ducks and other gulls especially smaller gulls. They were attracted to shad kills that occurred below the dam at Lake Springfield.

Documentation: Specimens = 9) IL. Sangamon Co., adults & near adults = 4, Lake Springfield, February 19 – December 13, $2 \stackrel{\frown}{\circ} \stackrel{\frown}{\circ} \text{wts.} = 570.6 - 629.8 \text{ gms}$, testes = 6 - 9 mm, $2 \stackrel{\frown}{\circ} \stackrel{\frown}{\circ} \text{wts.} = 536.1 - 545.0 \text{ gms}$, ovary = 21.5 mm; immatures = 5, LSpfld, October 8 – November 10, $4 \stackrel{\frown}{\circ} \stackrel{\frown}{\circ} \text{wts.} = 311.0 - 376.0 \text{ gms}$, testes = 4 - 5.5 mm, $1 \stackrel{\frown}{\circ} ?$, LSpfld, October 21, wt. = 556.5 gms.

Highest # Days/Season

Spring92 (8 years) maxedSummer61 (7 years) maxedFall122 (5 years) maxedWinter89 (2003)

Highest # Birds/Season

Spring88280 (2003)Summer7580 (2004)Fall79900 (2003)Winter107790 (1997)

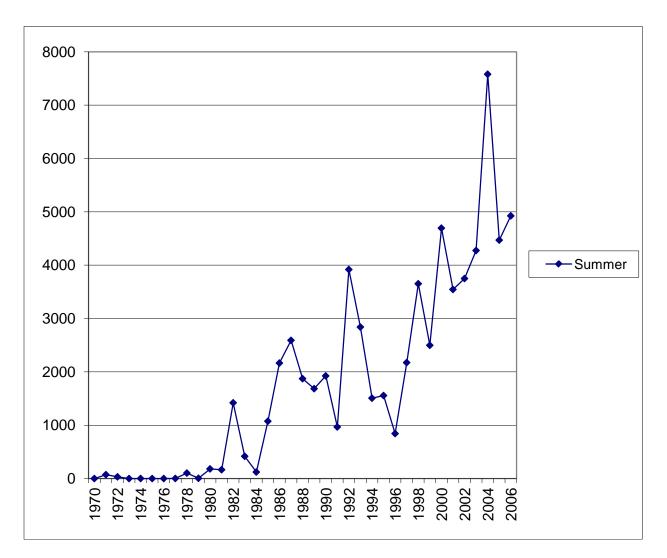


Figure 17. Summer Numbers of Ring-billed Gulls

California Gull

Larus californicus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	13/13 (3)	14/14 (3)	1/1 (1)	2/2 (2)	30/30
Average/day	1.0	1.0	1.0	1.0	1.0
Average/season					

Status: Very Rare Migrant, (non-breeding) Summer and Winter Resident

Dates:

- Spring: Earliest arrival = May 5, 1990 near adult Sangchris Average arrival (4 years) w/range May 5 – June 6 = May 20
- **Fall:** Average departure (5 years) w/range June 14 December 20 = **September 29** Latest departure = **December 20**, 2000 immature Lake Springfield

This vagrant from the west was a fairly straight forward identification as an adult, but was more difficult to identify as an immature. All records were of single birds (see Table 24). Spring and summer records (six of the nine records) probably stemmed from over-shoots, since they wintered on the west coast and flew (east) inland to breed. The other three were all immatures: October 18, 2001; December 5, 1992; and December 20, 2000. These could have occurred as a 90 degree deflection to the east when migrating from the breeding grounds. Actually, one record, a first summer bird in worn plumage, at Lake Springfield accounted for 21 of 30 total numbers, since it stayed from May 16 – June 14, 1998. In 1985, I found an adult on July 9 at the Cinder Flats, and later (July 30-31) I found another near adult in the same place that caused a stir because it was retaining some immature all dark primaries and a black tail. This suggested another species of gull that was even rarer (R. Goetz helped identify this gull). Other specific records of California Gulls were an adult at the Cinder Flats June 6, 1987 and third year at Lake Springfield May 20, 2000. Plus, there was a subadult at the Cinder Flats on March 31, 2009 in the addendum. This was a species that could be easily over-looked and great care was taken when studying flocks of gulls. There are two subspecies, the more northern L. c. albertaensis, I think, is probably the one that occurs most often in Illinois; but L. c. californicus could also occur and specimens are needed to make sure.

Documentation: Photographic: IL. Sangamon Co., July 9, 1985 gull (DO) and October 18, 2001 gull (HDB) plus drawings and notes HDB – on file ISM.

1005	adult	July 9	Cinder Flats
1985	subadult	July 30 & 31	Cinder Flats
1987	adult	June 6	Cinder Flats
1990	subadult	May 5	Sangchris
1992	immature	December 5	Lake Springfield
1998	first summer	May 16 – June 14	Lake Springfield
2000	subadult immature	May 20 December 20	North Pt. Lake Springfield
2001	immature	October 18	Cinder Flats
2009	subadult	March 31	Cinder Flats
2010	second year	September 25	Cinder Flats
2011	first summer	April 4	Lake Springfield

Table 24. Records of California Gulls in Sangamon County

Herring Gull

Larus argentatus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	14570/1433 (37)	138/122 (14)	5887/1581 (37)	90438/2268 (37)	111033/5404
Average/day	10.17	1.13	3.72	39.88	20.55
Average/season	393.78	9.86	159.11	2444.27	

Status: Common Winter Resident, Uncommon Migrant and Rare Summer Resident (nonbreeding)

Dates:

Fall:Earliest arrival = July 7, 1984 adult Cinder Flats
Average arrival (37 years) w/range July 7 – October 29 = September 9

Spring: Average departure (37 years) w/range March 25 – June 5 = May 14 Latest departure = June 5, 1982 immature Lake Springfield

This was the most numerous (22nd of all species) of the large gulls in the county, but they were out numbered by the smaller Ring-billed and Bonaparte's Gulls. The Herring Gull had distinctive plumages for juveniles through 4th year adults. Even though I think of this gull as a winter resident, there were 14 years of July and August fall arrivals. Besides the adult in July (above), there was one immature July 21, 1985. However, most arrivals in fall which had more continuous numbers were in September (17 years) and October (6 years). High counts for fall were: 50, November 30, 1976; 75, November 30, 1985; and 20, October 23, 2004. Numbers in fall and spring dropped in the mid-1980s for unknown reasons. I noted 8 circling Lake Springfield on October 3, 1998 and then flying on, maybe the reason few were seen in fall. These gulls were very graceful on the wing, and on the windy day of October 30, 2004, one adult could hold its wings out while it literally walked on water to feed. Maximum numbers of this gull were associated with ice on Lake Springfield, and when the ice melted they left. As a result, there were considerable fluctuations within and between the winter season(s). These gulls sat on the ice, and either took fish from the lake or by following diving ducks stole their food. I watched one of these gulls kill and eat a Hooded Merganser on January 6, 1979; and one was eating a dead Common Merganser on February 13, 2004. However, one eating another dead Herring Gull on November 7, 1984 seemed gruesome! High counts for winter were: 300, January 31, 1974; 600, December 27, 1978; 1200, January 10, 1981; 500, January 1, 1985; 1000, January 30 -February 1, 2005; and 2000, February 4 & 12, 2010. Some winters in maximum ice periods, the Herring Gull out-numbered the Ring-billed Gull, although this was more true in the 1970s than later. Most of the winter residents (mostly adults) moved north in early spring from late January to March. I detected gulls from further south especially from April 2 - 25, when small flocks of immatures and subadults were moving north. Records include 15, April 11, 1980 and 40, April 25, 2003. High counts for spring were: 200, March 4, 1977; 1000, March 9, 1979; 400, March 1, 1980; and 600, March 9, 1982. There were stragglers in summer in 12 years, some adults and some ratty-looking immatures in heavy molt (see Table 25). The Herring Gull breeds as close as Chicago. The subspecies in North America is L. a. smithsonianus, which may be a separate species from the European Herring Gull.

Documentation: Specimens = 3) IL. Sangamon Co., ISM# 607082 adult 3° , Cinder Flats, March 19, 1979, coll. by HDB, wt. = 1067.9 gms, testes = 6 mm; ISM# 606444 first winter sex?, LSpfld, December 14, 1975, coll. by W.Hammel; ISM# 608171 first winter 3° , Cinder Flats, December 12, 1985, coll. by HDB, wt. = 1233.5 gms, testes = 4 mm.

Highest	# Days/Season	Highest	# Birds/Season
Spring	64 (1979)	Spring	2666 (1980)
Summer	35 (1990)	Summer	46 (1990)
Fall	84 (1989)	Fall	463 (1977)
Winter	86 (2003)	Winter	11686 (1980)

Table 25. Herring Gulls in Summer in Sangamon County

1978adult at Lake SpringfieldJune 191980adult at Cinder FlatsJune 2719822 immatures at Lake Springfield until June 5one all summer until August 111984adult at Cinder FlatsJuly 7 & 9 = fall migrant1985immature at Cinder FlatsJuly 21 & 23 = fall migrant1986adult at Sediment RetentionJune 30 & July 15,1987adult at Sediment Retention & CinderJune 1 – August 9 and 2 immatures June 1619901-2 immatures at Sediment Retention & CinderMay 31 through August 91994immature at Lake SpringfieldJune 6 & 111995immature at Beach HouseMay to June 1 – 112000second year at SangchrisJune 292001immature in molt at Lake SpringfieldJune 8 – 102004adult at Lake SpringfieldJune 14 – September 17 (photo)			
19822 immatures at Lake Springfield until June 5one all summer until August 111984adult at Cinder FlatsJuly 7 & 9 = fall migrant1985immature at Cinder FlatsJuly 21 & 23 = fall migrant1987adult at Sediment RetentionJune 30 & July 15,1989immature at Lake SpringfieldJune 1 – August 9 and 2 immatures June 1619901-2 immatures at Sediment Retention & Cinder FlatsMay 31 through August 91994immature at Lake SpringfieldJune 6 & 111999immature at Beach HouseMay to June 1 – 112000second year at SangchrisJune 292001immature in molt at Lake SpringfieldJune 8 – 102004adult at Lake SpringfieldMay 31 – June 17 and immature June 20	1978	adult at Lake Springfield	June 19
1984adult at Cinder FlatsJuly 7 & 9 = fall migrant1985immature at Cinder FlatsJuly 21 & 23 = fall migrant1987adult at Sediment RetentionJune 30 & July 15,1989immature at Lake SpringfieldJune 1 – August 9 and 2 immatures June 1619901-2 immatures at Sediment Retention & Cinder FlatsMay 31 through August 91994immature at Lake SpringfieldJune 6 & 111999immature at Beach HouseMay to June 1 – 112000second year at SangchrisJune 292001immature in molt at Lake SpringfieldJune 8 – 102004adult at Lake SpringfieldMay 31 – June 17 and immature June 20	1980	adult at Cinder Flats	June 27
1985immature at Cinder FlatsJuly 21 & 23 = fall migrant1987adult at Sediment RetentionJune 30 & July 15,1989immature at Lake SpringfieldJune 1 – August 9 and 2 immatures June 1619901-2 immatures at Sediment Retention & Cinder FlatsMay 31 through August 91994immature at Lake SpringfieldJune 6 & 111999immature at Beach HouseMay to June 1 – 112000second year at SangchrisJune 292001immature in molt at Lake SpringfieldJune 8 – 102004adult at Lake SpringfieldMay 31 – June 17 and immature June 20	1982	2 immatures at Lake Springfield until June 5	one all summer until August 11
1987adult at Sediment RetentionJune 30 & July 15,1989immature at Lake SpringfieldJune 1 – August 9 and 2 immatures June 1619901-2 immatures at Sediment Retention & Cinder FlatsMay 31 through August 91994immature at Lake SpringfieldJune 6 & 111999immature at Beach HouseMay to June 1 – 112000second year at SangchrisJune 292001immature in molt at Lake SpringfieldJune 8 – 102004adult at Lake SpringfieldMay 31 – June 17 and immature June 20	1984	adult at Cinder Flats	July 7 & 9 = fall migrant
1989immature at Lake SpringfieldJune 1 – August 9 and 2 immatures June 1619901-2 immatures at Sediment Retention & Cinder FlatsMay 31 through August 91994immature at Lake SpringfieldJune 6 & 111999immature at Beach HouseMay to June 1 – 112000second year at SangchrisJune 292001immature in molt at Lake SpringfieldJune 8 – 102004adult at Lake SpringfieldMay 31 – June 17 and immature June 20	1985	immature at Cinder Flats	July 21 & 23 = fall migrant
19901-2 immatures at Sediment Retention & Cinder FlatsMay 31 through August 91994immature at Lake SpringfieldJune 6 & 111999immature at Beach HouseMay to June 1 – 112000second year at SangchrisJune 292001immature in molt at Lake SpringfieldJune 8 – 102004adult at Lake SpringfieldMay 31 – June 17 and immature June 20	1987	adult at Sediment Retention	June 30 & July 15,
1990FlatsMay 31 through August 91994immature at Lake SpringfieldJune 6 & 111999immature at Beach HouseMay to June 1 – 112000second year at SangchrisJune 292001immature in molt at Lake SpringfieldJune 8 – 102004adult at Lake SpringfieldMay 31 – June 17 and immature June 20	1989	immature at Lake Springfield	June 1 – August 9 and 2 immatures June 16
1999immature at Beach HouseMay to June 1 – 112000second year at SangchrisJune 292001immature in molt at Lake SpringfieldJune 8 – 102004adult at Lake SpringfieldMay 31 – June 17 and immature June 20	1990		May 31 through August 9
2000second year at SangchrisJune 292001immature in molt at Lake SpringfieldJune 8 – 102004adult at Lake SpringfieldMay 31 – June 17 and immature June 20	1994	immature at Lake Springfield	June 6 & 11
2001immature in molt at Lake SpringfieldJune 8 – 102004adult at Lake SpringfieldMay 31 – June 17 and immature June 20	1999	immature at Beach House	May to June 1 – 11
2004 adult at Lake Springfield May 31 – June 17 and immature June 20	2000	second year at Sangchris	June 29
	2001	immature in molt at Lake Springfield	June 8 – 10
2005immature in molt at Lake SpringfieldJune 14 – September 17 (photo)	2004	adult at Lake Springfield	May 31 – June 17 and immature June 20
	2005	immature in molt at Lake Springfield	June 14 – September 17 (photo)

Thayer's Gull

Larus thayeri

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	3/3 (3)	0/0	7/7 (5)	56/52 (22)	66/62
Average/day	1.0		1.0	1.08	1.06
Average/season	1.0		1.40	2.55	

Status: Rare Migrant and Winter Resident

Dates:

- Fall:Earliest arrival = October 15, 1978 first year Lake SpringfieldAverage arrival (24 years) w/range October 15 January 29 = December 18
- **Spring:** Average departure (16 years) w/range January 1 March 12 = **February 4** Latest departure = **March 22**, 2007 second year Lake Springfield

This gull seemed a shade of difference from either a Herring Gull or an Iceland (Kumlien's) Gull and protracted, close views were needed to separate this species from other gulls. The first record for Thayer's Gull in the county was December 5, 1976 at Lake Springfield of a second year bird. All records were for Lake Springfield or the nearby Cinder Flats except one first year bird from Sangchris, November 15, 1977. Although there were a few fall records, most arrived in winter with the freeze up of the lake. Other early dates of arrival were first year birds, October 23, 1979 and November 3, 1984. Fall arrival dates were mostly in December or January. The high count was two adults and one immature January 28, 2005, although two were seen several times. There were three March departure dates of first year birds on March 12, 1979; March 6, 1980; March 1, 1986. Subsequently, all departures were in January and February until a second year bird on March 21 & 22, 2007. The only counts of two toward spring were an adult and immature February 1, 2004 and two adults in the addendum on February 1, 2009. In fact, the highest seasonal numbers came from the winters of 2007-08 (14/13) and 2008-09 (12/11). Thayer's Gull breeds on cliffs in the High Arctic. Most winter along the Pacific coast, although some winter in the Great Lakes area. Some ornithologists question whether this is a full species or a subspecies.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

Iceland Gull

Larus glaucoides

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1/1 (1)	0/0	0/0	13/13 (9)	14/14
Average/day	1.0			1.0	1.0
Average/season	1.0			1.44	

Status: Very Rare Migrant and Winter Resident

Dates:

- Fall:Earliest arrival = December 22, 1998 first year Cinder Flats
Average arrival (7 years) w/range December 22 January 24 = January 8
- Spring: Average departure (5 years) w/range February 1 April 13 = February 27 Latest departure = April 13, 1994 immature South Fork

There were eleven records (four adults and seven immatures) plus another six records in the addendum (three adults and three immatures) of this Arctic species for Sangamon County (see Table 26). All of these Iceland Gulls pertained to the subspecies *L. g. kumlieni* because of gray in the wing tips. Iceland Gulls were usually found in the dead of winter when there were maximum ice conditions. All birds were seen at or near Lake Springfield except one, but the best views were obtained at the Cinder Flats. This rare gull was not recorded until a first year bird was seen on February 27, 1980, and then this species was not seen again for ten years. The only individual not seen in the winter period, was a first winter changing into first summer plumage on April 13, 1994, and it was along an over flow of the South Fork. The rest totaled by month (with some in two months) were: December (2), January (10), February (7). Observers need to be aware of leucistic gulls, as I encountered one that looked like an Iceland, but in fact was a Ring-billed Gull as it had yellow legs. Iceland Gulls breed in the Arctic in northeastern Canada. Most winter along the Atlantic coast in Canada and the northeastern US, but some winter along the Great Lakes.

Documentation: Photographic: IL. Sangamon Co., HDB on file ISM.

Table 26. Records of Iceland Gulls in Sangamon County

1980	first year	February 27
1990	first year	January 16
1991	adult	January 24
1994	first year	April 13
1996	first year	February 26
1997	adult	January 8
1998	first year	December 22 & 23
2000	adult	December 26
2005	adult second year	January 20 February 2, 4 & 6
2007	first year	February 1

Addendum:

2008	adult	January 2
2009	adult second year first year	January 11,18 & 26 January 22 January 26 & February 1
2010	first year adult	January 13 & February 1 January 26 & February 7

Lesser Black-backed Gull

Larus fuscus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	62/57 (15)	4/4 (1) fall mig	71/70 (16)	226/191 (19)	363/322
Average/day	1.09	1.0	1.01	1.18	1.13
Average/season	4.13	4.0	4.44	11.89	

Status: First record winter 1980, now Occasional Migrant and Winter Resident

Dates:

- Fall:Earliest arrival = July 26, 1993 second summer Cinder FlatsAverage arrival (20 years) w/range July 26 December 31 = October 29
- Spring: Average departure (17 years) w/range February 25 April 25 = April 5 Latest departure = April 25, 2000 subadult Lake Springfield

This was a medium-sized four year gull, larger than the Ring-billed Gull, with a dark gray mantle and yellow legs. My first record for Sangamon County was an adult at Lake Springfield on December 31, 1980. The first Illinois record of this European gull was seen at Chicago in April 1980. By the winter of 1992-93 the Lesser Black-backed Gull was a regular migrant and winter resident in Sangamon County, (see Figure 18), though in small numbers. Some individuals stayed for extended periods, especially in winter. Other early fall arrivals in addition to the July record were an adult August 29, 1994 and an adult September 1, 2008. The high count for fall was two November 24, 1997. I usually saw single adults, but during the winter of 2004-05 ice conditions brought numbers of gulls to the Lake Springfield area. Among these were seven Lesser Black-backed Gulls on January 30, 2005. Also on February 4, 2010 three adults were counted. The first non-adult (second year) and spring individual was seen April 8, 1989 at the Sediment Retention. These gulls were mostly seen at Lake Springfield, but I saw an adult east of Lake Springfield feeding in fields on February 12, 2005. Other late spring birds were: an adult at Sangchris April 19, 1997; an immature at Lake Springfield April 23, 1999; and an adult & immature at Lake Springfield April 19, 2007. This gull usually came into the lake in the evening with other gulls. It breeds in Europe and so far the closest breeding area to the US is western Greenland. The subspecies seen here is L. f. graellsii, but two other subspecies are remotely possible.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

<u>Highest</u>	# Days/Season	<u>Highest</u>	# Birds/Season
Spring	9 (2006)	Spring	14 (2006)
Summer	4 (1993)	Summer	4 (1993)
Fall	22 (1988)	Fall	22 (1988)
Winter	26 (2004)	Winter	51 (2004)

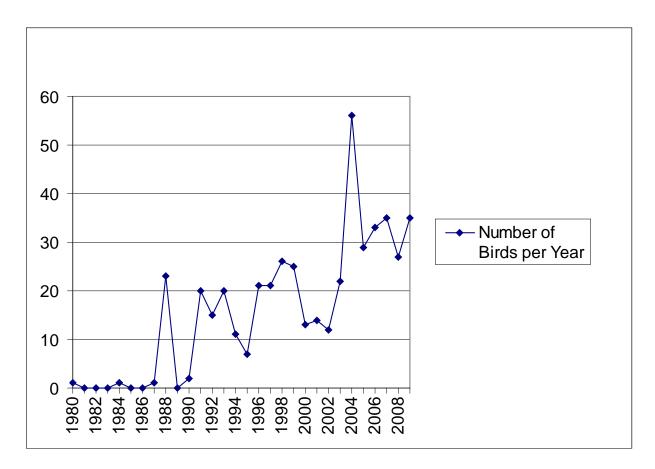


Figure 18. Lesser Black-backed Gulls in Sangamon County

[Western Gull]

Larus occidentalis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	0/0	0/0	0/0	2/2(1)	2/2
Average/day				1.0	1.0
Average/season					

Status: Hypothetical: Very Rare Winter Resident

Dates: One Potential Record: second year bird, Lake Springfield, January 22 & 23, 2000.

A West Coast species, this large gull occurred during an ice- up of Lake Springfield. It appeared to dominate the Herring Gulls and mostly sat on the ice, flew around and caught fish. Distinguishing features included fairly large size, somewhat stockier build than a Herring Gull, a slaty back with some brown feathering mixed in, black tail, barring on rump and undertail coverts, pinkish dull legs, large somewhat bulbous bill, streaking on nape and below. The Western Gull hybridizes with the Glaucous-winged Gull. There are two subspecies, but a second year bird would be difficult to identify to subspecies.

Documentation: Drawing & written description: IL. Sangamon Co., HDB - on file ISM.

Glaucous-winged Gull

Larus glaucescens

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	0/0	7/7 (1)	0/0	2/2 (2)	9/9
Average/day		1.0		1.0	1.0
Average/season					

Status: Very Rare Migrant and Summer Visitor

Dates: Three Records: first year, Cinder Flats, December 31, 1994; first year, Lake Springfield, December 13, 1998; first summer, Lake Springfield, June 29 – July 9, 2004.

All three records were first year plumaged gulls of this West Coast species. Glaucous-winged Gulls were fairly large with heavy bills, and were a whitish or buffy-gray color with the wings and tail mainly gray. The bill was thick and had a noticeable gonydeal angle. Both of the winter gulls came in with an early winter influx of larger gulls, but they only stayed one day. The summer gull was a bizarre sight at that season and stayed awhile though it was not easy to find (see Bohlen, 2005a). I saw it at the Cinder Flats and at the beach area where it sat with other summering gulls. There are several other records in Illinois of this rare gull.

Documentation: Photographic: IL. Sangamon Co., summer bird and written descriptions of winter birds, HDB - on file ISM.

Glaucous Gull

Larus hyperboreus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	6/6 (4)	0/0	5/5 (3)	61/57 (20)	72/68
Average/day	1.0		1.0	1.07	1.06
Average/season	1.50		1.67	3.05	

Status: Very Rare Migrant and Occasional Winter Resident

Dates:

- Fall:Earliest arrival = November 24, 1985 second year Lake SpringfieldAverage arrival (11 years) w/range November 24 January 20 = December 21
- Spring: Average departure (19 years) w/range January 9 May 15 = February 18 Latest departure = May 15, 1982 second year Cinder Flats

This large white gull came down from the Arctic usually in mid-winter with maximum freeze up. My first record was an immature on February 16, 1973 at Lake Springfield. The Glaucous Gull was recorded in 24 years of the study. These gulls were found on large bodies of water, and the majority were at Lake Springfield, although there were records from the Cinder Flats, Sediment Retention, and the North Side sewer pond (attracted to a fish kill). They usually arrived with a push of Herring Gulls on a cold front, all of the gulls kettling before they landed on the lake. Other early arrivals were an immature November 27, 1982 and an adult November 29, 1992. The Glaucous Gull being large and whitish, with white primaries was fairly easy to pick out on the ice or in flight. Many of these large gulls were very aggressive towards other gulls. One immature that stayed from December 25, 2007 - January 13, 2008, and although injured, fought off two adult Bald Eagles in a bloody battle on the ice. High counts were only two on February 7, 1984 and February 16, 1985. The most recent records were in the addendum of immatures at Lake Springfield January 14 – February 17, 2009 and an adult there December 31, 2009. The May 15, 1982 record was by far the latest in spring for the county. Other late spring records were an adult March 27, 1979 and a second year bird March 15, 1989. The subspecies is presumedly the eastern nominate form.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

<u>Highest</u>	# Days/Season	<u>Highest</u>	# Birds/Season
Spring	3 (1979)	Spring	3 (1979)
Fall	3 (1985)	Fall	3 (1985)
Winter	7 (2003 & 2004)	Winter	7 (2003 & 2004)

Great Black-backed Gull

Larus marinus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1/1 (1)	0/0	0/0	8/8 (6)	9/9
Average/day	1.0			1.0	1.0
Average/season	1.0			1.33	

Status: Very Rare Migrant and Winter Resident

Dates:

- Fall:Earliest arrival = January 4, 1981 immature Lake SpringfieldAverage arrival (4 years) w/range January 4 24 = January 14
- Spring: Average departure (4 years) w/range February 14 May 25 = March 11 Latest departure = May 25, 1990 adult Cinder flats

There were eight records for this large gull during the study, plus two in the addendum. This was an east coast species that had extended its range to the Great Lakes and a few drifted into this area usually at periods of maximum ice in mid-winter. All records in the county were from Lake Springfield, including the Cinder Flats. The records were: first winter, January 4, 1981; adult, May 25, 1990; adult, January 16, 1993; adult, January 24, 1994; second winter, February 14, 1995; first winter, January 10, 1996; first winter, February 19, 1996; near adult, February 11 & 12, 2007 (photograph). Additional records in the addendum were first winter, January 26 – 28, 2009 (photograph) and second winter, February 7, 2010. These gulls usually sat on the ice and when feeding were aggressive toward other gulls, stealing their fish. Adult birds were fairly easy to identify, but immatures were more difficult due to the variation in immature Herring Gulls. However, the lighter coloration, especially the head, the large black bill, and checkered back of the Great Black-backed Gull helped separate them. The May bird was a real surprise and was perhaps a late returning individual out of its normal range.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

Sabine's Gull

Xema sabini

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	0/0	0/0	65/45 (14)	0/0	65/45
Average/day			1.44		1.44
Average/season			4.64		

Status: Rare Fall Migrant

Dates:

Fall:Earliest arrival = September 9, 2001 adult Marine Pt.
Average arrival (15 years) w/range September 9 – October 10 = September 22
Average departure (14 years) w/range September 19 – October 17 = September 30
Latest departure = November 1, 2009 juvenile Lake Springfield

This small tern-like gull breeds in the Arctic and winters at sea off the Pacific coast of South America. A few migrated through the interior US in fall and by daily monitoring the lake I listed 23 records (see Table 27). All plumages of this species had the distinctive triangular wing pattern that allowed identification at a great distance. In addition, these gulls were easily spotted because some of them dipped and weaved, flying for long periods, low over the lake. Another characteristic I had noted from several individuals was; from a sitting position on the water they flew up a short distance and then looped back to the water. All sightings were from Lake Springfield except juveniles at the Cinder Flats on October 8, 1985; Sediment Retention on October 10, 1989; and Sangchris on September 22, 2000. Nearly all of these gulls were in juvenile plumage except four: Adult, September 27 – October 1, 1992; adult, September 9, 2001; adult, September 15, 2003, adult, September 14, 2004. The adults had the dark hood and yellow tipped black bill. Adults probably preceded juveniles in fall, but I did not have enough data to be sure (see Table 27). Most sightings involved single birds, but a flock was present of seven birds in the remains of hurricane Gilbert, September 18 and (6) 19, 1988. Two were seen September 20 - 26, 2003, and September 29 - October 4, 2005. Note that addendum birds (2007 - 09) were listed, but the numbers were not counted above.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 605923 juv. \bigcirc ?, LSpfld, Sept. 25, 1974, coll. by HDB, wt. = 182.6 gms.

<u>Highest</u>	# Days/Season	<u>Hig</u>	<u>Highest # Birds/Season</u>		
Fall	8 (2005)	Fall	1 13	(1988 & 2003)	

1974	juvenile	September 23 – 25	
1976	juvenile	September 23	
1979	juvenile	September 18 – 21	
1985	juvenile	October 8	Cinder Flats
1988	juveniles	7, September 18 – 6, September 19	
1989	juvenile	October 10	Sediment Retention
1992	adult	September 27 – October 1	
1995	juvenile	September 18	
1997	juvenile	September 21 – 24	
2000	juvenile juvenile	September 22 October 14	Sangchris
2001	adult	September 9	
2003	adult juvenile	September 15 2, September 20 – 26	
2004	adult juvenile juvenile	September 14 September 30 – October 15 October 17	
2005	juvenile juvenile	September 24 – 27 2, September 29 – October 4	

Table 27. Sabine's Gulls in Sangamon County (all from Lake Springfield unless noted)

Addendum

2007	juvenile	September 24 – 28	
2008	juvenile	September 18	
2009	juvenile juvenile	September 24 – October 4 November 1	

Black-legged Kittiwake

Rissa tridactyla

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	5/5 (1)	0/0	8/8 (6)	49/47 (6)	62/60
Average/day	1.0		1.0	1.04	1.03
Average/season					

Status: Very Rare Migrant and Winter Resident

Dates:

- Fall:Earliest arrival = August 25, 1984 juvenile Cinder FlatsAverage arrival (10 years) w/range August 25 January 15 = November 25
- Spring: Average departure (4 years) w/range January 26 April 8 = February 21 Latest departure = April 8, 1971 juvenile Lake Springfield

All of the 13 records (two spring, six fall and five winter) were of the distinctive juvenile plumage. All records were at Lake Springfield, although some rested at the nearby Cinder Flats (see Table 28). Some of the juveniles showed less of a collar than others, and may have been somewhat older, e.g. November 27, 1991. One Kittiwake apparently arrived in spring on April 1 - 8, 1971, however the February 16, 1973 bird may have also been a spring migrant. Fall and winter were the main seasons for this gull. The only multiple sightings were two December 6 & 8, 1980 (one had a more narrow collar). They were usually flying with Bonaparte's Gulls and feeding on fish. On December 7, 1980 one was feeding on dead shad and sitting on top of the pump building with the pigeons. The very early record of a juvenile on August 25, 1984 was probably a wandering bird (other juvenile gulls have been seen south of their breeding grounds in August) and it only stayed one day. The one listed below as a specimen I first found on January 15, 1999. It probably died from a fungus in its kidney. This was also the last record for the county during the study. The occurrence of this beautiful gull had ceased at Lake Springfield, though it was still rarely recorded in other parts of Illinois. The population in some parts of its breeding range had declined because of the lack of food. The Black-legged Kittiwake breeds in coastal Alaska and northern Canada and winters at sea. The nominate form is found here.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 660521 juvenile \Diamond , Lake Springfield, January 26, 1999, coll. by R.Sandburg, wt. = 273.7 gms, testes = 4 mm (eye blue-black, mouth lining orange with lime green edging, there was a small hind toe present).

1971	juvenile	April 1 – 8
1973	juvenile juvenile	February 16 December 31
1980	juvenile juvenile	December 5 – 13 December 6 – 8
1981	juvenile	November 19
1984	juvenile	August 25
1985	juvenile	November 11
1987	juvenile	November 9
1990	juvenile	November 22 – December 20
1991	juvenile	November 27
1992-93	juvenile	December 27 – February 4
1999	juvenile	January 15 – 26

Table 28.	Black-legged I	Kittiwake Records	in Sangamon	County ((all at Lake	Springfield)
					(-

Ivory Gull

Pagophila eburnea

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days				1/1 (1)	1/1
Average/day				1.0	1.0
Average/season				1.0	

Status: Very Rare Winter Resident

Dates: One Record: juvenile, Lake Springfield, January 1, 1991.

This Arctic gull appeared when Lake Springfield was at maximum ice conditions and it was a complete surprise. At that time, it was one of the most southern records for the Ivory Gull. It stayed for only a few hours, but was undoubtedly one of the rarest birds ever seen in Sangamon County (see Bohlen, 1991a). The gull was a juvenile with all dull white plumage except for the charcoal black face and throat and black marks on the wings, and tail tip. It looked whiter in flight. The eyes and tarsi were black, and the bill was gray with a yellowish-green tip. It stood on the ice near other gulls, flew around and caught a small fish, then flew west and was not seen again. I had seen this rare gull earlier below the dam, and several other observers (including C. Olson) had seen it earlier at the lake. The Ivory Gull usually winters around the pack-ice in the Arctic.

Documentation: Photographic: IL. Sangamon Co., DO and drawing and description HDB - on file ISM.

Least Tern

Sternula antillarum

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	2/2 (2)	16/14 (12) mig	28/17 (12)	0/0	46/33
Average/day	1.0	1.14	1.65		1.39
Average/season	1.0	1.33	2.33		

Status: Rare Migrant

Dates:

- Spring: Earliest arrival = May 14, 2009 adult Lake Springfield Average arrival (13 years) w/range May 18 – June 26 = June 12
- **Fall:** Average departure (14 years) w/range July 5 September 1 = **August 9** Latest departure = **September 1**, 1989 adult Sediment Retention

The Least Tern, the smallest tern in the county had almost a swallow-like flight, and plunged into the water when feeding to catch small fish. Many of the arrival dates for spring were in June (11 of 13 years) making it one of the latest birds to arrive at that season. Other early arrivals were adult, May 30, 2001 at Sangchris; and adult, May 18, 2004 at the Cinder Flats. Most were probably overmigrants or wandering birds that had been flooded out of their nesting areas further south. High counts for spring were only two: two adults, June 17, 1992 and two adults, June 14, 2005. Most of these terns were seen at the Cinder Flats, Sangchris and Buckhart and, in the late 1980's at the Sediment Retention. Rarely they were seen over ponds. They needed a place to rest such as a beach or solid mudflat or they passed by quickly. In the interior, these terns nested on sandbars in large rivers, most nested south of the county in the Mississippi or Ohio Rivers. Early fall arrivals were July 5, 2001 adult at the Cinder Flats and July 14, 1970 an adult at Sangchris. Occasionally adults brought the fledged young north and they were recorded: adult and two young, August 27, 1978 at the Cinder Flats; adult and young, August 14, 1988 at the Sediment Retention; and adult and young, August 5, 1989 at the Sediment Retention. Immatures were also seen as a group, and three occurred on August 17, 1997 at Sangchris. Another high count of three for fall was August 20, 1979 at Lake Springfield. The last records in the study were an adult, June 16, 2008 north of New City and the record above in 2009. The Least Tern is a federally endangered species. It winters along the northern coasts of South America. The subspecies is the interior form S. a. athalassos.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

Highest # Days/Season

Spring1 (2001 & 2004)Summer2 (1970 & 1992)Fall3 (2002)

Highest # Birds/Season

 Spring
 1 (2001 & 2004)

 Summer
 3 (1992)

 Fall
 4 (1980)

Caspian Tern

Hydroprogne caspia

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1728/500 (36)	1425/424 (32) mig	10349/1075 (36)	0/0	13502/1999
Average/day	3.46	3.36	9.63		6.75
Average/season	48.0	44.53	287.47		

Status: Uncommon Spring Migrant, Common Fall Migrant and Fairly Common in Summer (non-breeding)

Dates:

- Spring: Earliest arrival = April 4, 2000 Lake Springfield Average arrival (35 years) w/range April 4 – May 12 = April 17 Average departure (36 years) w/range April 30 – June 23 = June 1 Latest departure = June 23, 2001 LSpfld (arbitrary due to unknown status)
- Fall: Earliest arrival = June 13, 2003 & 2004 Lake Springfield
 Average arrival (36 years) w/range June 13 September 17 = July 6
 Average departure (36 years) w/range September 8 October 20 = October 4
 Latest departure = October 24, 2008 Lake Springfield

The largest tern, this species had a large red bill and a loud rasping call. Most of these terns were seen at Lake Springfield (especially at the beach area or Cinder Flats), Sangchris, Buckhart, and rarely at other places such as the Sediment Retention. Caspian Terns mainly ate fish which they caught by diving from the wing. This species in this county was limited by its prey, but also by a place to sit or rest and when this was denied; the numbers dropped. They also appeared to shy away from noisy boats and jet skis. The numbers were apparently lower in the early 1970s and they may have suffered from DDT accumulation. Other early **spring** arrivals were: April 8, 1984; April 7, 1997 & 2003; and April 9, 2009. High counts in spring were: 32, May 19, 1981; 23, May 13, 1994; 28, May 14, 2006; and 33, May 7, 2008. There was a lot of spring migration into June, in fact, there were 20 years with birds into June, and this seemed to be the norm (see Table 29). High counts for the summer period were, 13, June 4, 1987 and 40, July 31, 2007. In 1975 birds were observed in the summer season, and they were recorded every summer after that. Also by 1975, fall migration was beginning in July, and a few years later it was in June. At times, it was difficult to separate spring from **fall** migration, but there was nearly always a hiatus between the two. Adults usually arrived first in fall. Young of the year on average (for 13 years) arrived July 21, many still with their parents. The young, in distinctive plumage and the size of adults, sat on the Cinder Flats and squealed for food. Their indulgent parents went to the lake, caught a fish and brought it back for their young. Then, there was usually a fight trying to keep the gulls away. It was great fun to watch. There were not many species in which the adults continued to feed the young after migration was under way. On July 30, 2006 I was going to the aid of an injured young tern at Lake Springfield dam when I was dive bombed by an adult. Adult Caspian Terns were very protective. I observed some color banded terns (adult and young) at the Cinder Flats on August 28, 1979 and found that they were from a breeding colony on an island in northern Lake Michigan. The adults continued to feed the young into September. With a little

encouragement this tern could breed here. Fall numbers were almost six times higher than spring numbers. High counts in fall were: 50, August 23, 2000; 105, August 28, 2004; 150, September 1, 2004; 72, August 29, 2005; 60, August 20, 2006; and 89, August 29, 2007. Most departures were in October, but this species left very early in 1992 - 1994 for unknown reasons. Other late departures were October 18, 1983 and October 20, 1984. These terns winter in the southern coastal US south to Colombia, South America.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 660762 \bigcirc , Lake Springfield beach, September 19, 2004, coll. by B. Dyer & HDB, wt. = 430 gms, ovary = 15 mm.

Highest # Days/Season

 Spring
 36 (2001 & 2003)

 Summer
 57 (2001)

 Fall
 61 (2004)

Highest # Birds/Season

Spring146 (2001)Summer206 (2001)Fall2349 (2004)

4	June 29
2	June 8
4	June 8
4	June 10
5	June 9 & 29
8	June 4
2	June 24
4	June 25
5	June 2
13	June 4
2	June 4
1	June 12
4	June 27
2	June 13
9	June 20
8	June 9
8	June 17
3	June 26
3	June 25
7	June 20
3	June 15
10	June 24
7	June 24
5	June 19
8	June 23
7	June 19
2	June 5 & 28
7	June 24
	2 4 4 5 8 2 4 5 13 2 1 4 5 13 2 1 4 2 9 8 8 8 3 3 3 7 3 3 7 3 10 7 3 10 7 5 8 8 7 2

Table 29. High counts of Caspian Terns in June in Sangamon County

Addendum

2007	7	June 28
2008	3	June 3
2009	7	June 21 & 26

Black Tern

Chlidonias niger

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	3853/259 (37)	770/137 (34) mig	3126/366 (37)	0/0	7749/762
Average/day	14.88	5.62	8.54		10.17
Average/season	104.14	22.65	84.49		

Status: Common Spring Migrant and Fairly Common Fall Migrant

Dates:

- Spring: Earliest arrival = April 27, 1994 Lake Springfield Average arrival (37 years) w/range April 27 – May 18 = May 6 Average departure (35 years) w/range May 8 – June 16 = June 1 Latest departure = June 16, 1998 ten Lake Springfield
- Fall: Earliest arrival = June 17, 1982 & 2009 Lake Springfield Average arrival (36 years) w/range June 17 – August 13 = July 10 Average departure (37 years) w/range August 23 – October 12 = September 18 Latest departure = October 22, 2009 Lake Springfield

These graceful, dark terns looked like big swallows as they flew around Lake Springfield with swallows, gulls, and other terns. Cold fronts many times caused them to stay for several days, otherwise they moved through fairly fast in **spring**. I had only four arrival dates in April: see above, and April 30, 1982, 1987, & 1992. The rest of the spring arrivals were in May. Numbers varied greatly from year to year with high spring counts being: 50, May 15, 1981; 116, May 13, 1990; 120, May 15, 1995; 228, May 26, 2001; 35, June 3, 2001; and 100, May 16, 2007. Other late spring departures include: 17, June 4, 1970; one, June 11, 1980; 10, June 16, 1998; one, June 14, 2000; and 2, June 13, 2005. This tern breeds as close as northern Illinois. As in most terns, migration continued into June and it was sometimes difficult to tell late spring from early fall migrants. High counts for the summer period were 33, July 26, 1981 and 35, June 3, 2001. Rarely, non-breeding immatures were seen in summer. Most, if not all early fall returning birds in late June and early to mid-July were adults. In 2003, I missed the adults and did not see any terns until 10 immatures on September 1. By August or earlier many immatures (= juveniles?) were present. I took the following data entries: July 7, 2005 adult with white chin – starting molt; August 5, 1980 saw non-adult birds in gray and white plumage; August 5, 1988 fifty terns in various plumages; August 5, 1989 twenty adults many in body molt and one immature; August 14, 1980 there were 75 terns in various plumages, August 16, 1974 there were 22 feeding over the lake only two still black (adult); September 6, 1988 adult in basic plumage; and September 10, 1993 three terns one was adult. When migrating they swirl on the thermals just like Broadwinged Hawks, and 65 were doing this above Lake Springfield on August 13, 1975. They also moved on cold fronts in fall like many other species. I noted them close to shore feeding on mayflies August 3, 1976 and August 23, 1979. Unfortunately, the big eruptions of mayflies no longer occur at Lake Springfield. Other high counts not already mentioned were: 85, August 21, 1980; 60, August 23, 1999; and 70, July 30, 2004. Besides the lakes, I have seen these terns at sod fields, sewer ponds and flooded areas. There were three August and five October departure

dates, the rest (29) were in September. Other late departures were: October 12, 1972; October 2, 1983 & 1996; and October 1, 1988. The subspecies in North America is C. n. surinamensis. This tern winters from Mexico to South America.

Documentation: Photographic: Il. Sangamon Co., HDB - on file ISM.

Highest # Days/Season Spring 18 (1990) Summer 10 (1980 & 1998) 36 (1980) Fall

Highest # Birds/Season

Spring 624 (2001) Summer 97 (2004) Fall 866 (1980)

Common Tern

Sterna hirundo

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	2194/247 (36)	195/70 (25) mig	544/167 (34)	0/0	2933/484
Average/day	8.88	2.79	3.26		6.06
Average/season	60.94	7.80	16.0		

Status: Fairly Common Spring Migrant, Uncommon Fall Migrant and Occasional in Summer (non-breeding)

Dates:

- Spring: Earliest arrival = April 24, 1994 adult Cinder Flats Average arrival (37 years) w/range April 24 – May 24 = May 7 Average departure (36 years) w/range May 6 – June 16 = May 28 Latest departure = June 16, 1998 two adults Lake Springfield
- Fall: Earliest arrival = June 14, 2000 three adults Lake Springfield Average arrival (36 years) w/range June 14 – September 24 = July 26 Average departure (35 years) w/range August 10 – November 10 = October 3 Latest departure = November 10, 1994 immature Lake Springfield

The Common Tern usually arrived in **spring** at Lake Springfield in May, with only five arrivals in late April. It was completely missed in the spring and summer of 1984. I noted from other sources, they arrived on Lake Michigan, where they nest and were more numerous, much earlier than they arrived in Sangamon County (maybe they come in from the east?). Some years they came in larger flocks and they were forced down at Lake Springfield in cool rainy weather, which might be crucial to recording them at all. Other early spring arrival dates were April 25, 1979 & 1999 and April 28, 1974. They flew around the lake, rarely resting on the water or buoys and occasionally landed at the beach area or the Cinder Flats. High spring counts were: 52, May 11, 1981; 50, May 13, 1990; 80, May 18, 1993; 76, May 19, 1995; 75, May 13, 1996; 88, May 19, 1997; 65, May 23, 1999; 63, May 24, 2005, and 50, May 20, 2007. Smaller numbers were seen at Buckhart and Sangchris. Although one was seen in July as early as 1970, it was not until 1976 that I realized these terns were probably around every **summer** either as late spring or early fall migrants and some occurred because of nest failure in the breeding areas. High counts during summer were: 13, June 18, 1976; 9, June 9, 1998; and 16, June 27, 2008. A very few immature or non-breeding birds were present in late May and in summer. Fall arrival could be problematical, and each year the fall arrival date should be judged on its own, by the age of the terns and timing in relation to all summer sightings. Note that eight fall arrivals were in September, which means that either I missed the earlier terns or they migrated later. Numbers in fall were at least one forth that of spring, for unknown reasons. The Common Tern was missed in fall in 1973 and 1982. High counts for fall were: 22, October 3, 1983; 23, August 23, 1992; 75, October 9, 2003 (adults and immatures - some still showing brown in the back); 22, September 24, 2006; 30, September 20, 2008; and 16, September 25, 2009. Other late birds besides above, most in immature plumage were: November 2, 1991; November 3, 1995; November 5, 1997; and

November 1, 2004. This tern winters in South America. The subspecies which breeds in North America is the nominate form.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

Highest # Days/Season

Spring19 (2002)Summer8 (2000)Fall17 (1994)

Highest # Birds/Season

Spring281 (1996)Summer27 (1992)Fall78 (2003)

Arctic Tern

Sterna paradisaea

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	0/0	4/4 (1)	2/2 (2)	0/0	6/6
Average/day		1.0	1.0		1.0
Average/season					

Status: Very Rare Migrant

Dates: Three Records: first year, Cinder Flats, October 3, 1986; adult, Cinder Flats, June 28 – July 1, 1992; first year, Lake Springfield, October 7, 1997.

These graceful terns usually migrated at sea, but were occasionally found inland. The first year birds, both seen in early October, showed a white area in the secondaries, a small bill, and short legs. Some of these terns surely went unidentified nearly every year due to obtaining a critical view. The adult I found sitting on the Cinder Flats in 1992 was photographed (see Bohlen, 1993). The status of this tern (in 1992) in summer could have been a migrant or non-breeding summer resident. Several Arctic Terns have been seen in other localities in Illinois since then. One of the most long distant migrants, the Arctic Tern breeds mainly in the Arctic and winters in the Antarctic.

Documentation: Photographic: IL. Sangamon Co., adult above DO and drawings, descriptions and notes HDB –on file ISM.

Forster's Tern

Sterna forsteri

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	3707/638 (37)	361/182 (33) mig	2050/697 (37)	0/0	6118/1517
Average/day	5.81	1.98	2.94		4.03
Average/season	100.19	10.94	55.41		

Status: Fairly Common Spring Migrant, Uncommon Fall Migrant and Occasional in Summer (non-breeding)

Dates:

- Spring: Earliest arrival = April 6, 1991 adult Cinder Flats Average arrival (36 years) w/range April 6 – 23 = April 14 Average departure (37 years) w/range May 2 – June 27 = May 29 Latest departure = June 27, 2004 two Lake Springfield (arbitrary due to SR)
- Fall: Earliest arrival = June 16, 1997 immature LSpfld (arbitrary due to SR) Average arrival (37 years) w/range June 16 – September 12 = July 12 Average departure (37 years) w/range September 14 –November 25 = October 17 Latest departure = November 25, 1994 Lake Springfield

Despite the names, the Forster's Tern was more numerous than the Common Tern; and it also arrived earlier in spring. Other early spring arrivals dates were: April 8, 1976, 1994 & 1999 and April 9, 2000. This tern was almost always found at Lake Springfield, Sangchris, or Buckhart; occasionally they occurred at sewer ponds or flooded areas. They were usually seen in flight over the lakes, but sat on buoys, at the Cinder Flats, and on the sand at the beach area. They fed by plunging on the wing from a height to splash in the lake for small fish. Since Forster's Tern nested in northern Illinois and had declined in numbers, it was put on Illinois Endangered Species List. High counts for spring were: 55, May 12, 1980; 63, May 5, 1990; and 52, May 4, 1995. These terns continued to migrate into June with some other late dates: June 3, 1971; June 16, 1980; (12 birds) June 10, 1981; and June 17, 2005. Most early birds were adults, with immatures arriving later in spring and sometimes in **summer**. All birds seen in summer were migrants or non-breeding birds, and usually there was an obvious hiatus between spring and fall. Given the correct managed habitat, they could theoretically nest in the county, and an excellent spot would be the west end of Lake Springfield at Lick Creek. This area could support a couple of pairs since these terns nest on top of muskrat houses. By late June or July, fall migrants were returning. Most early returning birds were adults, but sometimes juveniles with brownish backs and crowns were seen. Adults started molting the black crown in early August and could look quite different from definitive alternate plumage. Other early fall arrivals were: June 29, 1977; June 17, 1996 & 1998; June 23, 1981 & 1982 & 1990 & 1995; and June 20, 1992. In the evening when the gulls and other waterbirds gathered in the middle of Lake Springfield this tern sat on the water as it did 9 on August 29, 1981 and 25 on September 15, 1977. Fall numbers were lower than spring numbers (1 to 1.8). High counts for fall were: 24, September 20, 1975; 52, August 30, 1978; 25, September 22, 1992; and 20, October 10, 1997. This tern was recorded eight times in November. Late dates of departure besides the above were November 11, 1992 at

Lake Springfield and November 19, 2001 at Sangchris. The Forster's Tern winters on the southern coasts of the US south to Honduras.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

Highest # Days/Season

Spring36 (2001)Summer16 (1990)Fall35 (1998)

Highest # Birds/Season

Spring277 (1980)Summer28 (2004)Fall114 (1994)

Black Skimmer

Rynchops niger

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	0/0	1/1 (1)	0/0	0/0	1/1
Average/day		1.0			1.0
Average/season		1.0			

Status: Very Rare Summer Visitor

Dates: One Record: adult, Lake Springfield, July 23, 2004.

The Black Skimmer was recorded only once from Sangamon County. It occurred at the Lake Springfield beach area and then flew to the Cinder Flats. This unexpected (Gulf?) coastal species stayed most of one day and was later viewed by three other observers. It was in alternate plumage, since it had a black hindneck. I saw it flying, being chased by gulls, resting with the gulls, sleeping, and twice making short feeding flights. The skimmer gave some soft yelping calls when chased by the gulls. There was no apparent weather system associated with this bird's arrival. This was the second Illinois record (see Bohlen, 2005). The subspecies in North America is the nominate form.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

Rock Pigeon

Columba livia

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	Х	Х	Х	Х	thousands
Average/day					
Average/season					

Status: Common Permanent Resident

This species was introduced to North America in the 1600s, but its arrival in Sangamon County went unrecorded. The pigeon was found in the city, towns, and countryside in all parts of the county. I did not keep numbers for this introduced species, but it had to be in the top 20 - 30species in numbers and days. The population in Springfield alone was in the thousands where they roost and nest on buildings, billboards and overpasses. Much effort has been expended trying to get rid of pigeons in downtown Springfield and the Capitol complex. The BBS, though mostly in rural areas, ranked the pigeon 43rd and it was recorded in 25 of 31 years. Nesting started early in the year with adults picking up nesting material by February 25. With so much artificial light, they can nest the entire year. No migration was noted in the pigeon, but at times flocks of 100 birds were seen in flight. There were a great variety of plumages in pigeons, some of which were quite spectacular. They fed on waste grain and at bird feeders. I once noted one on a city sidewalk outside a pub trying to copulate with a dead female pigeon. For additional information on numbers consult the Springfield Christmas bird counts and Illinois spring bird counts. There are twelve subspecies of Rock Pigeon in the world and the nominate C. l. livia from Europe and the Middle East probably is the form now in Sangamon County. However, note that many pigeon subspecies have been "crossed".

Documentation: Specimens = 1) IL. Sangamon Co., ISM# 606107 ♂, Spfld, December 27, 1974, coll. by M.Heuton, testes = 12 mm.

Band-tailed Pigeon

Patagioenas fasciata

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	0/0	0/0	0/0	11/11 (1)	11/11
Average/day				1.0	1.0
Average/season					

Status: Very Rare Winter Resident

Dates: One Record: adult, Lake Springfield, December 22, 1996 – January 23, 1997.

I found this pigeon of the western mountains on a Christmas Bird Count, and it stayed for at least a month (see Bohlen, 1997). Band-tailed Pigeons normally moved out of the mountains when food was scarce, but rarely dispersed so far. There were almost 50 records in eastern North America. This pigeon was attending a feeder on Hazel Dell Lane (L. Scott) at Lake Springfield. It sat quietly in trees or fed on the ground and it gave a loud clap of its wings when it flew. From descriptions, this pigeon was probably a female. This was the first Illinois record for this species. The subspecies is the paler inland form, *P. f. fasciata*.

Documentation: Photographic: Il. Sangamon Co., DO data above, and drawings and notes HDB – all on file ISM.

Eurasian Collared-Dove

Streptopelia decaocto

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	7/7 (3)	18/10 (4)	31/20 (6)	78/17 (5)	134/54
Average/day	1.0	1.80	1.55	4.59	2.48
Average/season	2.33	4.50	5.17	15.60	

Status: First record October, 2000, now Occasional Permanent Resident

This was an invading species that was originally from southern Asia. The Eurasian Collared-Dove had colonized all of Europe by 1971. It was accidentally introduced to the new world in 1974, and had subsequently spread across the US. My first Sangamon County record was of two birds west of Springfield on October 28, 2000. This dove remains only spotty in distribution, usually found in small towns, near grain elevators and farm yards. These doves do not migrate, but dispersed to a great degree. I have seen them at Dawson, Andrew, New City, Pawnee, Buckhart, Mechanicsburg, and other places such as Washington Park and Lake Springfield. Even though the Eurasian Collared-Dove was larger, as far as I could determine they did not greatly compete with Mourning Doves. One was building a nest on June 16, 2005 at Dawson. High counts were 18, January 17, 2004 and 14, January 14, 2007. They have a distinctive three syllable call. The subspecies is the nominate form found both in the US and in Europe.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

Highest # Days/Season

Spring3 (2005 & 2006)Summer7 (2006)Fall10 (2006)Winter6 (2005)

Highest # Birds/Season

 Spring
 3 (2005 & 2006)

 Summer
 12 (2006)

 Fall
 17 (2006)

 Winter
 29 (2003)

White-winged Dove

Zenaida asiatica

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1/1 (1)	0/0	0/0	0/0	1/1
Average/day	1.0				1.0
Average/season					

Status: Very Rare Migrant

Dates: One Record: adult ♂, west side of Springfield, May 17, 2005.

This large dove from the southern and southwestern U.S. has been moving northward, and there had been several records in Illinois and surrounding states. There were also other records (3) from Sangamon County. The White-winged Dove seen in this study (found by P. Ward) was calling its Barred Owl-like call while perched fairly high in a large tree in a residential area. It was attending a feeder. The subspecies was difficult to ascertain with no specimens available, but this bird is probably the widespread and expanding nominate form.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

Mourning Dove

Zenaida macroura

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	33553/3134 (37)	31542/1787 (37)	89305/3924 (37)	40189/2249 (37)	194589/11094
Average/day	10.71	17.65	22.76	17.87	17.54
Average/season	906.84	852.49	2413.65	1086.19	

Status: Very Common Fall Migrant and Common Spring Migrant, Summer and Winter Resident

Dates: (see text)

The cooing of this dove was so ubiquitous, that I had to concentrate to hear it. This dove was one of the most numerous birds in the county, and was 13th in total numbers and 4th in number of days of all species. Migration was difficult to detect, since they were present all year, but most migration observed was crepuscular and occurred in late February and March in spring and in October and November in fall. High counts for spring were: 80, May 4, 1974; 75, May 8, 1976; 59, March 6, 1982; 62, May 29, 2000; and 83, March 5, 2006. In spring, most were split into pairs making it harder to obtain high counts. On the summer BBS it ranked 6th and numbers were higher after 1992. Cooing began as early as January 20, but usually started in February, and the average date that cooing began was February 8 (16 years). The flight display was recorded between February 16 and March 27. Copulation was noted from March 2 to August 5 and took place in trees, on wires or on the ground. Nest building was seen from February 10 to July 28, and like most of this data, inferred multiple nestings. Supporting structures for the nests were: conifers (13), willow (4), black locust (2), cedar (2), elm (2), osage orange, and a dead tree. The nests were from 2 to 20 feet off the ground, plus three nests were on the ground (March 25, April 26, May 6). Of 41 nests with eggs (most with two eggs) the earliest was March 2 and the latest was August 20 with monthly break down: March (11), April (15), May (5), June (4), July (1), August (5). One nest was in the city square at Springfield on May 14, 1984. Young were seen in the nest from April 6 to October 10 (1980), and fledged young were seen April 15 to August 20. Cooing was last heard on September 3, 1999 and September 12, 2000. Flocks of doves were seen by late June, mid-July or August, with counts: 120, July 18, 1982; 185, July18, 1990; 285, July 19, 1997, and 260, July 17, 2002. Many doves flocked to water sources in dry weather. Fall numbers were 2.7 times more than spring numbers probably due to production of young, but flocking facilitated counting in fall. High counts for fall were: 100, September 26, 1976; 200, August 18, 1986; 225, November 14, 1987; 200, August 24, 1994; 245, November 15, 1997; 260, October 15, 2000; 230, September 1, 2002; and 400, August 19, 2004. Numbers in November usually tended to drop off suggesting migration or hunting pressure, (45 million are killed annually in the U.S.). In winter, many doves were associated with bird feeders especially in the city where it was warmer. They also flocked to agricultural fields such as corn stubble. Still some died due to very cold temperatures and snow and ice covering food. Some that were seen had missing toes due to frostbite. Others appeared to have very long tails, but ice had formed on the tail tip ripping out some feathers, and these were frozen to the tip, thus making the tail appear twice as long. I also noted doves using one wing held over their heads to shield themselves from sleet on December 24, 1997. High counts for winter were: 115, December 26,

1970; 160, January 5, 1986; 228, December 18, 1994; 350, December 9, 1997; 222, January 13, 2001; 145, February 2, 2003; and 260, January 17, 2004. Several white doves were seen: August 4, 1998, June 29, 2004, October 7, 2004, and May 23, 2005. One that was almost all white with orange tarsi was at Marine Pt. October 19 to December 14, 1997. Two subspecies are represented in the specimens below, six are the darker *Z. m. carolinensis* and two are the lighter *Z. m. marginella* ($\stackrel{\circ}{\bigcirc}$ ISM# 606147 & $\stackrel{\circ}{\bigcirc}$ 607499).

Documentation: Specimens = 8) IL. Sangamon Co., $\bigcirc \bigcirc = 3$, Spfld (2) & west Spfld, April 10 – December 20, wts. = 94.8 – 126.1 gms, testes = 6 – 15 mm; $\bigcirc \bigcirc = 5$, Spfld (3) & LSpfld & south Spfld, January 3 – December 11, wts. = 98.4 – 125.0 gms, ovaries = 3 – 13 mm (April 15 = juvenile).

Highest # Days/Season

Spring92 (8 years) maxedSummer61 (7 years) maxedFall122 (4 years) maxedWinter88 (2003)

Highest # Birds/Season Spring 1504 (2000) Summer 2477 (2002)

Summer2477 (2002)Fall5377 (1997)Winter3660 (1997)

Common Ground-Dove

Columbina passerina

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	0/0	0/0	6/4 (2)	0/0	6/4
Average/day			1.50		1.50
Average/season					

Status: Very Rare Fall Migrant

Dates: Two Records: one Lake Nursery, November 23, 1975; two, Sangchris November 7 - 11, with one November 24, 1979.

This southern dove erupted northward in fall, but apparently in small numbers. These doves sat fairly still until closely approached, when they suddenly flew quickly away. The 1975 dove was in a multiflora rose hedge, and I was able to view it for some time while it was sitting and later in flight. I noted the black tipped bill, the black spots on the wings, the red iris, the bluish nape, and the scaly breast plus the ruddy colored wings and the short black tail when it flew. The Sangchris record was unusual because it involved two birds (possibly three). They stayed over two weeks maybe because they were feeding in a sunflower field. There have been several other Illinois records of the Common Ground-Dove, which probably originated from the Gulf States. The subspecies is possibly the eastern nominate form.

Documentation: Written description and notes: IL. Sangamon Co., HDB - on file ISM.

Monk Parakeet

Myiopsitta monachus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	0/0	0/0	6/5 (4)	0/0	6/5
Average/day			1.20		1.20
Average/season					

Status: Introduced, Very Rare in Fall

Dates: Fall: September 28 – October 30

The records of this hardy parrot, all from 1980 – 1986, were based undoubtedly on apparent escapees. This parrot probably had little legitimate reason to be listed for the county since they did not have a sustaining population here. However, the Monk Parakeet does have a population in northern Illinois, especially in the Chicago area. In the study, all were seen or heard at Lake Springfield, except note the specimen below. All were single birds except two that flew by the Lake Springfield Nursery October 30, 1986. The records were: one, October 9, 1981; one, September 29, 1985; one heard (they are loud) October 28 and two flybys October 30, 1986. If successful, these parrots made huge stick nests, fed on fruit and grain and attended feeders. It is native to south-central South America. The subspecies of the Sangamon County specimen seems to be the larger nominate subspecies from southern Brazil to northeastern Argentina. It was interesting to note that three specimens from Will County, Illinois (in the ISM collection) are a smaller subspecies probably *M. m. cotorra* from southern Bolivia to northern Argentina.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 607205 adult 3° , near Capitol Airport, September 28, 1980, coll. by K.Veara, wt. =132.2 gms, testes = 8.5 mm, gizzard with sunflowers, crabapple, and corn.

Yellow-billed Cuckoo

Coccyzus americanus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1113/462 (37)	4128/1325 (37)	4088/1446 (37)	0/0	9329/3233
Average/day	2.41	3.12	2.83		2.89
Average/season	30.08	111.57	110.49		

Status: Fairly Common Spring Migrant, Common Summer Resident and Fall Migrant

Dates:

Spring: Earliest arrival = April 29, 1991 Sangchris & 2006 Washington Park Average arrival (37 years) w/range April 29 – May 22 = May 7

Fall:Average departure (37 years) w/range September 23 – November 7 = October 13
Latest departure = November 7, 1982 Gurgens Park

This was one of our most exotic appearing birds with its long, white spotted tail and a loud clucking call. Though the numbers in **spring** were much less than summer or fall, this was because this cuckoo arrived so late in spring. There were only three late April dates; the other was April 30, 2004. The rest of the spring dates were in May. The numbers showed two declines, one from 1985 to 1989 and another from 2004 to the end of the study. This cuckoo had a lot of mortality during migration and many were killed by vehicles and by flying into windows. High counts for spring were: 18, May 25, 1978; 20, May 12, 1979; 10, May 12, 1993; and 10, May 16, 1998. This cuckoo was usually still migrating into early summer, with counts of 27, June 13, 1978 and 21, June 6, 1991. This was essentially a riverine species, but was also found in some upland forest areas. In 30 years, it was recorded on the BBS, but showed lower numbers from 1985 – 1992. However, in contrast the Sangamon River Census tallied 54 in 1976 and 80 in 1991. On May 10, 1979 a pair was copulating at Carpenter Park, and the female had a white flower in its bill. Another copulation was seen June 11, 1991. Nest building was seen from June 5 to July 17. Adults were on the nest August 18 to September 14. A nest with three eggs on September 2, 1983 was at Sangchris. An adult was showing distraction display at Carpenter Park August 1, 2004. Young out of the nests were seen June 21 to September 26, with most in August. Food items noted were katydid (July, August, September), walking stick (August), 13 year cicadas (May), hairy caterpillars (September) and harvestmen (June). High counts for fall were: 10, August 25, 1971; 30, September 6, 1980; and 13, August 17, 1999 & August 25, 2002. Most fall departures were in October with three in September. One recent record was October 24, 2009 at the Cinder Flats. Besides the November date above, it was seen on November 4, 1981 at Lincoln Gardens and November 2, 1982 at Riverton. This cuckoo winters in South America. The subspecies here is the eastern nominate form.

Documentation: Specimens = 15) IL. Sangamon Co., $\bigcirc \bigcirc \bigcirc = 7$, May 25 – August 21, wts. = 51.9 – 67.7 gms, testes = 7 – 11 mm; $\bigcirc \bigcirc = 7$, Sangamon Co., May 15 – October 2, wts. = 49.0 – 106.1 gms, ovaries = 5 – 14 mm (ISM#660054 had egg in oviduct-July 15), gizzard with Lepidoptera; sex? = 1, Sangamon Co., June 2.

Highest # Days/Season Spring 23 (1982 & 1998) Summer 57 (2000) Fall 66 (2002)

Highest # Birds/Season

Spring 114 (1979) Summer 219 (2000) Fall 287 (2002)

Black-billed Cuckoo

Coccyzus erythropthalmus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	283/196 (37)	79/69 (27)	250/212 (35)	0/0	612/477
Average/day	1.44	1.14	1.18		1.28
Average/season	7.65	2.93	7.14		

Status: Uncommon Migrant and Rare Summer Resident

Dates:

Spring: Earliest arrival = April 24, 1990 Horse Creek (banded) Average arrival (37 years) w/range April 24 – May 23 = May 9 Average departure (31 years) w/range May 20 – June 5 = May 28 Latest departure = June 5, 1975, 1983, 1994 (arbitrary due to SR)

Fall: Earliest arrival = July 14, 1980 south Springfield Average arrival (35 years) w/range July 14 – September 13 = August 10 Average departure (35 years) w/range August 10 – October 27 = September 23 Latest departure = October 27, 1983 Lick Creek

The Black-billed Cuckoo was much less numerous than the Yellow-billed, and its numbers were declining, so much so, that it should be on the Endangered List. Although the highest numbers occurred from 1978 to 1983, most years after that had very low numbers, especially after the year 2000. As a result of low numbers, arrival and departure dates were more unreliable and summer residents could not be found. Most spring arrivals were in May, but three years it was in April: see above; April 30, 1986; and April 26, 1989. High counts for spring were 16, May 12, 1979 and 5, May 16, 1981. The migration sometimes continued into June as evidenced by 3, June 4, 1986 at Washington Park. This species tended to be in upland areas of second growth and hedgerows, although some were found in forest and sandy areas. Locations where they were seen in summer were: Sangchris (1979 – 2001), around Lake Springfield (1979 – 1994), Riverside Park (1979), near Irwin Bridge (1979–2004), Carpenter Park (1982), Lincoln Gardens (1983 – 2001), near Buffalo (1984), Williamsville (1985), west of Springfield (August 29, 1986 feeding bob-tail young), Buckhart (1993-1996), north of Pleasant Plains (1997), Mechanicsburg (1979 – 2001), and south of Springfield (1991). Not all years were inclusive and most birds were seen and some were calling. Many of these areas have been degraded, especially the sand areas at Riverside Park and near Irwin Bridge. I noted a calling male at Sangchris July 21, 2000 that puffed its throat, gave harsh belching notes, and cocked its tail. Later, this same bird was mobbed by chickadees and other small passerines. Most fall migrants arrived early in either July or August, but in four years they were not seen until September (1971, 1983, 1984, 2002). By the fall of 2005 and 2006 I could not find any of these cuckoos, and only three were seen in fall from 2007 – 2009. Earlier, there were several high counts for fall of three, and there were four August 21, 1992. The Black-billed Cuckoo winters in northwestern South America.

Documentation: Specimens = 3) IL. Sangamon Co., ISM# 606642 \Diamond , Lincoln Gardens, August 22, 1977, coll. by HDB, wt. = 46.7 gms, testes = 4 mm, gizzard with Phalangida & caterpillars; ISM# 606798 \heartsuit , Lincoln Gardens, September 6, 1978, coll. by HDB, wt. = 50.2 gms, ovary = 6 mm; ISM# 607771 \Diamond , tv tower, October 4, 1983, coll. by HDB, wt. = 57.3 gms, testes = 2 mm.

Highest # Days/Season

Spring14 (1979)Summer6 (1979 & 1996)Fall19 (1981)

Highest # Birds/Season

Spring36 (1979)Summer7 (1979)Fall24 (1992)

Barn Owl

Tyto alba

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1/1 (1)	0/0	0/0	0/0	1/1
Average/day	1.0				1.0
Average/season					

Status: Very Rare Permanent (?) Resident

Dates: One Record: adult, Island Grove, March 31, 2006.

The Barn Owl is an endangered species in Illinois. Note the rash of specimens listed below from the late 1950s and early 1960s. This was the time frame when this fairly common owl disappeared. There was a pair in every small town and many farmsteads. Nests were in barns, hollow trees, silos and other high structures. The demise was possibly caused by loss of habitat and nest sites, pesticides, and the increased auto traffic and the increased speed of that traffic. This species was mostly nocturnal, but the lack of recent sightings and road kills indicated that it had an extremely low population in this area. Efforts such as placement of nesting boxes should be taken to help this unique owl make a come back. The Island Grove owl was roosting in a row of pines and showed no indication it was nesting in the immediate vicinity (found by R. Mudd). The subspecies is the North American *T. a. pratincola*.

Documentation: Specimens = 4 plus 3 additional skeletal (skl.) specimens) IL. Sangamon Co., ISM# 683852 (skl.) sex? Buffalo, May 1956; ISM# 603808 \bigcirc , southwest Springfield, October 13, 1956 (this specimen is very buffy – almost brown on the underparts and face); ISM# 603810 sex? Springfield, December 13, 1956; ISM# 684011 (skl.) \bigcirc , 2mi north Springfield, March 1958; ISM# 603838 \bigcirc , Auburn, April 26, 1961; ISM# 684393 (skl.) \bigcirc , Pawnee, December 19, 1963; ISM# 603887 \bigcirc , Pawnee, December 23, 1963. Also photograph of 2006 record HDB – on file ISM.

Eastern Screech-Owl

Megascops asio

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	122/102 (32)	79/74 (25)	429/343 (31)	472/191 (37)	1102/710
Average/day	1.20	1.07	1.25	2.47	1.55
Average/season	3.81	3.16	13.84	12.76	

Status: Uncommon Permanent Resident

A small nocturnal owl with "ear tufts", the Eastern Screech-Owl was mostly found by imitating its call, which was a squeal and long trill. Many were found road killed, and almost all the specimens came from this source. There were three phases of this owl, gray (28 specimens = 50%), intermediate (4 specimens = 7 %) and red (24 specimens = 43 %). Detectability of this owl was low, and it was certainly present in all the seasons. However, I missed it in 5 springs, 12 summers, and 6 falls, but saw it all 37 winters. Some migration may have occurred, but it was difficult to prove. Fall and winter numbers were higher than spring and summer numbers (4.5 times higher), which might have indicated an influx in winter. High counts were: 11, December 18, 1977; 23, December 21, 1980; 5 August 26, 1981; 20, December 22, 1985; 5, May 9, 1987, and 13, December 15, 2002. They inhabited mainly woodland and edge, but also were seen and bred in residential areas. These owls seemed to call voluntarily in July and August more than other times of the year. They occasionally came out in daylight, but usually sat in thick cover such as cedar trees to avoid crows and jays. If the owl was discovered, many smaller birds mobbed them. For the observer, this was a good way to see warblers as well as the owl. Eventually, the owl usually found a cavity in a tree in which to hide. In winter, I noted them sitting near bird feeders to catch the mice that attended the feeders at night. They nest in cavities in trees, and some people put up nest boxes for this owl. Fledged young were seen between June 11 and November 3 (specimen), with most seen in June, July and August. Unfortunately, the numbers of this small owl dropped in the mid-1990's, and even road kills were difficult to find adding to this conclusion. Most gizzard contents (15) contained mice and insects, but also found were wolf spiders, crayfish and one bird. The subspecies is the northern M. a. naevius.

Documentation: Specimens = 56) IL. Sangamon Co., $\bigcirc \bigcirc \bigcirc = 22$, January 24 – December 24, wts. = 103.7 – 160.0 gms, testes = 2 – 10.5 mm; $\bigcirc \bigcirc \bigcirc = 24$, Sangamon Co., January 9 – December 30, wts. = 99.6 – 197.3 gms, ovaries = 5 – 17.5 mm; unsexed = 10, Sangamon Co., January 22 – December 30, wts. = 120.7 – 139.7 gms [3 were in juvenile plumage: August 12, 1981 (gray); November 3, 1982 (red); June 28, 1983 (red)].

<u>Highest # Days/Season</u>	<u>Highest # Birds/Season</u>
Spring 9 (1985)	Spring 9 (1985)
Summer 12 (1986)	Summer 12 (1986)
Fall 42 (1983)	Fall 59 (1983)
Winter 13 (1984)	Winter 29 (1985)

Great Horned Owl

Bubo virginianus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	838/593 (37)	174/132 (33)	848/660 (37)	811/478 (37)	2671/1863
Average/day	1.41	1.32	1.28	1.70	1.43
Average/season	22.65	5.27	22.92	21.92	

Status: Fairly Common Permanent Resident

This large "eared" owl was the most numerous owl in the study, probably because they sat out in the open at dusk and were highly vocal. The Great Horned Owl was recorded in almost every season (144) except four years in summer and was fairly evenly distributed through the year. They were usually associated with woodland, but also hunted in open areas. High counts were: 9, December 19, 1976; 13, December 19, 1993; 5, September 17, 1996; 7, May 9, 1998; 7, January 1, 2000; and 16, December 16, 2001. This owl called all year, but seemed most vocal in late winter and spring. Copulation was noted on January 30. Nests were placed in conifers, sycamore trees, broken off trees, and dead snags. These owls occasionally usurped crow and Red-tailed Hawk nests. A nest on February 28, 1979 in a partially built building at the University of Illinois at Springfield contained three eggs (ISM Collection). Adults were seen on nests from February 15 to April 6, and young were in the nests from March 16 to May 4, with most in late March and April. Fledged young were found April 3 to June 18 with most in April and May. Juveniles were seen and heard screeching (begging for food) until August or even September. West Nile Virus knocked the numbers of this owl down near the end of the study (2002 and 2003). Early in the study, several of these owls were found dead in yards and one at the State Capitol. One of these dead owls (from Washington Park area, Nov. 26, 1980) was analyzed and found to have been poisoned by strychnine which was a secondary poisoning from eating tainted pigeons. The analysis also showed pesticides in the fats of the owl. These owls ate anything they could catch. I saw one take a snake along the Sangamon River July 31, 2002 and found another electrocuted at Sangchris on March 29, 2002 with a rat still in its talons. One specimen in the collection has the strong odor of a skunk. The breeding subspecies in the county is the nominate form. Specimens of this subspecies varied greatly, some had extensive orange buff ventrally and blackish dorsally while others had more gray dorsally and light buff ventrally. One unsexed owl (ISM# 606441) from Sangchris, April 28, 1976 fits the coloration (gravish) and description of B. v. scalariventris from eastern Canada and was totally different from the rest of the specimens. This indicated that there has been some migration, probably of northern forms into the county in winter.

Documentation: Specimens = 24) IL. Sangamon Co., young = 2 (3 + one unsexed), March – April 8, wt. 187.3 gms; 33 = 5, Sangamon Co., January 16 – December 9, wts. = 939.2 – 1546.3 gms, testes = 5.5 – 12 mm, gizzards with insects parts, mice, pigeon; 99 = 11, Sangamon Co., April 1 – December 17, wts. = 1262.7 – 1714.9 gms, ovaries = 14 – 20 mm, gizzard with mice & rabbit; unsexed = 6, Sangamon Co. April 28 – December 22, wts. = 1428.9 gms, gizzard with a bird.

Highest # Days/Season Spring 33 (2004)

Spring33 (2004)Summer12 (2000)Fall33 (2004)Winter50 (2003)

Highest # Birds/Season

Spring47 (1994)Summer22 (1991)Fall48 (1992)Winter73 (2003)

Snowy Owl

Bubo scandiacus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	0/0	0/0	0/0	9/9 (5)	9/9
Average/day				1.0	1.0
Average/season				1.80	

Status: Very Rare Winter Resident

Dates:

Fall: Earliest arrival = December 3, 2004 ♀ west side Springfield Average arrival (5 years) w/range December 3- January 7 = December 16 Latest departure = January 14, 1981 Lake Springfield

I had only six records of this northern visitor during the study: 1) one found dead, half mile south of Springfield on January 7, 1971 (partial skeleton - ISM 604673); 2) male, west of New Berlin December 7 – 10, 1980 (found dead – skin ISM# 607245); 3) one at Lake Springfield December 17 – January 14, 1980-81 (this was probably the owl found at the municipal building February 3, 1981 and shipped back to Canada); 4) male, 7 miles west of Auburn December 25, 1986 (injured and died – skin ISM# 608777); 5) one a half mile south of New City December 6, 1987; 6) female, west side of Springfield December 3 & 4, 2004 (hit by a car and died – skin was not saved). Obviously, many of these beautiful owls were killed when they came south. Snowy Owls were diurnal and preferred very open areas (away from crows) and usually sat on the ground or perched on buildings, electric poles or other structures. The January 1981 bird was hunting out on the ice of frozen Lake Springfield. Most of these owls were quite tame, and many photographs were taken of the 2004 owl. Snowy Owls nest in the High Arctic and only migrated to this area when food was scarce.

Documentation: Specimens = 4) IL. Sangamon Co., ISM# 607245 \Diamond , west New Berlin, December 7 – 10, 1980, coll. by E. Nagel, wt. = 950 gms, testes = 7 mm (owl was heavily infested with mallophaga); ISM# 608777 \Diamond , west of Auburn, December 25, 1986, coll. by S.Milburn, wt. = 937.7 gms, testes = 7mm; ISM# 603885 unsexed, 12 mi southeast Spfld, December 13, 1963, coll. by J.Nave.

Burrowing Owl

Athene cunicularia

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1/1 (1)	0/0	0/0	0/0	1/1
Average/day	1.0				1.0
Average/season					

Status: Very Rare Spring Migrant

Dates: One Record: adult, Carpenter Park, April 18, 1975.

I observed this owl in undulating flight along the back edge of the park. Then, it zipped to the top of an oak tree and sat there for a quarter of an hour. Noted were its rounded head, stick-like legs, horizontal barring on the under-parts, and spots on the wings. When it finally flew, it went due east. Burrowing Owls usually sat on the ground in fairly open areas, and this bird probably came off the nearby golf course. Although this owl was probably from the western North American population, making it the subspecies *A. c. hypugaea*, a population from Florida exists, but these were not known to wander north. There are several records from Illinois and the mid-west, but this is the only Sangamon County record.

Documentation: Drawing and notes: IL. Sangamon Co., HDB – on file ISM.

Barred Owl

Strix varia

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	976/634 (37)	201/156 (33)	441/382 (37)	258/203 (35)	1876/1375
Average/day	1.54	1.29	1.15	1.27	1.36
Average/season	26.38	6.09	11.92	7.37	

Status: Fairly Common Permanent Resident

This was one of the larger nocturnal owls in the county and was recorded 142 seasons in the study, but was missed four years in summer (1970, 1971, 1973, 1976) and two years in winter (1971-72 & 1989-90). Though most active at night, the Barred Owl was occasionally seen perched in the daytime in wooded areas. Barred Owls were most numerous in bottomland forest, but later (about 1992) were found in the city, especially around Washington Park, where they had evidently adapted to people. Their hooting vocalizations were the easiest to hear of the owls and probably accounted for the higher numbers in spring. High counts were: 4, July 13, 1972; 10, May 4, 1991; 5, December 15, 1991; 11, May 9, 1992; 4, September 2, 1998; 5, February 22, 2004; and 13, May 7, 2005. They nest all over the county where woodland still exists and were most numerous between 1997 and 2000. These owls were at the nest site as early as March 13 and on the nest, usually in a hallow tree, by April 7. Of 25 sightings of young out of the nests, dates varied from April 21 to July 25, with most sightings in May and June. Since they feed in the bottomlands, one of their prey items that I had found in their pellets was crayfish. On October 21, 2003 one owl found dead in Springfield was probably a victim of West Nile Virus. Many of these large owls when hunting at night were killed by motorist. The subspecies in the county is the northern nominate form.

Documentation: Specimens = 5) IL. Sangamon Co., ISM# 607534 \Diamond , Camp Sangamo Road., February, 1981, coll. by W. Webb, wt. = 559.6 gms, testes = 6 mm; ISM# 607812 \Diamond , near Andrew, December 23, 1983, coll. by D. Angelo, wt. = 887.0 gms, testes = 7 mm; ISM# 660413 \heartsuit , Spfld, January 14, 1991, coll. by D. Hill, wt.= 1064.9 gms, ovary = 12 mm; ISM# 607791 \heartsuit , Spring Creek bridge, February 13, 1984, coll. by Dr. C.Starling, ovary =12 mm; ISM# 607792 \heartsuit , West Lake drive., November 29, 1983, coll. by M. Mason, wt. = 962.7 gms, ovary = 13 mm, gizzard with rabbit.

Highest # Days/Season

Spring39 (2000)Summer11 (2001 & 2006)Fall23 (1998)Winter14 (2004)

Highest # Birds/Season

 Spring
 68 (2000)

 Summer
 15 (2001)

 Fall
 35 (1998)

 Winter
 17 (1993)

Long-eared Owl

Asio otus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	21/18 (9)	0/0	1/1 (1)	30/16 (7)	52/35
Average/day	1.17		1.0	1.88	1.49
Average/season	2.33		1.0	4.29	

Status: Rare Spring Migrant and Winter Resident, and Very Rare Fall Migrant

Dates:

Fall:Earliest arrival = November 30, 1992 SangchrisAverage arrival (5 years) w/range November 30 – January 11 = December 20

Spring: Average departure (11 years) w/range February 8 – April 13 = March 14 Latest departure = April 13, 1992 Sangchris

This medium-sized nocturnal owl was probably more numerous than my numbers indicated, but they hide in conifers in out-of-the way places, and most of these areas were on private property. No extensive conifer woods occurred on public lands in Sangamon County. I have also flushed them from cedars, black locust, and willows. In fact, one owl was found dead on March 5, 2001 because its wing was caught on a locust thorn (see specimen below). The primary area for this species was Sangchris, but by about the year 2000 hunting and other activities had mostly prevented them from roosting there. Most of these owls sat between 6 and 14 feet up in the trees. When flushed one gave a loud call "wheem" on March 9, 1994. There was only one fall record - see above. High counts were three: February 2, 1978; February 26, 1991; and February 23, 1998. Other late spring records were April 11, 1975 at Washington Park and March 28, 2001 at Sangchris. I had very little response to played calls of this owl, but one was flying and calling at the south end of Lake Springfield on December 14, 2003. My last record was March 20, 2005 north of Rochester. This interesting owl undoubtedly was much more common and may have nested in the county in the past. Now, it mostly nests in the northern US and southern Canada. The subspecies in North America is *A. o. wilsonianus*.

Documentation: Specimens = 2) IL. Sangamon Co., ISM# 605469 \bigcirc , southeast Spfld, January 8, 1973, coll. by J. White, wt. = 274.4 gms, ovary = 10 mm; ISM# 660560 \bigcirc , south end LSpfld, March 5, 2001, coll. by HDB, wt. = 263.7 gms, ovary = 4.5 mm.

Highest # Days/Season		Highest	# Birds/Season
Spring	5 (2001)	Spring	7 (1979)
Fall	1 (1992)	Fall	1 (1992)
Winter	7 (2000)	Winter	13 (2000)

Short-eared Owl

Asio flammeus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	62/35 (21)	0/0	7/5 (5)	48/16 (10)	117/56
Average/day	1.77		1.40	3.0	2.09
Average/season	2.95		1.40	4.80	

Status: Occasional Spring Migrant and Winter Resident and Rare Fall Migrant

Dates:

- Fall:Earliest arrival = October 8, 1979 south of SpringfieldAverage arrival (10 years) w/range October 8 January 17 = November 23
- Spring: Average departure (22 years) w/range March 3 April 30 = March 23 Latest departure = April 30, 1982 near New City

This medium-sized owl of the prairies was mostly crepuscular, but occasionally it was seen in the day time. The Short-eared Owl is on the Illinois Endangered List and was probably common and nested when Sangamon County had prairie. Special effort was made in the evenings to find this species and sometimes it was flushed up while looking for longspurs. They roost on the ground in tall grass, many times in the same areas that Northern Harriers used and ate mostly field mice (Microtus). This owl had a distinctive erratic flight, and the best way to find them was to scan likely habitat at dusk. During the snowy winter of 1998-99, two of these owls stayed along a country road north of Andrew (KB) in snow pushed up the snow plow. They arrived in fall in October and November and left in spring in March and April. Although recorded in only 10 winters, they were probably present in most other winters also. Other late spring departures were April 18, 1971 and April 12, 1975 both at Sangchris. High counts were: 3, November 5, 1970; 10, February 8, 1978; 13, March 4, 1978; 8, February 17, 2001; and 14, March 21, 2009. Spring and winter accounted for most of the numbers, and they were difficult to find in fall. Numbers in spring were 8.9 times that of fall. Some in spring were migrants from further south. Unfortunately, people still illegally shoot this owl, but many more were probably hit by vehicles at dusk. The Short-eared Owl breeds as far north as the Arctic. The subspecies here is the nominate form.

Documentation: Specimens = 2) IL. Sangamon Co., ISM# 661929 \bigcirc , 1 mi south Lowder, March 2, 2007, coll. by T. Pickrel, wt. = 450.9 gms; ovary = 15 mm; ISM# 606250 \bigcirc , Rochester, November 5, 1975, coll. by L. Bozartch, wt. = 286.0 gms, ovary = 13 mm.

Highest	# Days/Season	H
Spring	4 (4 years)	S

Fall1 (all 5 years)Winter4 (1999)

Highest # Birds/Season

 Spring
 13 (1978)

 Fall
 3 (1970)

 Winter
 19 (1977)

Northern Saw-whet Owl

Aegolius acadicus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1/1 (1)	0/0	9/9 (6)	10/10 (7)	20/20
Average/day	1.0		1.0	1.0	1.0
Average/season	1.0		1.50	1.43	

Status: Very Rare Migrant and Winter Resident

Dates:

Fall:Earliest arrival = October 26, 1995 Oak Ridge Cemetery
Average arrival (7 years) w/range October 26 – December 15 = November 11

Spring: Average departure (7 years) w/range January 3 – March 15 = February 8 Latest departure = March 15, 1978 ♀ Lake Springfield

Although listed as very rare in this study, this tiny owl almost surely occurred every year and was probably much more numerous than my records indicated. However, there was not a lot of the correct habitat that this owl liked to hide in, which was dense stands of cedar with surrounding woods. Finding these owls was a difficult task, which was unlike looking for birds and more like looking for "a needle in a haystack". They were nocturnal and hid in the day time to avoid enemies like jays and crows, which would kill them given the chance. Hiding well was life or death to this owl. The easiest way to monitor their presence was by bird netting (by a licensed bird bander), and that was the way I first saw one on November 8, 1974 at Carpenter Park (VK). Later, I banded one in my backyard south of Springfield on November 5, 1976, proving to me that they were widespread. I believe this still to be the case, but they varied greatly in numbers from year to year. These owls could also be detected by being aware of the behaviors of small birds like chickadees, Blue Jays and cardinals involved in mobbing actions. One was detected by cardinals at Oak Ridge Cemetery, December 15, 1985 which was 16 feet up in a Hemlock (T.Teeter), and another owl was six feet up in a willow thicket at Riverside Park on November 1, 1995 betrayed by chickadees and kinglets. Saw-whet Owls roost from 2 - 25 feet off the ground. Most were very tame, and when perched, sat and stared back at the observer. These owls not only sat in cedars but other conifers as well as willow thickets and dense vine tangles. Unfortunately, they were hit by vehicles when hunting at night, and that was how the ISM obtained four specimens. Plus, the other was a window kill. One owl observed at Sangchris from February 7 - 25, 2005 stayed in the same spot and pellets collected from three dates all contained white-footed mice (Peromyscus). The main migrations were in November and March, but also see the migrational dates above. They breed mostly in the coniferous zone, but they have nested rarely in Illinois. The subspecies in almost all of North America is the nominate form.

Documentation: Specimens = 5) IL. Sangamon Co., ISM# 607370 \bigcirc , Spfld, February 17, 1982, coll.by J. Segretto, wt. = 101.1 gms, testes = 5 mm, gizzard with microtus sp?; ISM# 660149 \bigcirc , Sangchris, November 17, 1990, coll. by HDB, wt. = 80.3 gms, testes = 3 mm; ISM# 606059 \bigcirc , LSpfld, November 11, 1974, coll. by T.Paisley, wt. = 89.2 gms, ovary = 10.5 mm; ISM# 606288

 \bigcirc , Buckhart, February 1, 1976, coll. by HDB, wt. = 87.4 gms, ovary = 11 mm; ISM# 606715 \bigcirc , LSpfld, March 15, 1978, coll. by R. McCormick, wt. = 101.4 gms, ovary = 13 mm.

Common Nighthawk

Chordeiles minor

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	2189/496 (37)	1192/660 (37)	14269/1194 (37)	0/0	17650/2350
Average/day	4.41	1.81	11.95		7.51
Average/season	59.16	32.22	385.65		

Status: Fairly Common Spring Migrant, Uncommon Summer Resident and Common Fall Migrant

Dates:

Spring: Earliest arrival = April 21, 1987 south Springfield Average arrival (37 years) w/range April 21 – May 13 = May 4

Fall: Average departure (37 years) w/range September 25 – October 26 = October 7 Latest departure = October 26, 1986 near New City

This goatsucker, which depended on flying insects for food, usually arrived in **spring** in May, but I also recorded eight late April dates of arrival. It arrived twice on April 25, 1975 & 1979. Migrants passed through the county quickly at this season, so numbers were 6.5 times lower in spring than fall. High spring counts were: 50, May 20 & 21, 1976; 50, May 15, 1981; 60, May 12, 1996; 57, May 23, 2000; and 53, May 21, 2002. Occasionally like swallows, in cool, rainy weather, they flew low over Lake Springfield. Nighthawks may follow rivers in migration as 32 were moving north along the South Fork on May 30, 1995. Some years migration continued into June such as 1984 and 1997. High counts for the summer period were 10, June 1, 1984 and July 25, 1994. Though this species at one time nested on the ground, they apparently did not in this county during this study, but instead used roof tops for nesting. This was mostly an urban nesting species in this county and their nasal buzz was a common sound in Springfield and some of the other towns. I occasionally heard them"booming" along Wabash Avenue in spring. They were aggressive in protection of their young, e. g. on July 4, 1992 two chased off a Red-tailed Hawk. I noted fledged young between July 13 and August 11 in Springfield. Although summer residents were present, fall arrival was fairly obvious and the average of 32 years was August 19 with extremes August 5 to 31. Many of these birds moved on cold fronts, with examples: August 29, 1977 south of Springfield a swirling mass of 200 were going over in the evening; September 15, 1982 at Washington Park after clouds began to break up and with a north wind, a kettle of 150 flew over and later another 50 passed over; August 30, 1987 swallows and nighthawks were moving before a cold front; and September 8, 2005 a small flight was before a front with rain. On October 9, 1988 one was soaring with migrating gulls. Nighthawks migrated diurnally in both spring and fall, but I did find a tv tower kill on September 17, 1979 indicating nocturnal migration. Other high counts for fall were: 170, August 31, 1981; 164, August 28, 1983; 150, September 12, 1986; 292, September 17, 1998; and 220, August 28, 2004. Sometimes these birds sat horizontally on wires or tree limbs and occasionally they were mobbed by songbirds, which I noted at Riverside Park on September 2, 2004 and at Center Park on September 23, 2006. Departures were in late September (9 times) and October (28 times) with other late dates of October 21, 1977 & 2001; October 23, 2007; and October 19, 2009. The Common Nighthawk

winters in South America. The main subspecies and breeding bird in this area is the northern nominate form, but the much lighter *C. m. sennetti* from the Great Plains was recorded once (see partial specimen below) on September 11, 1982.

Highest # Days/Season

Spring22 (2000)Summer33 (1999)Fall48 (1999)

Highest # Birds/Season Spring 264 (1997)

Summer 73 (2005) Fall 843 (1998)

Chuck-will's-widow

Caprimulgus carolinensis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	8/8 (6)	0/0	1/1 (1)	0/0	9/9
Average/day	1.0		1.0		1.0
Average/season	1.33		1.0		

Status: Very Rare Migrant

Dates:

Spring: Earliest arrival = April 30, 1991 ♂ Carpenter Park Average arrival (6 years) w/range April 30 – May 12 = May 7 Average departure (3 years) w/range May 10 – 12 = May 11 Latest departure = May 12, 1996 Lake Springfield

Fall: Earliest arrival / latest departure = September 13, 1971 south Springfield

This large goatsucker was on the northern edge of its breeding range in this area, but was not known to nest in this county. The Chuck-will's-widow was more numerous further south in Illinois and was mainly a southeastern woodland species. I had nine records, eight for spring and one for fall, several of which were based on calling birds since it was a nocturnal species. One was calling along the warm water ditch at Lake Springfield (K. & J. Watt) on May 10, 1979 at 8:30 pm and was heard as late as 10:00 pm. In spring only one record was in April (above), the rest were in May. I last saw this species on May 12, 1996 when one was flying over the water at Lake Springfield during a cool spell with many other birds at dusk. Other 'chucks' occurred at Washington Park on May 3, 1982, Carpenter Park April 30, 1991 and May 7, 1983 and Sangchris May 10, 1988 & 1991. The only fall bird was at a pole light south of Springfield, and gave a growling sound as it fed on the wing on September 13, 1971. This species winters from the very southern US to northern South America including the West Indies.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 607068 \bigcirc , Springfield (caught in building), May 11, 1979, coll. by HDB, wt. = 89.7gms, ovary = 12 mm.

Whip-poor-will

Caprimulgus vociferus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	175/134 (34)	66/52 (17)	22/22 (14)	0/0	263/208
Average/day	1.31	1.27	1.0		1.26
Average/season	5.15	3.88	1.57		

Status: Occasional Spring Migrant and Summer Resident and Rare Fall Migrant

Dates:

Spring: Earliest arrival = April 7, 1977 Lake Springfield area Average arrival (34 years) w/range April 7 – May 10 = April 19

Fall:Average departure (14 years) w/range August 8 – October 8 = September 19
Latest departure = October 8, 1995 ♂ northwest of Springfield (road kill)

The call of this night bird was county-wide in woodland areas not very long ago, but by the end of the study it was gone except for a very few migrants. In the 1970s, it still nested around the southern part of Lake Springfield, at Sangchris and northwest of Springfield. However, by 2009, only a few migrants could be found and not only in this county, but the whole state was losing this unique bird. It should be on the Illinois Endangered List. Though seen most springs, it was not found in 1971 and 1972 or 2006 and 2008. It was seen May 3, 2007 at Sangchris and April 18, 2009 at Washington Park, both migrants. High counts in spring were three: May 8, 1976, April 23, 1978, May 4, 1983, and April 22, 1991. The Whip was not recorded on either the BBS or the Sangamon River Census in summer. On June 6, 1973 four miles west of Springfield, I was shown a nest on the ground in the woods with two eggs; and on June 18 both young and the female were seen. I doubt that this woods now exists with all the sprawl on the west side. I must admit that I did not, at that time, appreciate the significance of what I was being privileged to see. The last breeding holdouts in the county were at Sangchris and northwest around Irwin Bridge; both areas have recently been damaged. High counts in summer were: six males, near Irwin Bridge June 18, 1992 and four males, near Irwin Bridge June 25, 2000. These night birds were much harder to find in **fall** because they quit calling in early fall, but may start again, though not regularly, and the latest date for calling was September 28, 1978. At Oak Ridge Cemetery on September 26, 1982, I watched as a flock of warblers, vireos and kinglets mobbed a male Whip-poor-will which was sitting 13 feet up in a pine tree. Night work was difficult in crowded Sangamon County, especially with all the building in rural areas; consequently this bird went unrecorded in 22 fall seasons. After 1998, only one was seen in fall on September 29, 2009 at Carpenter Park. My recent findings may prove that this species can be found by scanning lake edges at first light in fall. Reasons for decline could be loss of habitat, increase in numbers of predators on ground nesting birds, and road kills. These birds were prone to sit in the road, especially on cool nights, and were blinded by on coming car lights. The increased traffic in rural areas because of sprawl theoretically increased the mortality of these unique birds. The subspecies in the eastern US is the nominate form, and they winter from the southern part of the Gulf States south to Central America.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 607292 adult $\stackrel{\wedge}{\bigcirc}$, Buckhart, September 16, 1981, coll. by HDB, wt. = 58.2 gms, testes = 2.5 mm.

Highest # Days/Season

Spring19 (1982)Summer18 (1983)Fall4 (1983)

Highest # Birds/Season

Spring22 (1982)Summer18 (1983)Fall4 (1983)

Chimney Swift

Chaetura pelagica

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	24939/1531 (37)	23736/1779 (37)	66737/2454 (37)	0/0	115412/5764
Average/day	16.29	13.34	27.20		20.02
Average/season	674.03	641.51	1803.70		

Status: Very common Fall Migrant and Common Spring Migrant and Summer Resident

Dates:

Spring: Earliest arrival = **April 2**, 2000 Washington Park Average arrival (37 years) w/range April 2 – 20 = **April 13**

Fall:Average departure (37 years) w/range October 7 – November 1 = October 16Latest departure = November 1, 1988 UIS

For a small bird that migrated so far south in winter the Chimney Swift was very accurate in its spring arrival timing, always in early to mid-April depending on the weather. These stubby agile birds were all wings and dynamic fliers with weak bills and feet. Two other early dates were both April 7, 1998 & 2001. High counts for spring were: 200, May 3, 1976; 200, May 9, 1981; 200, April 29, 1994; 500, May 29, 1995; and 200, May 26, 2004. On cold rainy days, these swifts swirled around the dam at Lake Springfield catching small flies, and in the process many were hit by vehicles. I noted the following kills in this manner 100+ killed June 4, 1982; 25 killed May 26, 1992; 94 killed June 6, 1993; 50, killed May 25, 1995; 100 killed May 29, 1995; 50 killed June 5, 1998; 25 killed May 25, 1999; 45 killed end of May 2001; 20 killed June 1, 2006 plus other small kills. Some migration was apparently still going on in early June some years. Summer numbers were about the same as spring numbers. High counts in summer were: 100, June 25, 1981; 150, July 25, 1985; 100, July 20, 1991; 125, June 21, 1992; 200, June 20, 1995; and 400, June 3, 1996. Chimney Swifts nested in Springfield and all of the smaller towns in the county. I did not collect any data on nesting since they nest in chimneys and the young on the wing looked similar to adults. These swifts may nest in hallow trees at Carpenter Park because they were always flying over the preserve in summer. Counts were moderate in summer (maybe somewhat lower at the end of the study), the exceptions probably occurred with cool rainy weather or the early on start of fall migration. On August 12, 1999 at the Rochester sewer pond swifts and swallows were feeding low over the water when two swifts collided. One was knocked into the water and swam ashore using its wings as paddles. Some fall migration apparently began in late July, but usually in August. Numbers in fall were 2.7 times spring numbers and probably showed increases because of young of the year and flocks staying longer. Many times, they could be seen moving south along the lake or in the hundreds circling a large chimney in the evening. The speed that swifts descended down the chimneys was amazing and spectacular to watch. High counts for fall were: 600, September 21, 1981; 760, September 15, 1985; 500, October 11, 1995; 1000, October 9, 2003; and 500, September 19, 2006. All departure dates were in October except the one above. Other late dates of departure were: 64, October 23, 2004; one, October 30, 2006; and one, October 25, 2009. This swift winters in Peru.

Documentation: Specimens = 25) IL. Sangamon Co., Spring = 21, all Springfield, adult $\bigcirc \bigcirc = 11$, May 19 – June 8, wt. = 21.6 – 26.1 gms, testes = 5 - 12 mm; adult $\bigcirc \bigcirc = 10$, May 16 – June 8, wt. = 22.9 – 26.0 gms, ovaries = 5 – 10 mm; Fall = 4, all Spfld, $\bigcirc \bigcirc = 2$ & unsexed = 2, July 25 – September 25, $\bigcirc \bigcirc \bigcirc$ wt. = 21.9 – 26.0 gms.

Highest #Days/Season

Spring50 (1992)Summer61 (1986, 2000, 2002, 2004) maxFall86 (2006)

Highest # Birds/Season

Spring 1750 (1995) Summer 1472 (1982) Fall 4477 (2003)

Ruby-throated Hummingbird

Archilochus colubris

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	587/392 (37)	652/390 (36)	2543/981 (37)	0/0	3782/1763
Average/day	1.50	1.67	2.59		2.15
Average/season	15.86	18.11	68.73		

Status: Fairly Common Spring Migrant and Summer Resident and Common Fall Migrant

Dates:

Spring: Earliest arrival = April 12, 1999 ♀ Center Park Average arrival (37 years) w/range April 12 – May 17 = May 3

Fall: Average departure (36 years) w/range September 16 - October 23 = October 1Latest departure = **October 23**, 2006 \bigcirc north Springfield

All hummingbirds seen in this study were assumed to be Ruby-throated unless proved otherwise. Most of these active little birds I observed in the wild, plus some were seen at feeders. If I had spent more time observing feeders, the data would be different. The earliest spring record could have possibly been a Black-chinned Hummingbird, but I would have needed to examine the bird in the hand to confirm it. Not counting the early female, the average arrival of females was May 13 for eleven years. Numbers were very low from 1987 – 1991, but picked back up in the fall of 1991. Then, the numbers increased again in 1998, especially in fall, and have stayed high through 2010. For every one seen in spring, 4.3 were seen in fall. Other early spring arrivals were: April 23, 1972; April 22, 1981; and April 20, 2000. High counts for spring were 6, May 16, 1970 and 8, May 20, 2002 & May 26, 2003. These birds passed through very fast in spring feeding on columbine, clover, honey-suckle, and locust. Later, summer residents fed on trumpet vine. I noted few summer residents prior to 1976, which were low in numbers until 1998. Spotting the males on their perches near their nests was key to counting this bird in summer. Usually, the perch was some dead twigs at the top of a tree, but it could also be power wires along the roadside. High counts in summer were 9, June 20, 2003 and June 13, 2004. The pendulum display was first seen May 3, but one displaying over a gnatcatcher at Carpenter Park April 20, 2000 must have been exhibiting aggression. I have seen many encounters between these two small species. The aggressiveness of this little hummingbird seems to be great, and one flew up into the sky to harass a Broad-winged Hawk on August 27, 1979. Nest building, including gathering spider web and lichens, occurred between May 7 and July 17. Two females were sitting on nests within sight of each other at Tower Road on June 20, 2005. Young were seen out of the nest July 19, 2002 at Riverside Park. The latest male seen at a nest perch was August 4, 2002. Some fall migrants began arriving by late July and these early arrivals were noted in seven years. Frequently in fall, I could see hummingbirds flying across Lake Springfield. High counts for fall were: 12, September 5, 1984; 15, September 1, 2001; 28, August 31, 2002; and 22, September 28, 2008. In fall, these birds gathered at jewelweed patches and held territories and perches, chasing each other from favored flowers. One was seen using jimsonweed flowers September 17, 1993. On August 16, 2008 I photographed a Ruby-throated

Hummingbird puncturing the base of a trumpet vine flower because its bill was too short to obtain the nectar from this long flower. As the flowers played out in late September and early October, the birds left; but those at feeders sometimes lingered later. I had 19 departure dates into October; one other late date besides the one above (seen at S. Doubet's feeder) was October 16, 1994. This bird migrates to Mexico and Central America for winter.

Documentation: Specimens = 25) IL. Sangamon Co., Spring = 5, $\Im \Im = 4$, Spfld (2) & Dawson & Salisbury, May 9 – 23, wts. = 3.0 – 3.5 gms; $\Im = 1$, 2 mi north Spfld, May 25, 1978, wt. = 2.8 gms; Summer = 3, $\Im = 1$, north Spfld, June 17, 1971, wt. = 2.9 gms, testes = 1.5 mm, $\Im \Im = 2$, Spfld, June – July 4, wt. = 3.6 gms, ovary = 4 mm; Fall = 17, immature $\Im \Im = 5$, Spfld, August 17 – October 7, wts. = 2.9 – 5.2 gms; immature ? $\Im \Im = 3$, Spfld, September 11 – 21, wt. = 3.5 gms. Plus 9 not sexed (some injected with formaldehyde), August 12 – September 21.

Highest # Days/Season

 Spring
 26 (2006)

 Summer
 34 (2002)

 Fall
 63 (2005)

Highest # Birds/Season

 Spring
 51 (2006)

 Summer
 71 (2003)

 Fall
 300 (2002)

Rufous Hummingbird

Selasphorus rufus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	0/0	3/3 (1)	5/5 (3)	2/2 (1)	10/10
Average/day		1.0	1.0	1.0	1.0
Average/season					

Status: Very Rare Fall Migrant

Dates:

Fall:Earliest arrival = July 24, 2003 adult ♂ west SpringfieldLatest departure = December 17, 1998 adult ♂ west Springfield

The first Illinois record of a *Selasphorus* hummingbird (not counted in the study) occurred a half mile south of the Sangamon County line at Virden in November 1986. It served as a good lesson in hummingbird identification, and I found that most of these birds (females and immatures) had to be netted and measured in the hand to be correctly named. However, with the digital cameras now being used, the clear photographs can in some cases make netting these delicate birds unnecessary. The Rufous Hummingbird is a western species which breeds in the Northwest from California to southern Alaska and winters in Mexico. Due to its elliptical migration route this bird, which migrates north along the Pacific Coast in spring and deflects more eastward in fall, all Sangamon County records were for fall. Fall migration for this species started in July. All four records for the county of the Rufous Hummingbird were first spotted at feeders, and I would not have seen them except for the kindness of the observers at the sites (see list below*). Of the four records, all were adults, two males and two females. Total records were: adult \Diamond , west of Springfield November 17 –December 17, 1998; adult Q, Lake Springfield November 23, 1998: adult Q, south of Washington Park November 17 – 18, 2000: and adult \Diamond , west of Springfield July 24 – 27, 2003.

Documentation: Specimen: IL. Sangamon Co., ISM# 660520 adult \mathcal{Q} , Lake Springfield, November 23, 1998, wt. = 3.6 gms, ovary = 2.5 mm, gizzard with small Diptera.

 * David & Sharon Oehmke Robert & Cyd Labonte Cathy Kinser Joy & Louie Laughlin Carolyn Barris

Belted Kingfisher

Ceryle alcyon

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	2030/1341 (37)	1300/728 (36)	4321/2505 (37)	1335/897 (37)	8986/5471
Average/day	1.51	1.79	1.72	1.49	1.64
Average/season	54.86	36.11	116.78	36.08	

Status: Uncommon Migrant and Summer and Winter Resident

Dates:

- Spring: Earliest arrival = February 2, 1987 three Lake Springfield (arbitrary due to WR) Average arrival (24 years) w/range February 2 – April 15 = March 15
- **Fall:** Average departure (18 years) w/range November 26 January 1 = **December 14** Latest departure = **January 1**, 2002 three Lake Springfield (arbitrary due to WR)

Some kingfishers were probably permanent residents, but there was also a migrational component. Occasionally, I saw birds in flight in early spring which appeared to be migrating. Areas like Lake Springfield, the Sangamon River and Sangchris seemed to have them at any season, but they could appear nearly anywhere there was a pond or creek. Migration dates were difficult to determine because of resident birds and numbers increased with more time in the field. High counts for spring were: 6, May 23, 1987 and 8, April 3, 2002. One was roosting on the bank of a pond in willows March 20, 1992. Numbers in summer were very low until 1979. In 1987, I found five pairs in Sangamon County. This species increased on the Sangamon River Census from four in 1976 to 16 in 1991. Additionally, the BBS showed that it was found only eight years, but seemed to be increasing more recently. In early spring, much chasing and loud chattering occurred between pairs and rivals. Kingfishers were paired by March 23, 2002 at Riverside Park and digging nest holes March 8 - 30. Fledged young were noted between May 23 and August 9 with most being in July. Birds in summer were not obvious until the young were out of the nest. High counts for summer were 7, June 21, 1987 and July 31, 2005. One flying over the state complex in Springfield on June 15, 1992 seemed lost and out of habitat. Fall migration was even more obscure than spring, but fall numbers were 2.1 times spring numbers. One was seen flying south before a cold front on August 11, 1977. High counts for fall were: 7, August 15, 1992; 9, September 18, 1998; and 7, August 14, 2003. Numbers dropped off in December when the water froze and winter numbers were well below fall numbers. High counts for winter were: 5, December 20, 1992, February 21, 1998, and December 19, 2002. Some winters the kingfisher seemed to completely depart due to mostly frozen water. Besides fish this bird was observed eating crayfish and a small turtle. A crow was seen stealing a fish from a kingfisher on May 19, 1997 at Washington Park.

Documentation: Specimens = 4) IL. Sangamon Co., ISM# 606616 adult 3° , LSpfld, May 8, 1977, coll. by K. Watt, wt. = 165.5 gms, testes = 7 mm; ISM# 660136 immature 3° , IDOT Spfld, August 30, 1990, coll. by K.Lockart, wt. = 130.5 gms, testes = 3.5 mm; ISM# 605820 immature 2° , LSpfld, July 27, 1972, coll. by Mrs A.Finlay, wt. = 134.5 gms, ovary = 8 mm; ISM# 607418

immature \bigcirc , Douglas Park, July 28, 1982, coll. by R. Wenneborg, wt. = 104.3 gms, ovary = 5 mm.

Highest # Days/Season

Spring76 (2006)Summer55 (2001)Fall117 (2006)Winter117 (2006)

Highest # Birds/Season

Spring121 (2006)Summer118 (2001)Fall243 (2002)Winter90 (2002)

Red-headed Woodpecker

Melanerpes erythrocephalus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	4991/1689 (37)	3553/1293 (37)	6956/2343 (37)	1486/654 (36)	16986/5979
Average/day	2.96	2.75	2.97	2.27	2.84
Average/season	134.89	96.03	188.0	41.28	

Status: Fairly Common Migrant and Summer Resident and Uncommon Winter Resident

Dates:

Spring: Earliest arrival = March 20, 2009 adult Center Park Average arrival (29 years) w/range March 30 – April 27 = April 16

Fall: Average departure (29 years) w/range September 15 – November 14 = **October 9** Latest departure = **November 14**, 1987 (arbitrary due to WR)

This was a commonly seen woodpecker up to 1985, but the dead trees it needed for nesting were being cut down by cities, the park district, the state and everyone else. Consequently, its population recently was much lower. It inhabited woodland, but was also found in open areas with scattered trees as long as there were some dead trees present. In this study, the years with the highest populations were 1975 – 1984. Although some wintered, many came back in spring after wintering further south, and could be seen migrating diurnally usually just above the treetops. Birds in juvenile plumage were noted until at least March 13. High counts for spring were: 25, May 4, 1974; 22, May 8, 1976; and 21, May 5, 1979. Counts in spring after 1992 were lower on average. This woodpecker ranked 46th in the BBS and after a significant decrease in the late 1960s my numbers on the BBS showed a drop off about 1989. High summer counts were 33, June 18, 1976 and 26 June 13, 1978. Later in the study, summer counts were less than half of these numbers. Even the Sangamon River Census had more in 1976 (56) than 1991 (37). Nest excavation was seen between April 11 - 25 and feeding in the nest was observed June 22, 1993. Young were seen out of the nest from June 20 to August 12, with the majority in July. In fall 1992, 1993, and 2000 I kept track of juvenile vs adult numbers (after observing the first juvenile). The data showed (1992) 53 adults : 28 juveniles; (1993) 69 adults : 33 juveniles; and (2000) 100 adults : 25 juveniles, which appeared to indicate low nesting success during those years. Migration in fall was tied to the production of acorns and other seed crops, the fewer the acorns, the more of these woodpeckers migrated south. They hoard acorns and other seeds for later use and were in competition with Red-bellied Woodpeckers, squirrels and others. Fall numbers were 1.4 times more than spring numbers. Flights sometimes were observed such as 33 at Lake Springfield on September 15, 1978 and 46 flying southwest at Lake Springfield September 12, 1998. Low numbers in winter occurred in 1973-74 (6); 1978-79 (0); 1984-85 (6); 1988-89 (8); 2001-02 (8); and 2008-09 (1). There were some other years where the numbers were fairly low 1986, 1990, 1995, 1997 and 2004 (see Figure 19). High counts for winter were: 25, December 13, 1970; 25, December 19, 1971; 32, December 17, 1972; and 17, January 30, 1977. Especially in winter during inclement weather, these birds were not always evident as they stayed inside their roost cavities, and this behavior should be taken into account by observers of winter surveys. This woodpecker also flycatches and many were hit by vehicles. Three were

killed along East Lake Drive at Lake Springfield in the summer of 1992. The Red-headed Woodpecker may winter as close as Southern Illinois, since there are large numbers in the bottomland forests there.

Highest # Days/Season

Spring69 (1975)Summer52 (1982 & 2000)Fall117 (1981)Winter40 (1976)

Highest # Birds/SeasonSpring376 (1973)Summer217 (1979)Fall581 (1981)Winter178 (1970)

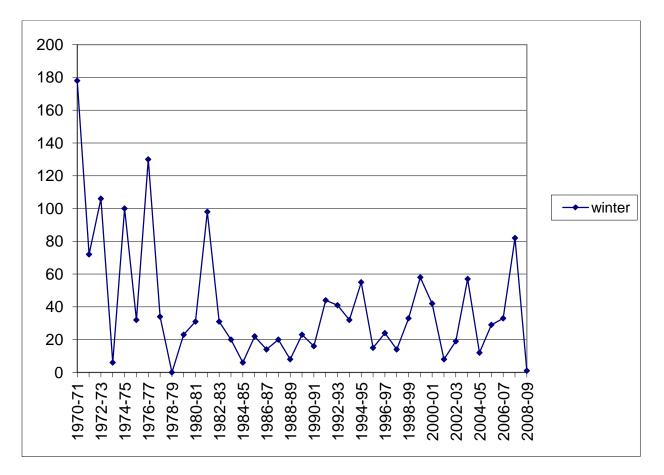


Figure 19. Red-headed Woodpecker Numbers in Winter.

Red-bellied Woodpecker

Melanerpes carolinus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	12033/2811 (37)	4404/1355 (37)	17117/3742 (37)	9433/2287 (37)	42987/10195
Average/day	4.28	3.25	4.57	4.12	4.22
Average/season	325.22	119.03	462.62	254.95	

Status: Common Permanent Resident

Of the woodpeckers in this study, only the flicker was more numerous than the Red-bellied Woodpecker. The Red-bellied Woodpecker was mostly a woodland species, but had adapted to wooded parks, golf courses, and residential areas. High counts for spring were: 18, May 5, 1973; 19, May 9, 1987; 21, May 5, 1990; and 22, April 2, 2000. In summer it ranked 37th on the BBS with increased numbers in 1989 and 2000. It also increased (more than doubled) on the Sangamon River census from 1976 to 1991. Intraspecific competition was seen from March 1 to April 2, and fights with starlings over nest cavities were observed April 5, 1995 and April 27, 1982. Excavation of the nest took place March 25 – April 3, with most nests found on the under side of a limb. Copulation was noted between April 9 - 30. Young were being fed in the nest from May 18 – July 1, and fledged young were seen between June 2 to August 11. High counts for summer were 19, June 18, 1976 and 25, June 11, 1991. This was a species that stored food and an immature was observed storing acorns at Sangchris August 20, 1993. If there was any migration/ dispersion, it was in fall as I saw three flying south at Sangchris on October 1, 1980 and six flew by Marine Pt. September 30, 1993. High counts for fall were: 18, November 6, 1983; 18, August 25, 1998; 21, October 27 & 29, 2000; and 19, September 7, 2003. The Redbellied Woodpecker seemed to be holding better numbers compared to the Red-headed Woodpecker, maybe because it was non-migratory and could utilize more varied nesting situations. The Red-bellied Woodpecker was also more regular at feeding stations in winter. High counts for winter were: 20, February 1, 1978; 28, February 21, 1998; 30, December 14, 2003; and 22, January 1, 2004. Slightly higher numbers in winter could be because they were easier to observe. The subspecies in the county is M. c. zebra, but some taxonomists consider this species monotypic.

Documentation: Specimens = 11) IL. Sangamon Co., $\bigcirc \bigcirc = 5$, LSpfld (2) & southeast Spfld (2) & 4 mi east Spfld, January 18 – December 3, wts. = 76.0 – 86.8 gms, testes = 1 – 9 mm; $\bigcirc \bigcirc = 6$, LSpfld (3) & Spfld & 5 mi south Spfld & southeast Spfld, February 9 – December 2, wts. = 69.7 – 80.1 gms, ovaries = 1 – 6 mm.

Highest # Days/Season

 Spring
 92 (2000, 2001, 2004, 2006) max

 Summer
 59 (2000)

 Fall
 122 (2001, 2002) max

 Winter
 89 (2003)

<u>Highest # Birds/Season</u>

Spring754 (2000)Summer328 (2000)Fall887 (2001)Winter551 (2000)

Yellow-bellied Sapsucker

Sphyrapicus varius

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	2188/778 (37)	0/0	1633/907 (37)	546/401 (37)	4367/2086
Average/day	2.81		1.80	1.36	2.09
Average/season	59.14		44.14	14.76	

Status: Common Spring Migrant, Fairly Common Fall Migrant and Uncommon Winter Resident

Dates:

- Spring: Earliest arrival = March 12, 2005 three in Sangamon Co. (arbitrary due to WR) Average arrival (36 years) w/range March 12 – April 4 = March 25 Average departure (37 years) w/range April 16 – May 8 = April 27 Latest departure = May 9, 2009 ♀ Horse Creek
- Fall:Earliest arrival = September 7, 1988 immature Washington ParkAverage arrival (37 years) w/range September 7 October 5 = September 22Average departure and Latest departure were obscured by early winter birds (see text).

This well marked species with the long white wing patch in all plumages was the most migratory of the woodpeckers. Both sexes had a squeal for a call note and would sometimes answer an imitation. They occurred in woodland of all types. Though present in winter, spring arrival could be determined by increased numbers, plus observations in different areas. They usually arrived in March, but did so in April in four years (1972, 1975, 1980, 1984). High counts for spring were: 14, April 18, 1980; 16, April 13, 1982; 14, April 6, 1995; 14, April 12, 1997; and 15, March 31, 2005. The sapsucker drilled holes in rows in trees to obtain sap and to attract insects, this behavior also attracted other birds, especially other sapsuckers. Many squabbles occurred over these sap holes, and on March 30, 2005 one male at Washington Park inflated its red throat to intimidate another male. Most left in late April, and I noted they left early in 2002 because of a mid-April heat wave. They were seen into May in ten years, with late records: above, female, May 8, 1976; one, May 7, 1983; female, May 7, 1985. Even though they nest rarely in northern Illinois, most nest in the coniferous zone in the northern US and Canada. The sapsucker was less numerous in fall (numbers were 1.3 times more in spring) and arrived in September with only two October arrivals (1970 and 1986). One other early fall arrival was a female September 11, 2001 at Carpenter Park. Immatures were easy to separate from adults in fall because of their much duller appearance. The sapsucker migrated nocturnally proven by the several tv tower kills in fall. High counts for fall were: 8, October 6, 1974; 7, November 28, 1976; 13, October 14, 1985; 11, October 3, 1998; 7, September 28, 2001; 8, October 2 & 6, 2006; and 8, September 29, 2009. Most migrants left by late November, and the wintering population could vary considerably. In 16 winters there were less than 10 birds, and in five winters there were over 30 birds. Sapsuckers seemed more sedentary in winter and frequently sat quietly in a pine tree for long periods. Many were found in the city, in parks and cemeteries, and some attended feeders. They ate wild grapes, cedar berries, holly berries, poison ivy berries and honeysuckle berries in woodland. High counts for winter were: 5, December 21, 1975; 5, December 6, 1982; and 6,

December 14, 2003. I noted some mortality in winter of birds found dead under trees, probably due to severe cold and lack of food. Occasionally, there were males with red napes: April 3, 1986 at Carpenter Park; April 5, 1988 at Sangchris; April 5, 2001 at Lick Creek; and January 15, 2009 at Lake Springfield, although the latter one may be a hybrid X Red-naped Sapsucker from further west (photographs). The sapsucker winters as far south as Panama and the Caribbean Islands.

Highest #Days/Season		<u>Highest</u>	Highest #birds/Season		
Spring	34 (1976)	Spring	119 (1975)		
Fall	48 (2003)	Fall	100 (2003)		
Winter	29 (2003)	Winter	53 (2003)		

Downy Woodpecker

Picoides pubescens

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	12527/2912 (37)	5073/1499 (37)	15413/3740 (37)	8167/2275 (37)	41180/10426
Average/day	4.30	3.38	4.12	3.59	3.95
Average/season	338.57	137.11	416.57	220.73	

Status: Common Permanent Resident

This was the smallest woodpecker in the county and did not migrate, although it may have dispersed, especially the young. At times, there were situations that seemed to indicate dispersal, such as more numbers, as I noted on September 28, 2001 at Carpenter Park, or birds at odd locations such as three in downtown Springfield March 6, 1975. The numbers were fairly static and differences were probably due to detectability because of vegetation thickness, point in the nesting cycle, and frequency of vocalizations. The Downy Woodpecker was found in all types of woodland and even in open areas such as corn stubble and had adapted to residential areas, where it was a main stay at bird feeders. High counts for spring were: 20, May 6, 1978; 18, March 15, 1986; 18, April 23, 1992; and 18, March 23, 1995. On the BBS, it was found in all but one year, was ranked 36th, and had fairly stable numbers. High counts for summer were 19: June 15, 1976 and June 13, 1991. Somewhat increasing numbers were found on the Sangamon River Census with 66 in 1991 to 51 in 1976. This woodpecker began drumming February 16, 1979, and seemed to be paired by February 28, 2006. Copulation was observed ten times, all in April from the 6th to the 26th. Some of the nests found were in dead snags. Birds were seen at the nest hole April 29 to May 21 and were feeding nestlings mostly in May, but ranged from May 14 to June 22. When the young were in the nest, they could be heard and sounded like a squeaky version of the adults. Young out of the nest, some of which were being fed by adults, were seen May 22 to August 22. High counts for fall were: 18, November 17, 1974; 20, September 17, 1977; 20, September 6, 1980; 18, November 23, 1993; and 17, September 28, 2001. One was noted sun bathing on September 2, 2006. High counts for winter were: 28, December 12, 1971; 30, February 1, 1978; 30, February 28, 1980; 25, December 5, 1981; and 21, January 1, 2002. The subspecies in this area is *P. p. medianus*.

Highest # Days/Season	Highest # Birds/Season
Spring 91 (1987)	Spring 503 (1981)
Summer 57 (1982)	Summer 293 (1979)
Fall 121 (1983)	Fall 716 (1998)
Winter 79 (1997 & 2003)	Winter 364 (1997)

Hairy Woodpecker

Picoides villosus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	2872/1746 (37)	953/632 (37)	3255/2104 (37)	1653/1037 (37)	8733/5519
Average/day	1.64	1.51	1.55	1.59	1.58
Average/season	77.62	25.76	87.97	44.68	

Status: Uncommon Permanent Resident

This species was not known to migrate, but like all birds it probably dispersed during the nonbreeding season. One was seemingly migrating at dusk south of Springfield on April 16, 1991. Though the Hairy Woodpecker was not common it was seen in all 148 seasons of the study. In comparison, in this study, approximately one Hairy Woodpecker was seen for every five Downy Woodpeckers. High counts for spring were: 7, May 6, 1978; 6, April 25, 1990; 6, March 29, 1995; and 6, April 21, 2001. Being a woodland species, its stronghold was along the Sangamon River although it was also hanging on in areas like Washington Park, Lincoln Gardens, Lick Creek and others; but many of these areas had only one or two pairs. In summer the Sangamon River Census showed about even numbers in 1976 and 1991. Like all cavity nesting species, the nidology of this species was difficult to assess. A pair were at the nest hole which was on the under side of a limb at Washington Park April 21, 2003; a pair was displaying at the nest site at Carpenter Park April 24, 2002; and copulation was observed at Washington Park May 1, 2002. Fledged young were noted between May 19 and August 3. High counts for summer were 7, June 9, 1979 and 8, June 17, 1997. On September 3, 2004 at Center Park, a male was tearing into a fungus on the side of a tree for food. High counts for fall were: 7, September 3, 1996; 7, November 9 & 29, 1997; and 7, September 16, 2001. High counts for winter were: 6, February 1, 1978; 6, January 31, 1998; and 8, December 17, 2006. Large tracts of woodland such as Carpenter Park need to be preserved for the survival of this woodpecker. The subspecies in Illinois is the nominate form.

Documentation: Specimens = 2) IL. Sangamon Co., ISM# 606633 \bigcirc , LSpfld, early spring, 1977, coll. by Mrs R. Howard, ovary = 7 mm; ISM# 607159 \bigcirc , LSpfld, March 16, 1980, coll. by D. Patkus, wt. = 45.7 gms, ovary = 9 mm.

Highest # Days/Season		Highest # Birds/Season		
Spring	79 (2000)	Spring	165 (2000)	
Summer	35 (2002)	Summer	58 (2000)	
Fall	89 (2002)	Fall	175 (2001)	
Winter	47 (1997)	Winter	93 (1997)	

Northern Flicker

Colaptes auratus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	17532/2998 (37)	6099/1642 (37)	21021/3860 (37)	6310/1842 (37)	50962/10342
Average/day	5.85	3.71	5.45	3.43	4.93
Average/season	473.84	164.84	568.14	170.54	

Status: Common Migrant and Fairly Common Summer and Winter Resident

Dates:

- Spring: Earliest arrival = March 2, 1974 (arbitrary due to WR) Average arrival (36 years) w/range March 2 – April 2 = March 23 Average departure (36 years) w/range April 11 – May 11 = April 25 Latest departure = May 11, 1990 (arbitrary due to SR)
- Fall: Earliest arrival = September 1, 1991 (arbitrary due to SR) Average arrival (36 years) w/range September 1 – 25 = September 14 Average departure (36 years) w/range October 1 – November 28 = November 4 Latest departure = November 28, 2004 (arbitrary due to WR)

This was the Yellow-shafted Flicker of the old books, and it was the most numerous woodpecker in the study. The Northern Flicker was essentially a largish brown bird that spent much of its time on the ground and showed a white rump patch in flight. Though they were seen in all 148 seasons of the study, they did migrate and most, if not all migration, was diurnal. Occasionally, small groups were seen along wood edge or even out in very open areas. All spring arrivals were in March except April 2, 1984. High counts for spring were: 25, April 23, 1970; 30, April 2, 1978; 31, April 14, 1992; 26, April 3 & 9, 1995; 27, April 7, 2002; and 31, March 29, 2003. Departure dates in spring were more difficult to determine because resident birds were well into the nesting cycle. The flicker was recorded on every BBS and was ranked 38th with fairly even numbers, but had a slight increase in the early 1980s. The highest count for summer was 16, June 13, 1978. These woodpeckers had a loud call which began February 3 to March 23. Sometimes, they used structures other than trees to amplify their drumming such as houses, tv antennas, street light covers, etc. Copulation was noted March 28 to April 28. Fledged young were seen from May 12 to August 14 with most seen in June and July. A flicker had a nest in the same cottonwood tree as a Red-headed Woodpecker on June 22, 1993 at Irwin Bridge. Two flickers were seen taking a dust bath at North Pt. on August 22, 2003. All fall migrations started in September and continued until October or November, and some migration probably went into December. High counts for fall were: 30, October 29, 1977; 28, September 17, 1982; 28, October 8, 1983; 28, November 27, 1997; and 28, September 24, 2001. I noted that flickers would follow Pileated Woodpeckers, perhaps to get food from the drillings and dead wood exposed by the larger billed bird. Flickers at times seemed fearless near Accipiter hawks as were 2-3 at Carpenter Park on October 29, 1977 when they were chasing and calling at two Sharp-shinned Hawks. However, they did get preved upon, as I have a photograph of a Cooper's Hawk eating a flicker at Lake Springfield on February 15, 2004. Occasionally in winter, there were flocks of flickers along the borders of a woods and a cornfield such as: 16, February 15, 1981; 16, January

21, 1990; 14, January 24, 2002; and 15, January 29, 2002. High counts for winter were: 25, December 12, 1971; 27, February 28, 1980; 25, December 18, 1988; and 21, December 1, 1997. When seen on the ground they were usually looking for ants, their favorite food. They also ate poison ivy berries, wild grapes, sumac, and honeysuckle berries. On November 27, 1976 at New City, I saw a flicker intergrade with a mostly red moustache and maybe orange shafts. More interesting, was a male "Red-shafted Flicker" at the south end of Lake Springfield on October 29, 1991. Its only Yellow-shafted character was the red on the nape, which made it an intergrade, probably with *C.a.collaris*? Sutton (1967) states "Hybrids [now intergrades] with red moustaches and full nape patch are common in Oklahoma in winter" (drawings on file ISM). The breeding Northern (Yellow-shafted) Flicker and most migrants in the county are the subspecies *C. a. luteus*. Also in the ISM collection from Sangamon County are one large male specimen *C. a. borealis* (April 22, 1980) from the northern US, and another small male (wing = 145 mm) *C. a. auratus* (April 22, 1976) originating possibly (?) from southern Illinois.

Documentation: Specimens = 26) IL. Sangamon Co., $\bigcirc \bigcirc = 18$, March 17 – November 7, wts. = 113.0 – 142.4 gms, testes = 2 – 11 mm, several gizzards with ants, (three in juvenile plumage – July 30 – August 13); $\bigcirc \bigcirc = 8$, Sangamon Co., March 2 – October 26, wts. = 91.8 – 146.2 gms, ovaries = 5 – 12 mm, (two in juvenile plumage – August 7 – 15).

Highest # Days/Season

Spring92 (1992, 2000, 2004) maxedSummer60 (2000 & 2005)Fall122 (1980) maxedWinter80 (1993 & 2003)

Highest # Birds/Season

Spring676 (2000)Summer339 (2000)Fall943 (1982)Winter420 (1997)

Pileated Woodpecker

Dryocopus pileatus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1321/774 (36)	452/269 (34)	1251/710 (37)	339/191 (36)	3363/1944
Average/day	1.71	1.68	1.76	1.77	1.73
Average/season	36.69	13.29	33.81	9.42	

Status: Occasional Permanent Resident

This large woodpecker was mostly restricted to the heavier wooded areas and the Sangamon River Valley in the county. It did disperse, especially in spring and was occasionally seen in odd areas away from the Sangamon River. Besides the Carpenter Park/Riverside Park area where I first found it in the study in 1970, I have seen it at Buckhart (1977), near Clear Lake (1975), Oak Ridge Cemetery (1979), Irwin Bridge (1979), Lick Creek (1979), Sangchris (1973), north of Rochester (1987), the South Fork (1988), Horse Creek (1990), Lake Springfield (1990), north side sewer pond (1990), Lincoln Gardens (1996), Jefferies Orchard (1999), Griffith Creek (1999), and Washington Park (2008). Its main breeding areas were in the bottomland woods along the Sangamon River. They were seen excavating nests holes from February 23 to April 9. Some of these holes were quite high and usually in sycamore trees. A pair was showing a nuptial display on the ground and on a log on April 14 2004 at Riverside Park. Adults were feeding young in the nest at Gurgens Park April 29 and May 8, 1976 in a sycamore tree. Fledged young were seen between May 31 and August 6, but most were seen in June and July. Most high counts were 3 to 5, with 6: December 9, 1990; June 13, 1991; December 18, 2001; September 6, 2002; and September 9, 2004. The presents of this large woodpecker helped other smaller birds obtain food, especially in winter, since it could open wood that other species could not. I noted a flicker on December 19, 1986 that was waiting near by as a Pileated Woodpecker was chipping wood. Pileated Woodpeckers leave large noticeable holes in trees, usually squarish in shape. Numbers of this woodpecker seemed to increase moderately in the late 1990s and it was seen in more areas; but they had a small vulnerable population and whether it survived depended on fairly large tracts of woodland with some large trees. The Sangamon River census tallied 4 in 1976 and 18 in 1991. The subspecies in this county is D. p. pileatus. The northern form D. p. abieticola may also occur in Illinois but the distribution of each subspecies is uncertain.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 606212 \bigcirc , north Spfld at Sangamon River, May 23, 1975, coll. by L.Miller, wt. = 239.4 gms, ovary = 10 mm, brood patch present, primaries and some secondaries worn brown, gizzard with Elateridae larva and numerous *Campanotus pensylvanicus* – carpenter ants.

Highest # Days/Season

 Spring
 45 (2002)

 Summer
 15 (1998, 2002, 2003)

 Fall
 50 (2004)

 Winter
 15 (1998)

Highest # Birds/Season

Spring87 (2002)Summer29 (1991)Fall100 (2004)Winter26 (2003)

Olive-sided Flycatcher

Contopus cooperi

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	297/220 (37)	34/31 (13)	322/269 (37)	0/0	653/520
Average/day	1.35	1.10	1.20		1.26
Average/season	8.03	2.62	8.70		

Status: Uncommon migrant.

Dates:

Spring: Earliest arrival = April 29, 1992 Sangchris Average arrival (37 years) w/range April 29 – May 20 = May 12 Average departure (35 years) w/range May 16 – June 10 = May 29 Latest departure = June 12, 2009 Washington Park

Fall: Earliest arrival = July 25, 1998 Williamsville Average arrival (36 years) w/range July 25 – September 8 = August 15 Average departure (35 years) w/range September 3-29 = September 18 Latest departure = October 11, 2009 Oak Ridge Cemetery

This flycatcher was like a sentinel since it was usually seen alone in the top branch of a large dead tree. From the front the heavy vest-like streaks, and from the back the white flank feathers showing above the wings, plus the relatively large bill identified the Olive-sided Flycatcher. Note also the long wings and short tail. It was never very numerous, but when present it was obvious. They arrived late in **spring**, all arrival dates were for May, except 1992. Other early spring arrivals were May 6, 1990 at Oak Ridge Cemetery and May 3, 1991 at Lincoln Gardens. Most high counts in spring were 2-3 birds with the exceptions: 4, May 19, 1983 and 6, May 21, 2006. This species called infrequently away from its breeding grounds in the northern boreal forests, but in spring I heard it from May 13 – June 5. All birds seen in summer were migrants, there were no breeding records, although it occurred into June twelve times. Other late departures were: June 7, 1983 at Knapp Lake; June 10, 1984 at Riverton; June 7, 1993 at Washington Park; and June 10, 1998 at Tower Road. There were counts of 2 on June 3 & 4, 1997 and June 1, 2003. In fall it arrived early, some times exceptionally so, such as July 30, 1978 and July 25, 1998, plus there were six dates in early August. All other times it arrived in August except September 8, 2003 which, I think, showed that there was a recent decline in numbers. All high counts for fall were only 2-3 per day, with 3, September 4, 1978 & 1983; 3, August 29, 1988; 3, September 12, 1999; and 3, August 20, 2002. There was some calling in fall, but less than in spring and dates were August 17-27. Twice, I have noted this flycatcher eating bumblebees and once a dragonfly. On August 22, 1980 an Olive-sided Flycatcher was chased by Eastern Kingbirds. All departures were in September during the study, as this species did not linger. However, in the addendum, this species established several late dates, see above and two, October 8, 2008 at Carpenter Park (all photographed). Also, it became spotty and difficult to find in the addendum, and may have become a prime target for the increasing Cooper's Hawk. This flycatcher was a long distant migrant and spent the winter in northern and western South

America. If subspecies are recognized in this flycatcher the one in Sangamon County is the widespread northern nominate form.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 606386 3, 2 mi north Springfield, May 24, 1976, coll. by HDB, wt. = 37.0.gms, testes = 8 mm, gizzard with wasps and Coleoptera.

Highest # Days/Season

Spring 12 (2000) Summer 4 (1993, 1997, 1998) Fall 13 (1998)

Highest # Birds/Season

Spring15 (2000 & 2005)Summer6 (1997)Fall15 (1979, 1983, 1998)

[Western Wood-Pewee]

Contopus sordidulus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	0/0	0/0	4/4 (3)	0/0	4/4
Average/day			1.0		1.0
Average/season			1.33		

Status: Hypothetical: Very Rare Fall Migrant

Dates: Three Potential Records: adult, Lake Springfield, October 8, 1982; immature, Lick Creek Marsh, October 28, 2002; immature, Center Park, November 8 – 10, 2006 (photograph).

In the first two records above, the pewees were calling with raspy- burry-like calls; and in the third record the bird was very dark with an almost all dark lower mandible (photograph on file ISM) but did not call. All birds were seen at close range and were in late fall. Although pewees were very difficult to separate, the Western Wood-Pewee should theoretically have occurred as often as the Spotted Towhee. The towhee had a similar geographic range, but was easier to identify and was seen nearly annually. The Western Wood-Pewee breeds in Western North America as far north as Alaska and winters from Panama south to Peru.

Documentation: Photographic: IL. Sangamon Co., Center Park, November 8 & 10, 2006 and written descriptions HDB – on file ISM.

Eastern Wood-Pewee

Contopus virens

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	3369/793 (37)	4751/1366 (37)	7709/1872 (37)	0/0	15829/4031
Average/day	4.25	3.48	4.12		3.93
Average/season	91.05	128.41	208.35		

Status: Common Migrant and Summer Resident

Dates:

Spring: Earliest arrival = April 21, 1973 Washington Park Average arrival (37 years) w/range April 21 – May 11 = May 3

Fall:Average departure (37 years) w/range September 25 – November 8 = October 13Latest departure = November 8, 1972 Washington Park & 2006 Center Park

Although this was a rather drab olive and brown bird, it had a lovely plaintive song that was associated with woodland in summer. In total numbers, it was the second numerous flycatcher, just behind Eastern Kingbird. This long distant migrant usually arrived in **spring** in May, but got here in April in eight years. Other early dates were April 23, 1985 at Carpenter Park and April 25, 1996 at Adams Sanctuary. Sometimes even in May, cold, rainy weather stressed them, and they fed on or near the ground as they did at Center Park on May 17, 2002. They normally perched from mid- to high in the vegetation in forest and edge, and were also found in the open woodlands of parks, cemeteries, and residential areas. High counts for spring were: 12, May 24, 1982; 17, May 18, 1995; 19, May 19, 2001; 15, May 26, 2002; and 25, May 28, 2008. Though it was difficult to determine, some pewees were still migrating into at least the first week in June. The pewee in summer was recorded every year on the BBS and ranked 42nd and saw increases in the mid-1980s. The Sangamon River Census showed an increase from 1976 (60) to 1991 (131). High daily counts for summer were: 26, June 15, 1976; 30, June 2, 1979; 37, June 6, 1991; and 22, June 3, 2001. Nest building was observed May 29 to July 7. The shallow nest was saddled on a horizontal limb, and moss was used to help camouflage it. Trees in which the nest was placed were ash, sycamore, hickory, cottonwood, willow, oak, maple, and locust. Nests were usually high up, and the contents difficult to see. Adults on the nests were noted May 25 to July 11, and young were seen in the nest July 9 to August 6. Fledged young were noted July 12 to September 27. Even though the pewee was very aggressive around its nest, cowbirds managed to parasitize it, with pewees attending young cowbirds July 15 – August 12. Calling in this bird may be curtailed after August, but I heard them occasionally right up to the time they left in fall. The molt mostly took place on the wintering grounds, but I had seen some molt from August 10 -26. Some pewees that occurred along hedges and weedy areas in August and early September could signal the beginning of **fall** migrants. The numbers in fall were 2.3 times that of spring. Besides feeding on insects, they ate dogwood berries and wild cherries. Sometimes pewees were quite tame and used humans walking or lawn mowers to flush up insects to catch. Even though they had adapted to humans, they were much less numerous in places such as Washington Park as they were in the 1970s and 1980s. This could be because of habitat disturbance. High counts for fall were: 18, August 29, 1981; 19, August 24, 1997; 21, August 29, 2001; 19, September 7,

2003; and 15, September 5, 2006. Most left in October, but in 1974 and 1994 they left in late September. Some straggled into late October and November: see above, October 27, 1982 Lake Springfield; October 25, 1983 Oak Ridge; November 4, 2002 North Pt.; October 25, 2004 Riverside Park. Note also, the very late date of November 10, 2006 at Center Park, which was definitely a pewee and possibly a Western? The Eastern Wood-Pewee winters from Nicaragua to South America, and the fact that this small bird migrates from northern hemisphere forest all the way to the Amazon River (and back) exemplifies the intelligence of these birds.

Documentation: Specimens = 8) IL. Sangamon Co., Spring and Summer = 3, $\bigcirc \bigcirc \bigcirc = 2$, LSpfld & south Spfld, May 15 – 23, wts. = 14.7 – 15.6 gms, testes = 5.5 – 6.5 mm, one gizzard with Coleoptera; $\bigcirc = 1$, south Spfld, June 24, wt. = 14.0 gms, ovary = 7 mm; Fall = 5, $\bigcirc \bigcirc \bigcirc \bigcirc = 2$, LSpfld & tv tower, August 4 – September 2, wts. = 13.6 – 15.9 gms, testes = 5 – 7 mm; $\bigcirc \bigcirc \bigcirc = 3$, tv tower (2) & LSpfld, August 25 – September 4, wts. = 12.5 – 13.7 gms, ovaries = 2 – 3 mm.

Highest # Days/Season

Spring28 (1983 & 2002)Summer58 (2006)Fall73 (2002 & 2006)

Highest # Birds/Season

Spring195 (2002)Summer243 (1991 & 2006)Fall486 (2006)

Yellow-bellied Flycatcher

Empidonax flaviventris

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	757/335 (37)	162/71 (27) mig	1024/632 (37)	0/0	1943/1038
Average/day	2.26	2.28	1.62		1.87
Average/season	20.46	6.0	27.68		

Status: Uncommon Migrant

Dates:

- Spring: Earliest arrival = May 6, 2002 Washington Park Average arrival (35 years) w/range May 6 – 19 = May 13 Average departure (36 years) w/range May 21 – June 12 = June 2 Latest departure = June 15, 2007 Sediment Retention
- Fall: Earliest arrival = July 21, 1998 Lincoln Gardens
 Average arrival (37 years) w/range July 21 August 25 = August 11
 Average departure (37 years) w/range September 17- November 13 = October 1
 Latest departure = November 13, 1980 Refuge south

This was one of the easier *Empidonax* to identify by sight, but careful separation from Acadian Flycatcher was needed. Yellow-bellied Flycatchers arrived late in spring and many times continued into June, especially in 1997 when 45 were seen in May and 39 in June. Other early arrivals were May 8, 2000 and May 7, 2007 both at Washington Park. High counts were usually in the single digits, but there were 10, May 24, 1978 & 1982, and 13, May 25, 1990. Also, spring high counts into June were: 11, June 1, 1995; 18, June 2, 1997; and 9, June 3, 2003. Another late spring departure was June 12, 2009 at Washington Park. These birds were usually in woodland or along the edge. The calls were a pewee-like "pheb" – cut shorter than pewee and a "che-bec" like the Least Flycatcher, but slower and not as sharp. It fed from mid- to low in the vegetation and was difficult to see because of low light in the forest and its tendency to sit in the middle of a tree under the canopy. It breeds in the northeastern US and east central Canada. Due to adult basic molt which occurred on the wintering grounds, this flycatcher occasionally returned on its southward migration in **fall** as early as late July; recorded six years from July 21 - 30, examples were: Boy Scout area, July 26, 1983; two, Washington Park, July 25, 1989; Lincoln Gardens, July 21, 1998; and Washington Park, July 28, 2006. Note also the fairly early specimen from Williamsville, August 9, 1979 (J. Oglesby). High counts in fall were lower than spring, with 7, August 31, 1978 and 8, August 26, 1997 and September 2, 2003. However, it was slightly more numerous in fall (1 in spring to 1.2 in fall). This was because it foraged more in the open in fall and was easier to see. Also, its fall migration was slower paced, and therefore, it was seen on many more days. Occasionally, this flycatcher lingered late - see above, plus October 23, 2001 at Oak Ridge and October 19, 2003 at Washington Park. Numbers were decreasing around the year 2000 and into the addendum. These small flycatchers winter from southern Mexico to Panama.

Documentation: Specimens = 11) IL. Sangamon Co., Spring = 3, $\bigcirc \bigcirc = 2$, Spfld & 2 mi south Spfld, June 3 – June 5, wts.= 11.2 – 12.7 gms, testes = 5.5 – 6 mm, gizzard (June 3) with lady beetles and other Coleoptera, Diptera, & Hemiptera; $\bigcirc =1$, Spfld, May 31, wt. = 11.8 gms, ovary = 5.5 mm; Fall = 8, $\bigcirc \bigcirc =3$, tv tower (2) & Williamsville, August 9 – September 10, wts. = 9.1 – 13.4 gms; $\bigcirc \bigcirc = 3$ & $\bigcirc \bigcirc ? = 2$, tv tower (4) & Buffalo, September 3 – 27, wts. = 9.1 – 14.1 gms.

Highest # Days/Season

Spring19 (2002)Summer8 (1998)Fall28 (2006)

Highest # Birds/Season

Spring57 (1996)Summer39 (1997)Fall62 (1977)

Acadian Flycatcher

Empidonax virescens

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	256/190 (36)	585/282 (36)	88/74 (28)	0/0	929/546
Average/day	1.35	2.07	1.19		1.70
Average/season	7.11	16.25	3.14		

Status: Uncommon and Local Migrant and Summer Resident

Dates:

- Spring: Earliest arrival = April 29, 1974 banded CP, 1986 Lick Cr., 1993 CP Average arrival (36 years) w/range April 29 – May 19 = May 9
- Fall:Average departure (29 years) w/range July 24 September 16 = August 28Latest departure = September 16, 2003 & 2005 Riverside Park

This flycatcher of the bottomland woods was not an easy bird to get in Sangamon County; and I had observed, for example, it was much more numerous in the Illinois River Valley. The Acadian Flycatcher usually arrived late in **spring**, and I had only three April dates (see above). High counts in spring were low with 7, May 19, 1973 and 4, May 24, 2006. Flooding limited access to the bottomland some years and caused the counts to be low. Spring migration continued until late May and sometimes into June. Actually, my summer counts had better numbers with 15, June 18, 1976 and 15, June 6, 1991. This flycatcher tried to nest at Washington Park and Lincoln Gardens, but did not do well in these highly disturbed places. Areas along the Sangamon River, Lick Creek, and Horse Creek had the most birds. The Sangamon River Census had 37 birds in 1976 and 35 in 1991. Breeding data includes: a pair nest building by collecting grapevine strips at Carpenter Park on May 19, 1992; two young at a nest in Carpenter Park on August 17, 1976; a pair at a nest in a maple at Gurgens Park on June 9, 1995; fledged young with an adult at Carpenter Park on August 22, 1998; and an adult feeding a cowbird at Carpenter Park on July 15, 1973. Besides this flycatchers explosive "spee –unck" song, they gave a call note of "phew" and also a little rattling trill. Late dates of singing were August 31, 1991 and 1998, but they usually quit in late July or early August. Once they stopped singing or calling they were difficult to detect. This *Empidonax* species molted on the breeding grounds, and I noted molt from August 1 to September 7. The juveniles had rusty wingbars. They and adults can be identified at close range by larger size, larger bill, yellowish lower mandible, bluish-gray tarsi, and greenish upperparts. Most of fall migration consisted of summer residents exiting, and many years they seemed to just disappear in late summer. There were no high counts for fall. Other late dates of departure were September 14, 1992 at Washington Park, September 13, 2008 at Sangchris and September 13, 2009 at Carpenter Park (photograph). The Acadian Flycatcher winters from Central America to northwestern South America.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

Highest # Days/Season Spring 11 (1993)

 Spring
 11 (1993)

 Summer
 18 (1986)

 Fall
 8 (1993)

Highest # Birds/Season

Spring23 (1973)Summer46 (1991)Fall9 (1993)

Alder Flycatcher

Empidonax alnorum

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	565/266 (31)	41/29 (16) mig	472/330 (36)	0/0	1078/625
Average/day	2.12	1.41	1.43		1.72
Average/season	18.23	2.56	13.11		

Status: Uncommon Migrant

Dates:

- Spring: Earliest arrival = May 5, 1999 Sangchris Average arrival (31 years) w/range May 5 – 26 = May 14 Average Departure (33 years) w/range May 18 – June 11 = May 31 Latest departure = June 11, 1976 Sangchris
- Fall: Earliest arrival = July 6, 1981 ♂ North side sewer pond Average arrival (30 years) w/range July 6 – August 30 = August 14 Average departure (37 years) w/range September 2 – October 10 = September 17 Latest departure = October 10, 1970 Springfield

The Alder Flycatcher was split from Willow Flycatcher in the early 1970s. In the field they looked pretty much the same. Consequently, due to the relatively recent systematic revision and the very similar appearance of these two flycatchers, the Alder Flycatcher went unrecorded four seasons in spring and once in fall. The Alder sang "wee- be- oo" and the call note was "bic", both much different from the Willow's notes. The Alder generally showed a little more evering than the Willow. Most of spring migration took place in May and these birds were found in brushy areas and woodland edge. Other early arrival dates were May 9, 1978, May 8, 1983, May 9, 1992, May 8, 1993, and May 9, 2003. High counts were: 6, May 19 & 24, 1978; 8, May 26, 1990; 9, May 30, 1996; 8, May 19, 1997; and 6, May 19, 2002. In some years, cold weather dropped numbers of these birds in this area, and they could be seen flycatching from fences along the roads. In 14 years, spring migration continued into June with some numbers, including five on June 3, 1997. Alder Flycatchers breed further north than Willow Flycatchers, from the northeast US to central Canada and eastern Alaska. As with the Willow, adults preceded juveniles in **fall** due to the molt taking place on the wintering grounds. Most arrivals were in August, but it was in July three years: above, July 16, 1993 at Buckhart and July 30, 1978 at Lincoln Gardens. High counts for fall were 8, September 2, 1980 and 5, September 6, 2001. They were even more difficult to distinguish in fall, but if the plumage was analyzed, the habitat noted, and/ or the call given, some could be identified. Banding experience helped in identification, and those Empidonax not discernable to species were not counted in the totals. I noted them eating dogwood berries in fall. Most departures were in mid-September, but there were three October dates: above, October 1, 1977 at Carpenter Park and October 1, 2002 at Sangchris. This flycatcher winters in South America.

Documentation: Specimens = 13) IL. Sangamon Co., Spring = 1 \bigcirc , south LSpfld, May 31, wt. = 13.8 gms ovary 7 mm; Fall = 12, $\bigcirc \bigcirc \bigcirc = 7$, adults = 2, tv tower & New City, August 15 – 25, wts.

= 13.9 – 15.0 gms; immature = 5, all tv tower, September 2 – 15, wts. = 11.9 - 15.1 gms; $\bigcirc \bigcirc = 5$ all immatures & all tv tower, September 2 – 20, wts. = 13.5 - 16.3 gms.

Highest # Days/Season

Spring18 (1996 & 2000)Summer5 (1997)Fall19 (1979)

Highest # Birds/Season

Spring58 (1996)Summer13 (1997)Fall35 (1980)

Willow Flycatcher

Empidonax traillii

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	314/185 (36)	693/364 (37)	200/131 (36)	0/0	1207/680
Average/day	1.70	1.90	1.53		1.78
Average/season	8.72	18.73	5.56		

Status: Uncommon Migrant and Summer Resident

Dates:

Spring: Earliest arrival = April 30, 2001 Sangchris Average arrival (36 years) w/range April 30 – May 26 = May 16

Fall:Average departure (36 years) w/range August 1 – September 26 = August 27Latest departure = September 26, 1970 Springfield

The Willow Flycatcher and the Alder Flycatcher were difficult, if not impossible to tell apart except by song and call note. The song of the Willow Flycatcher was "fitz - bew" or "rite - rear" with sometimes a preparatory note "ritzz", while the call note was a less emphatic "whip". I also used habitat as an indicator to separate these flycatchers. Note also that the Willow usually did not show an eyering, but had a light area in front of the eye. The Willow Flycatcher arrived late in spring (latest of the flycatchers), and the April date above was the only one, the rest being in May. I usually found it in the willow thickets at Sangchris with most birds already on territory. The more birds in spring (1.6 to one in fall) undoubtedly related to better detection due to singing. High counts were 7, May 30, 1975 and 6, May 30, 1996. I never saw much of a build up or lots of migrants in either spring or fall in this species. The Willow Flycatcher was recorded 29 years in summer on the BBS and there were more numbers earlier in the survey. This species appears to be declining as a breeding bird in the county. High counts for summer were: 11, June 11, 1976; 9, July 25, 1978; and 11, July 1, 2000. An adult was carrying nest material June 11, 1993 at the Buffalo sewer pond and a nest was found at the Berlin sewer pond on July 1, 2000. Fledged young were seen from July 18 to August 18. Late dates of singing were August 15, 1974, August 27, 1980, August 8, 1995, and August 1, 1999. These flycatchers molted on the wintering grounds, allowing adults to depart in **fall** before juveniles. High counts in the fall period were 12, August 27, 1972 and 5, August 19, 2006. Although this flycatcher's breeding range extends somewhat north of Sangamon County, there was never a noticeable influx in fall. Sometimes, these flycatchers would disappear in August, but I managed to find them in September in 17 years. Other late records were: September 17, 1992; September 20, 1998; September 21, 2000; and September 23, 2007. The Willow Flycatcher winters from southern Mexico to northwest Colombia. The subspecies is the eastern nominate form.

Documentation: Specimens = 10) IL. Sangamon Co., all Fall tv tower immatures, $\bigcirc \bigcirc \bigcirc = 3$, September 3 – 20, wts. = 18.1 – 20.0 gms; $\bigcirc \bigcirc = 7$, August 28 – September 15, wts. = 12.3 – 18.7 gms.

Highest # Days/Season Spring 14 (1996)

Spring14 (1996)Summer20 (2005)Fall12 (1999)

Highest # Birds/Season

Spring30 (1996)Summer43 (2000)Fall19 (1972)

Least Flycatcher

Empidonax minimus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	2936/791 (37)	46/43 (25)	1676/891 (37)	0/0	4658/1725
Average/day	3.71	1.07	1.88		2.70
Average/season	79.35	1.84	45.30		

Status: Common Spring Migrant and Fairly Common Fall Migrant

Dates:

Spring: Earliest arrival = April 20, 1980, 1987, & 1993 Average arrival (36 years) w/range April 20 – May 5 = April 26 Average departure (35 years) w/range May 19 – June 11 = May 29 Latest departure = June 11, 1981 Boy Scout area

Fall: Earliest arrival = July 9, 1993 Washington Park
Average arrival (37 years) w/range July 9 – August 25 = August 2
Average departure (37 years) w/range September 24 – November 9 = October 5
Latest departure = November 9, 1976 Lake Springfield (specimen)

This was the smallest flycatcher in Illinois and was the most numerous of the cryptic Empidonax flycatchers. In spring and sometimes in fall, the Least Flycatcher can be identified by its call "che-bec". Also the complete eyering, usually gravish overall coloration, and thin tail helped separate them from other *Empidonax*. They fed at mid-height in the vegetation, usually in woodland. The numbers in spring fluctuated greatly from 180 in 1983 to 22 in 1987 and were lower near the end of the study for unknown reasons. All arrivals were in April except May 5, 2005. High counts were: 18, May 10, 1975; 20, May 14, 1981; 22, May 7, 1983; 20, May 10, 1989; and 20, May 9, 2003. Most birds left by late May, but spring migration went into June in 13 years. Other late spring departures were: June 7, 1976; June 8, 1978; and June 5, 2001, with 3, June 2, 1997. There were no summer residents found, all summer numbers above were migrants. They breed in the northern US (including northern Illinois) and Canada. Fall migration started early in this species since it molted where it winters, and adults preceded juveniles. There were 17 years where the fall arrival dates were in July, the rest were in August. Other early dates were: July 10, 1980 at Lincoln Gardens and July 10, 1992 at Washington Park. There were 2, July 16, 1990. High counts for fall were: 12, September 2, 1979 and 10, September 11, 1999. The numbers in fall were lower than in spring (1 to 1.7) partly because of much less singing. In fall, they foraged in more open areas such as woodland edge and brushy habitat. They ate some berries, and I noted them taking dogwood berries September 12, 2001 at Sangchris. Most birds had departed by late September and early October, but note the straggler above, plus one November 3, 1987 at Knapp Lake and one October 22, 2001 at Washington Park. This flycatcher winters in Mexico and Central America.

Documentation: Specimens = 14) IL. Sangamon Co., Spring = 2, $\bigcirc \bigcirc$, tv tower & 2 mi north Spfld, May 8 & 22, wts. = 9.8 – 10.4 gms, testes = 3 – 4 mm; Fall = 12, $\bigcirc \bigcirc = 9$, tv tower (7) & 2 mi north Spfld & LSpfld, September 3 – November 9, wts. = 9.7 – 14.0 gms (ISM# 606518

gizzard with Coleoptera & Diptera); $\bigcirc \bigcirc = 3$, tv tower (2) & Spfld, August 31 – September 27, wts. = 9.9 - 10.5 gms.

Highest # Days/Season Spring 32 (1993)

 Spring
 32 (1993)

 Summer
 5 (1978)

 Fall
 37 (2006)

Highest # Birds/SeasonSpring180 (1983)Summer5 (1978)Fall73 (2001)

Eastern Phoebe

Sayornis phoebe

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	2930/1306 (37)	1004/531 (35)	2409/1183 (37)	12/11 (8)	6355/3031
Average/day	2.24	1.89	2.04	1.09	2.10
Average/season	79.19	28.69	65.11	1.50	

Status: Common Migrant, Uncommon Summer Resident and Very Rare Winter Resident

Dates:

Spring: Earliest arrival = February 18, 2002 Sangchris Average arrival (37 years) w/range February 18 – March 30 = March 14

Fall: Average departure (36 years) w/range October 21 – November 25 = **November 7** Latest departure = **November 25**, 1973 Sangchris

This little tail wagger was the first flycatcher to return in **spring**, and I always looked forward to its arrival since few other "songbirds" were around that time of year. Eastern Phoebes were found in rather open areas, but could be in forest and edge also, and were usually near streams or ponds. All arrivals were in March except for two, see above and February 25, 1998 east of Springfield. Sometimes they migrated diurnally as one did east of Lake Springfield on March 16. 1982 at about 11am. It flew in low to the ground over an open field and continued northwest out of sight. Bad weather usually held them up in spring, and they fed over water such as the lagoon at Washington Park where 7 - 8 were seen fluttering over the pond and drooping their wings from the cold on March 26, 2002. These were stressful times and grackles and House Sparrows chased them, and on April 10, 1995 a chipmunk was seen with a dead phoebe. High counts for spring were: 12, March 29, 1987; 14, April 6, 1994; 17, March 23, 1995; and 13, March 26, 1998. Many migrants moved on north on average around April 17, but some stayed in the county to breed. Breeding numbers were low until 1992, maybe because of pesticide usage. Then, phoebes increased and this was backed up by the BBS data. High summer counts were: 10, June 25, 2000; 12, June 30, 2002; and 10, July 17, 2004. Nest building was seen from March 30 to April 26, and adults were on the nests April 18 to May 6. Egg dates ranged from April 24 to June 11 with 1-5 phoebe eggs. The June 11 nest had four phoebe and two cowbird eggs. Young were noted in the nest May 9 to June 28, and fledged young were seen June 4 to August 4. Adults were feeding two cowbirds at Lake Springfield May 29, 2005. Interestingly, a pair was nesting in the old vault at Lincoln's tomb April 5, 2006 and another pair tried to nest annually at the stone building at Carpenter Park. Molt was noticed June 25 to August 31. Fall migrants on average appeared around September 5. They were observed many times with bluebird flocks along the roadside. Phoebes sang their nasal call mainly in spring and summer, but occasionally they sang in fall. They had a call note similar to the call of the Swamp Sparrow. High counts for fall were: 8, October 13, 1982; 9, October 10, 1991; 10, September 12, 1999; 16, October 29, 1999; and 12, October 13, 2002. All departure dates were in October (12 years) and November (24 years). Winter records were: December 14, 1987 at Spaulding Orchard Road; January 10, 1994 at Sangchris; December 19, 1996 at North Side sewer pond; (2) December 14, 1997 at Lake Springfield and the East side sewer pond; January 1, 1999 at Lake Springfield; December 28,

2002 and January 3, 2003 at Andrew; February 6 & 9, 2006 at Lincoln Gardens; December 7, 2008 at the North Side sewer pond. They were found in sheltered places in winter. At Sangchris on August 29, 1998 I encountered a strange phoebe that had creamy yellow wings, outer tail feathers, and short but thick supercilliary (drawing on file ISM). Most Eastern Phoebes winter in the southern US south to Veracruz, Mexico.

Documentation: Specimens = 3) IL. Sangamon Co., ISM# 607119 \Diamond , LSpfld, October 3, 1979, coll. by HDB, wt. = 22.2 gms, testes = 2 mm; ISM# 608125 \Diamond , tv tower, October 11, 1985, coll. by HDB, wt. = 20.9 gms, testes = 2 mm; ISM# 661847 \heartsuit , Riverton, September 28, 2006, coll. by J. Slingsby, wt. = 20.4 gms, ovary = 4 mm.

Highest # Days/Season

Spring73 (2006)Summer43 (2000)Fall76 (2006)Winter2 (1997, 2002, 2005)

Highest # Birds/SeasonSpring220 (2000)Summer137 (2000)Fall208 (2006)Winter3 (1997)

Say's Phoebe

Sayornis saya

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days			1/1 (1)	9/9 (1)	10/10
Average/day			1.0	1.0	1.0
Average/season					

Status: Very Rare Fall Migrant and Winter Resident

Dates: One Record: one, North side Sewer Pond, November 30, 1984 to January 1, 1985. Plus a second record in the addendum: adult, Sangchris, October 1, 2009.

I found this rusty and brown flycatcher from the western U.S. at the sewer pond on the north side of Springfield. All of the numbers above referred to the same bird. This was the first record for Sangamon County and the only one during the study, but see the addendum record. The phoebe stayed on a metal divider at the pond much of the time, but some days it would not appear, and it was always shy. On December 3 it was along the ditch on the north side of the pond and showed the definite tail flip. The bird stayed into January 1985 and was seen by other observers. There were several other records of Say's Phoebe from Illinois. The subspecies is unknown, but is probably the nominate form. The second record occurred at the west end of Sangchris in an open weedy field, and the bird stayed only a short time. However, I was able to photograph this bird. It was seen flycatching and it caught a whitish moth. This phoebe usually winters in the southwestern US and Mexico.

Documentation: Photographic: IL. Sangamon Co., HDB, also written description and drawing – on file ISM.

Vermilion Flycatcher

Pyrocephalus rubinus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	0/0	0/0	1/1 (1)	0/0	1/1
Average/day			1.0		1.0
Average/season					

Status: Very Rare Fall Migrant

Dates: One Record: immature (or second year) ♀, Sangchris, September 18, 1992.

I first saw this brown flycatcher in the road near the camp ground behind the headquarters at Sangchris, where it was pouncing on insects. The male in this species is a brilliant red and black, but this bird was brown with lighter and streaked underparts. The only color was a few yellowish-orange feathers in the vent area. This rare flycatcher was perching in some low trees and on the edge of an outhouse. I called several other observers and a few saw the bird, but then it was lawnmower time and the bird was chased off. This flycatcher is usually found in the southwestern U.S. and Mexico. Of the two subspecies this one is probably *P. r. mexicanus*. There are a few other records from Illinois.

Documentation: Photographic: IL. Sangamon Co., DO, also drawing and notes HDB - on file ISM.

Ash-throated Flycatcher

Myiarchus cinerascens

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	0/0	0/0	4/4 (1)	0/0	4/4
Average/day			1.0		1.0
Average/season					

Status: Very Rare Fall Migrant

Dates: One Record: adult ♀, Washington Park, November 2 – 9, 1973.

Occasionally, fall migrants flying off course arrived in late fall as was the case with this rare flycatcher. I discovered it in Washington Park, which was mostly oak woods. The bird endured a temperature of 23 degrees F. and 1.3 inches of snow on November 8. The flycatcher was surviving by picking Hemiptera (Coreidae) off the foliage and tended to stay on the underside of the canopy from about 6 - 20 feet high. This was the first Illinois record of the Ash-throated Flycatcher. The subspecies (verified R. & G.Graber) was determined to be *M. c. cinerascens*. This bird breeds in the western US and winters in Mexico and Central America (also see Bohlen, 1975).

Documentation: Specimens = 1) IL. Sangamon Co., \bigcirc , ISM# 605794 adult Washington Park, November 9, 1973, coll. by HDB, wt. = 27.1 gms, ovary = 3.5 mm, mouth lining grayish-yellow.

Great Crested Flycatcher

Myiarchus crinitus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	4531/1142 (37)	3527/1203 (37)	1969/987 (37)	0/0	10027/3332
Average/day	3.97	2.93	1.99		3.01
Average/season	122.46	95.32	53.22		

Status: Common Spring Migrant and Summer Resident and Fairly Common Fall Migrant

Dates:

Spring: Earliest arrival = April 19, 2000 Center Park Average arrival (37 years) w/range April 19 – May 5 = April 25

Fall:Average departure (37 years) w/range September 8 – October 8 = September 19Latest departure = October 8, 1983 Carpenter Park

This large, handsome flycatcher, though occurring in modest numbers, was maintaining its population in fragmented forest because it nested in cavities. All spring arrivals were in April except May 5, 1971 and May 2, 1977. Other early spring arrivals were April 20, 1976 & 1980 and April 21, 1973, 1993, & 1994. High counts for spring were: 15, May 7, 1977; 17, May 10, 1980; 15, May 19, 1999; and 15, May 6, 2000. One bird was seen eating beetles from a road killed raccoon at Buckhart May 30, 2009. Some migration continued into June, especially in 1978, 1979, and 1997. It was ranked 45th on the BBS, and its numbers were fairly even for 30 years. High counts for summer were 23, June 18, 1976 and 25, June 11, 1991. Fledged young were noted between July 1 to August 2, but most were seen in mid- to late July. Molt was observed between July 15 and September 23, although one bird appeared to be in basic plumage by August 7, 1989. One male banded as an adult in August 1979 and found dead in July 1982 was at least four years old. On July 15, 1999 one of these flycatchers was dust bathing on bare ground at Washington Park, its mouth was open and it was immobile for several minutes. When chasing prey, this flycatcher snapped its bill, making a sound which was very audible. Several food items noted were annual cicadas, mourning cloak butterfly, dragonflies, walking sticks, mayflies, dogwood berries, sassafras berries and elder berries. I had noted fall migrants by at least August 28. Fall numbers were 2.3 times less than spring numbers, maybe because these flycatchers called less and left so early in fall. High counts for fall were 10, September 1, 1980 and 14, August 5, 2004. These birds seemed to disappear past mid-September, but other late dates besides the one above were October 5, 1975 at Oak Ridge and October 2, 2007 at Sangchris. This species is considered monotypic. The Great Crested Flycatcher winters from southern Mexico south to northern South America.

Documentation: Specimens = 6) IL. Sangamon Co., Spring = 2, ISM# 608036 $\stackrel{\circ}{\circ}$, WP, May 22, 1985, coll. by HDB, wt. = 33.0 gms, testes = 5mm, gizzard with Homoptera and Diptera; ISM# 608667 $\stackrel{\circ}{\circ}$, 3 mi south Spfld, May 27, 1986, coll. by HDB, wt. = 31.1 gms, testes = 9 mm; Summer = 2, ISM# 607874 $\stackrel{\circ}{\circ}$, East Lake Dr., June 3, 1984, coll. by HDB, wt. = 33.1 gms, ovary = 9 mm; ISM# 607419 $\stackrel{\circ}{\circ}$, Lincoln Gardens, July 14, 1982, coll. by W. Ackinson, wt. = 26.6

gms, testes = 5.5 mm; Fall = 2, ISM# \bigcirc , tv tower, September 2, 1972, coll. by HDB, wt. = 33.0 gms; ISM# 604560 \bigcirc , tv tower, September 20, 1966, coll. by P. Parmalee.

Highest # Days/Season

Spring39 (2001)Summer56 (2002)Fall43 (1981)

Highest # Birds/Season

Spring199 (2000)Summer171 (2000)Fall94 (1999)

Western Kingbird

Tyrannus verticalis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	50/36 (7)	120/53 (9)	15/12 (7)	2/2 (1)	187/103
Average/day	1.39	2.26	1.25	1.0	1.82
Average/season	7.14	13.33	2.14	2.0	

Status: Rare Migrant and Very Rare Summer and Winter Resident

Dates:

Spring: Earliest arrival = April 24, 2001 Lincoln Greens golf course Average arrival (7 years) w/range April 24 – May 18 = May 2

Fall: Average departure (11years) w/range June 22 – September 28 = **August 4** Latest departure = **September 28**, 1973 south of Springfield (also see WR)

Before and after the nesting pair(s) at the Lincoln Greens golf course, this western species was very rare. I first encountered a Western Kingbird on September 3, 1972 west of New City. This sighting was one of five records prior to 1998. One was 15 miles east of Springfield in a farm vard on June 20, 1973 and another was going to roost with robins in a cornfield near Woodside Road on September 28, 1973. Then eight years passed before the next bird occurred, when Carl Curby notified me he saw one on his property south of the south arm of Lake Springfield. I saw it November 29, 1982 a very late record, but this bird stayed into winter until I last saw it January 1, 1983. This flycatcher was feeding by pouncing off a fence and caught wasp sized insects on November 30 (photographs) and seemed to get small earthworms on January 1. Then, 12 years passed, and I found one at the Panther Creek golf course on June 19 - 29, 1995 (photographs). In 1998, Dennis Oehmke found Western Kingbirds on the Lincoln Greens golf course in August and I saw them August 3, 1998. They had probably nested. The birds returned to this spot for the next seven years, nesting in sycamore trees. There was probably two pair in 2000. High count for spring was 3, May 26, 1999. The nests were high in the trees, made of a rather loose construction of grass and twigs and sometimes had paper or trash in them. There was some competition with nearby Eastern Kingbirds (see Bohlen, 2000) and Western Kingbirds were seen feeding Eastern Kingbird young in 1999 and vice versa in 2002. Nest building took place May 21 to June 1, and the adults were on the nests May 31 – June 18. The adults were feeding young in the nests June 12 to July 5. Fledged young, usually three, were seen June 25 to July 12. Hatching year birds were seen: two, north end of Lake Springfield July 29, 1999; one, near Berry August 31, 1999 (possibly not from the nesting at the golf course), and one, August 14, 2004 at the Lake Springfield dam (photograph). High counts at the Lincoln Greens golf course in summer were: 6, July12, 1999; 7, July 3, 2000; and 6, July 28, 2003. The high count for the **fall** season was 2, August 3, 1998. By 2005, only one bird arrived on May 7, and it was seen June 4 and 22 at the golf course. No nest was found, and it was the last bird seen in the study. This incipient population was probably eliminated when the golf course moved the driving range back to include the nesting tree. The Western Kingbird mostly nests in the western half of the US and winters from southern Mexico to Costa Rica.

Documentation: Photographic: IL. Sangamon Co., M. Harris, DO, HDB – on file ISM.

Highest # Days/Season

Spring10 (2000)Summer12 (2000)Fall4 (2003)Winter2 (1982)

Highest # Birds/Season

Spring16 (2000)Summer36 (2000)Fall6 (2003)Winter2 (1982)

Eastern Kingbird

Tyrannus tyrannus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	5881/1128 (37)	7583/1597 (37)	7325/1270 (37)	0/0	20789/3995
Average/day	5.21	4.75	5.77		5.20
Average/season	158.95	204.95	197.97		

Status: Common Migrant and Summer Resident

Dates:

- **Spring:** Earliest arrival = **April 12**, 2008 three southwest Springfield (photograph) Average arrival (37 years) w/range April 16 – May 1 = **April 23**
- Fall:Average departure (37 years) w/range September 7 October 4 = September 19Latest departure = October 4, 1986 immature Lake Springfield

This flycatcher was dark above, white below, with a white tipped tail and had a mostly concealed reddish orange crown patch. Besides the earliest **spring** arrival date above, other dates were: April 17, 1981; April 18, 2001; and April 16, 2006. High spring counts were: 36, May 14, 1981; 57, May 19, 1997; 59, May 9, 1999; 54, May 19, 2001; and 50, May 12, 2002. When Eastern Kingbirds first arrived, I saw them in woodland sitting up high in the trees, rather than out in the open. On May 12, 1994 they were migrating diurnally past Lincoln Gardens and on May 5, 1999 at Lake Springfield 15 kingbirds materialized out of a storm cloud at dusk. On May 20, 1989 six kingbirds were feeding on termites at Carpenter Park with other migrants. Cool, rainy weather would down flocks in spring, and fields were sometimes covered with these birds. Some late spring migration was still being seen in late May and early June. They ate mulberries in season, and the stain could be seen on their breasts. In summer, they were recorded on the BBS all 31 years, mostly with even numbers. Likewise, the Sangamon River Census showed stable numbers. In general, this species seemed to be increasing, because it was adapting to humans, needing only a few open trees in which to nest. Nest building occurred between May 23 and June 10. A pair was seen copulating on a power line June 11, 1981 at 1745 hours. Adults were observed on the nest May 26 to June 28 and young were in the nest June 23 to July 8. Young were out of the nest with adults attending June 24 to September 10. By the end of July and in early August, kingbirds were moving south. I saw them migrating with swallows August 27, 1975 or in family groups as on September 3, 1974. During southward migration, they frequently roost in standing cornfields with robins. Some moved along the lake especially at Lincoln Gardens. High counts for fall were: 33, August 16, 1979; 33, September 1, 1997; 39, August 14, 1999; 35, July 21, 2002; and 38, August 23, 2005. They ate some berries in fall, like wild black cherries and sassafras. One at Beamington caught a frog and beat it against a wire before eating on July 7, 1991. Usually kingbirds were gone by September, but I had two October dates the one above and October 1, 2004 at Jefferies Orchard. Kingbirds were aggressive toward many other birds, chasing hawks to cowbirds, and also mammals like squirrels. One kingbird even got off its nest to chase a high flying rival kingbird. A kingbird with snow white body and dark wings and tail was seen at Buckhart on July 2, 1983. The Eastern Kingbird was a long distant migrant and winters in South America south to Bolivia.

Documentation: Specimens = 14) IL. Sangamon Co., Spring = 6, $\partial \partial = 4$, May 7 – 29, wts. = 40.7 – 42.8 gms, testes = 6 – 11mm, gizzards with Hymenoptera and Coleoptera; Q = 2, Sangamon Co., May 22-23, wts. = 38.8 – 41.4 gms, ovaries = 6 – 9 mm; Summer = 8, adult $\partial = 1$, Sangamon Co., June 24, 1973, wt. = 41.1 gms, testes = 10 mm; immature $\partial \partial = 2$, Sangamon Co., July 13 – August 13, wt. = 40.7 gms; adult Q = 3, Sangamon Co., June 1 – 18, wts. = 37.9 – 44.0 gms, ovaries = 8 mm, gizzard with mulberries, Coleoptera, gall wasp pupae; immature Q = 2, Sangamon Co., July 27 – August 15, wts. = 36.9 – 40.9 gms.

Highest # Days/Season

 Spring
 41 (2006)

 Summer
 61 (2005) maxed

 Fall
 46 (1992)

Highest # Birds/Season

Spring	397 (2002)
Summer	496 (2000)
Fall	382 (1998)

Scissor-tailed Flycatcher

Tyrannus forficatus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1/1 (1)	0/0	3/3 (1)	0/0	4/4
Average/day	1.0		1.0		1.0
Average/season					

Status: Very Rare Migrant

Dates: Two Records: adult, Sangchris, May 20, 1981; adult in worn plumage, Auburn Sewer Pond, August 6 – 8, 2000.

The Scissor-tailed Flycatcher, a species of the southern Great Plaines, breeds as close as Missouri and rarely southern Illinois. I thought there would be more records of this unmistakable flycatcher. The first record was a close flyby at Sangchris. The long tail and pinkish under wing color were obvious. The early fall bird I found, had a more worn plumage, and the left tail feather was broken off near the tip. This flycatcher spent most of the time sitting on wires and fences in open areas with scattered trees. The Scissor-tailed Flycatcher winters from southern Mexico to central Panama.

Documentation: Photographic: IL. Sangamon Co., DO and drawing and notes HDB - on file ISM.

Loggerhead Shrike

Lanius ludovicianus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	141/107 (31)	88/51 (22)	42/35 (20)	12/11 (7)	283/204
Average/day	1.32	1.73	1.20	1.09	1.39
Average/season	4.55	4.0	2.10	1.71	

Status: Occasional Spring Migrant, Rare Summer Resident and Fall Migrant and Very Rare Winter Resident

Dates:

Spring: Earliest arrival = February 15, 1974 Sangamon County Average arrival (33 years) w/range February 15 – April 16 = March 22

Fall:Average departure (19 years) w/range August 3 – November 26 = September 19Latest departure =November 26, 1970 Sangamon County (also see WR)

Although this endangered bird was difficult to find in the 1970s when the study was started, it was on the brink of extirpation from Sangamon County by the end of the study (2010). This shrike was easier to find in the spring than any other season, but even that was not true later (see Figure 20). Eifert (1945) wrote "Common ... Roadsides and farms. Nests in osage-orange hedges." The Loggerhead Shrike apparently started to decline in the 1960s. Other early spring arrivals were February 24, 1986 at Spaulding Orchard Road and March 2, 1971 & 1972 south of Springfield. The highest count for spring was three, April 8, 1973. During the study in summer nesting areas were: southwest of Springfield and near Loami 1978 – 2001 (young seen); northwest of Berlin 1995 and 1996 (young seen); south of Salisbury 1980 (young seen); northeast of Bradfordton 1997; south of Williamsville 1985 (young seen); near Mechanicsburg 1993 –2001 (young seen); east of Rochester 1980 – 1985 (young seen); south of Springfield 1982 – 1984 (young seen); Hunter Lake Area 1982 & 1990 (young seen); west of Chatham 1989 (young seen); west of Sangchris 1975 – 2003 (young seen). The last nests were west of Sangchris and near Loami both had a house built nearby and nesting ceased. I also noted that two hedgerows that had shrikes in 1982 were destroyed in the spring of 1983. So it was humans that caused the decline of the shrike in this county. A male was on a wire singing a rough, broken robin-like song west of Sangchris August 21, 2000. Young were seen between June 8 and August 19. An older juvenile was photographed at Sangchris on September 8, 2001 which had some characteristics of a Northern Shrike including a two toned bill and no black over the bill. Fall migration mainly consisted of the summer residents leaving, but I noted a total of 16 in August, 10 in September, 4 in October and 5 in November. The high fall count was 4, August 1, 1996. There were eleven winter records, four in December, one in January, and six in February, of which there were two birds on February 22, 1997. Some of these could be late fall or early spring migrants. Some of the records were: February 27, 1974 Springfield; November 9, 1986 west of Springfield; November 17, 1990 Buffalo; December 22, 1995 west of Berlin; and January 17, 2000 southwest of Springfield. After 2003, the shrike became very rare, and the last one recorded was near Buckhart on March 24, 2007 where I watched it cast a pellet. The subspecies in this area is L. l. migrans which winters as far south as eastern Mexico.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 603785 $\stackrel{<}{\bigcirc}$, 3 mi southwest of Springfield, March 29, 1955, collected by P. Parmalee.

Highest # Days/Season

Spring18 (1990)Summer 6 (2003)Fall9 (2001)Winter2 (4 years)

Highest # Birds/Season

 Spring
 26 (1990)

 Summer
 11 (2000)

 Fall
 9 (1996 & 2000)

 Winter
 3 (1996)

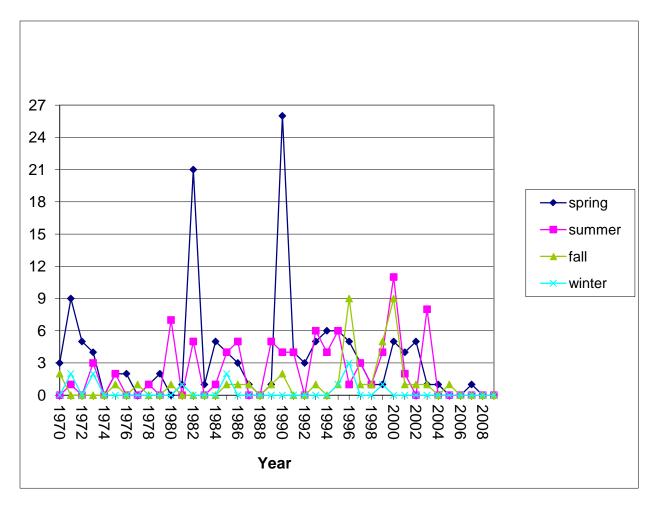


Figure 20. Loggerhead Shrikes in Sangamon County by Season

Northern Shrike

Lanius excubitor

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1/1 (1)	0/0	9/7 (4)	19/18 (6)	29/26
Average/day	1.0		1.29	1.06	1.12
Average/season	1.0		2.25	3.17	

Status: Rare Migrant and Winter Resident

Dates:

Fall: Earliest arrival = October 25, 1999 adult, west of Sangchris Average arrival (6 years) w/range October 25 – December 4 = November 11
Spring: Average departure (7 years) w/range January 3 – March 29 = February 4 Latest departure = March 29, 2000 immature Cinder Flats

I went 25 years without recording the Northern Shrike even though I looked for it every winter. Finally on November 13, 1995 I found an adult at Sangchris which was perched in the top of a small tree in an open area of grassland with many small trees and bushes. This area was later cleared. I watched this shrike for a long time during which it called, giving harsh as well as buzzy notes, and it chased a flock of goldfinches. This larger and chunkier shrike had a larger bill with a more obvious hook than the Loggerhead Shrike. The Northern Shrike had a light area on the lower base of the bill and the mask was reduced both before and after the eye. The black did not extend over the top of the bill, and in fact a white line may show there. The tail appeared fuller and the rump was white in contrast to the gray back. Usually, there were vermiculations on the breast, and these could appear quite dusky. Most Northern Shrikes seemed to prefer to perch in the tops of trees, but I have seen them on wires and fences and in the tops of corn stalks. After the initial sighting, another shrike wintered at Buckhart and was singing December 5, 1995 giving trills and melodious notes from a brush pile. Plus, it cast a pellet on January 3, 1996. No shrikes were found in 1996, the next bird occurred January 10 and February 21, 1998 north of Pleasant Plains. There was only one bird the next winter on January 24, 1999 east of Salisbury. The following year (1999-2000) I recorded a record number with 4 in the fall, 5 in the winter and one in the spring. This also included the earliest arrival, the latest departure and the highest daily counts, which were 3 on November 1, 1999 (fall) and 2, December 8, 1999 (winter). The March 29, 2000 bird at the Cinder Flats was flycatching from the top of a small tree on a mild evening. The fall and winter of 2000 –2001 produced four birds, November 18 – February 14; and the fall of 2001 two, November 1 - 18. There were not any in 2002, but in the winter of 2003 - 2004 there were five shrikes December 4 – January 17. There were none in 2005 or 2006 which was the longest hiatus since 1995. In the addendum of fall and winter of 2007 - 2008 five more shrikes were found from November 3 – January 12 (numbers not in totals above). Oddly, four were in November and only one in January suggesting that they arrived in November, but most did not stay. Then in the fall of 2008 three were seen November 9 – December 3, again not staying the winter. The sudden appearance (in 1995) and numbers (though low) may indicate that the Northern Shrike was attempting to exploit the niche vacated by the declining Loggerhead Shrike which was now very rare during winter or any time and was on the verge of extirpation.

Most Northern Shrikes seemed to hold winter territories and most of the birds were adults. The subspecies is *L. e. borealis* which breeds in Ontario, Quebec to Labrador.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

White-eyed Vireo

Vireo griseus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1065/640 (37)	463/336 (37)	698/462 (34)	2/2 (1)	2228/1440
Average/day	1.66	1.38	1.51	1.0	1.55
Average/season	28.78	12.51	20.53	2.0	

Status: Uncommon Migrant and Summer Resident and Very Rare in Winter

Dates:

Spring: Earliest arrival = April 8, 1977 ♂ Lincoln Gardens Average arrival (37 years) w/range April 8 – 28 = April 20

Fall:Average departure (34 years) w/range August 15 – November 9 = September 30Latest departure = November 14, 2009 Lake Springfield (also see WR)

This small greenish bird of the thickets had a distinct loud song. All arrival dates were in April and it was usually the earliest vireo in the **spring**. Other early dates were April 10, 1995 at Lick Creek and April 11, 2001 & 2005 at Washington Park. Most high counts were 3 – 6, but there were: 10, May 5, 1993; 7, May 5, 1994; and 8, May 4, 2008. This vireo was usually foraging low on woodland edge. They moved around a lot because of habitat destruction, and succession which made the vegetation unsuitable. Thus, the population varied from year to year. It was found in only six of 31 years on the BBS, and indications were it had dropped in numbers in this county before I started the BBS (1972). However, it was found in summer in all 40 years of the study, and numbers in summer increased in the 1990s. It had always been much more common further south in Illinois. The high count for summer was 5, June 5, 1979. Nest building was observed at Lincoln Gardens on May 5, 1981, and on May 30, 1981 an adult with a greenish caterpillar was apparently feeding young in the nest. Fledged young were seen between July 7 and August 10 at such places as Horse Creek, Sediment Retention, Sangchris, Washington Park, Carpenter Park, and Lake Springfield. Some of these vireos appeared in other areas after nesting and apparently under went molt there. Molt was observed from July 6 to September 25. These vireos seemed to sing different songs at different times of the year; I noted its "pea brain" song began July 25, 2003 at Sangchris. This species sang from spring to June; sporadically in July; and more regularly in August and September until cessation. Late dates of singing were September 15, 1980, September 16, 1985, September 14, 1999 and September 27, 2004. High counts for **fall** were 2 - 5, with the highest six on September 12, 2001. Most departure dates were late September or early October, but very late records include: November 9, 1991 at Lake Springfield; November 1, 2000 at Oak Ridge; October 26, 2003 at Muni; (a dark eyed immature) October 29, 2004 at Riverside Park; and the record above. One tried to over-winter at Adams Sanctuary December 6 - 11, 1996, but on December 16 only a few feathers were found. In the addendum (2007 - 2009), there appeared to be an increase in numbers considering that a 100 White-eyed Vireos were seen in the spring of 2008 and 91 in 2009, plus 72 birds were recorded in the fall of 2008. These numbers were twice the normal numbers. The subspecies in this area is V. g. griseus. The White-eyed Vireo winters in the southern coastal states to northern Central America and Cuba.

Documentation: Specimens = 3) IL. Sangamon Co., ISM# 608506 \bigcirc , tv tower east Springfield, May 12, 1986 coll. by HDB, wt. = 10.8 gms, ovary = 6 mm; ISM# 661915 \bigcirc , near Lake Springfield, May 28, 2009, coll. by HDB, wt. = 12.8 gms, ovary = 8 mm; ISM# 606626 immature \bigcirc , Lincoln Gardens, September 1,1977, coll. by HDB, wt. = 12.9 gms, testes = 1 mm.

Highest # Days/Season

Spring30 (2006)Summer25 (2001)Fall49 (2001)Winter2 (1996)

Highest # Birds/Season

Spring58 (1979)Summer36 (2001)Fall102 (2001)Winter2 (1996)

Bell's Vireo

Vireo bellii

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	608/372 (36)	879/563 (36)	396/257 (34)	0/0	1883/1192
Average/day	1.63	1.56	1.54		1.58
Average/season	16.89	24.42	11.65		

Status: Uncommon Migrant and Summer Resident

Dates:

- Spring: Earliest arrival =April 27, 1976 Carpenter Park & 2009 north of New City Average arrival (36 years) w/range April 27 – May 16 = May 8
- **Fall:** Average departure (34 years) w/range August 15 September 29 = **September 8** Latest departure = **September 29**, 1984 Riverside Park

A small, plain vireo which usually showed one wing-bar and had a very distinctive chattery song, it was heard much more often than seen. The Bell's Vireo was almost always in willows and hedgerows, it stayed from low to medium height in the vegetation. I recorded it only three times in April, also including April 28, 2001, as a **spring** arrival. All other spring arrivals were in May, and it was missed in spring in 1971. They apparently enter Sangamon County (and the state) from the west as most of the population breeds to the west or southwest. High spring counts were low, usually less than five, but there were 6, May 21, 1986 and 8, May 23, 1990. Due to succession and destruction (by humans) of their habitat, they tended to move from year to year. This vireo was ranked 68th on the BBS in **summer** and was recorded only 13 years up to 1997. Adults were observed carrying food at Sangchris June 18, 1998 and July 23, 2003. Fledged young were seen between June 29 and August 7. Other areas with nesting were Cinder Flats, Buckhart, Carpenter Park (along the railroad), Jefferies, Knapp Lake, and Sediment Retention. High counts for summer were: 6, June 12, 1979; 8, July 13, 1985; and 6, June 30, 2001. On June 18, 1988 one singing west of Springfield sounded like it was giving both Bell's and Warbling Vireo songs. Late singers were heard September 7, 1980, September 3, 1999, and September 11, 2000. Some sang while in molt, and molt was seen August 2 - 22. A few birds were found in areas where they did not nest in late summer and early **fall**, suggesting they dispersed before migrating. Otherwise, most fall migration was simply vacating the nesting areas, but this vireo was missed in three falls (1972, 1973, and 1987). High counts for fall were: 6, August 15, 1974; 6, August 18, 1979; and 6, August 13, 2006. Other late departures were September 16, 1993 at Sangchris and September 17, 2005 at the Cinder Flats. The subspecies in the county is the nominate form which winters in western Mexico south to Nicaragua.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 606625 immature \bigcirc , 3 mi south Spfld, August 22, 1977, coll. by HDB, wt. = 11.0 gms, ovary = 1.5 mm, gizzard with Lepidoptera.

Highest # Days/Season Spring 25 (1992)

 Spring
 25 (1992)

 Summer
 52 (2000)

 Fall
 28 (2001)

Highest # Birds/Season

Spring42 (1992)Summer91 (2000)Fall46 (2001)

Yellow-throated Vireo

Vireo flavifrons

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1611/762 (37)	925/504 (36)	851/521 (37)	0/0	3387/1787
Average/day	2.11	1.84	1.63		1.90
Average/season	43.54	25.69	23.0		

Status: Fairly Common Spring Migrant and Summer Resident and Uncommon Fall Migrant

Dates:

Spring: Earliest arrival = March 28, 1975 ♂ Boy Scout area Average arrival (37 years) w/range March 28 – April 30 = April 22

Fall:Average departure (37 years) w/range September 12 - October 15 = September 29Latest departure = October 15, 1984 Washington Park

Mid- to late April was the normal arrival time in **spring** for this vireo, but I had two March dates. The bird recorded above was seen only one day, but in 2004 a male showed up on March 29 at Lincoln Gardens and stayed on territory and sang all through April. I photographed it April 1. The numbers in spring were nearly double (1.9 to 1) those in fall, but some of this discrepancy may be due to singing birds in spring, which were much easier to locate. This vireo was a woodland species that stayed fairly high in dense leaves. Most high counts in spring were low being 2 – 10 in late April to early May. High counts were: 6, May 8, 1976; 8, April 30, 1989; 11, May 6 & 7, 1994; and 10, May10, 1997. Indications were that migrants left in mid- to late May, although some wandering singing males were present into June. The BBS in Sangamon County recorded this bird in 9 years of 31 possible in summer. It ranked 70th out of 101 summer species. Woodland species were less obvious on BBS, but Yellow-throated Vireos were occasionally also found in open shade trees. Small population peaks were noted in 1982 - 1984 and 2002 – 2003 on the BBS. The Sangamon River Census showed an increase from 1976 to 1991. On May 11, 1999 at Oak Ridge, a male was puffed up displaying. At Riverside Park on June 3, 1997 a pair was trying to chase off a Blue Jay. Nest building was observed at Carpenter Park April 29, 2001; and an adult was collecting spider web at Lincoln Greens May 3, 2002. On July 26, 1987, a family was seen with an adult feeding young a green caterpillar at the south end of Lake Springfield. The young were duller, ragged looking (molt ?) and had less obvious wingbars than the parents. Fledged young were at Lincoln Gardens on July 31, 2000. Several fledged young were seen at Jefferies Orchard June 22, 2002; and a male with young were at Center Park June 28, 2005. The maximum counts for summer were six usually in early June, the exception being six on July 12, 2003. Singing continued from spring into June, July and dropped off in late July, with some singing in August and regained momentum in September. The latest song was October 7, 1999. Sometimes they sang whisper songs in fall such as were heard September 2, 2000 at Washington Park. Also at Washington Park on September 6, 2001 one was giving a heavy wren-like scolding call. Other scold notes were similar to Blue-headed Vireo, but were louder as I heard both at Oak Ridge on October 12, 2005. One bird was in worn plumage at Lick Creek July 25, 1988. I noted molt from July 19 – August 21. Birds (usually juveniles) in

fresh basic plumage were seen by August 26, 1976 (tv kill). According to tv kills and other observations migrants began to arrive in **fall** in late August and early September. High counts in fall were 3 – 6 birds mostly in August and September. The maximum fall count was 8, September 18, 2006. Departures in fall were about equal between September and October, but by 2004 to the end of the study (2010) departures were all in October. Other late fall departures were: 2, October 14, 1984; one, October 12, 2005; and one, October 11, 2008. Numbers increased in recent years and this vireo seemed to be exploiting parks, cemeteries, and other areas near humans. Hopefully, this would ensure its survival, but many of these areas have been destroyed or severely modified, and these vireos need time and successful nestings to make the transition. The Yellow-throated Vireo winters from southern Mexico to northern South America and the Greater Antilles.

Documentation: Specimens = 24) IL. Sangamon Co., Spring = 2, $\mathcal{J} = 1$, 8 mi southwest Springfield, May 1, 1975, wt. = 17.1 gms, testes = 5 mm; $\mathcal{Q} = 1$, Springfield, May 9, 2001, wt. = 15.3 gms, ovary = 6 mm; Fall = 22, all tv tower kills, adult $\mathcal{J}\mathcal{J} = 4$, September 17 - October 4, wts. = 21.0 - 23.9 gms; immature $\mathcal{J}\mathcal{J} = 5$, September 10 - October 14, wts. = 16.4 - 24.9 gms; adult $\mathcal{Q}\mathcal{Q} = 6$, September 13 - 20, wts. = 16.9 - 20.0 gms; immature $\mathcal{Q}\mathcal{Q} = 4$, August 26 - October 7, wts. = 16.2 - 26.7 gms; plus unsexed = 3, September 5 - October 14, wts. = 16.9 - 26.1 gms.

Highest # Days/Season

Spring52 (2004)Summer42 (2002)Fall40 (2002)

High #Birds/Season

Spring146 (2004)Summer82 (2003)Fall80 (2006)

Cassin's Vireo

Vireo cassinii

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	0/0	0/0	2/2 (1)	0/0	2/2
Average/day			1.0		1.0
Average/season					

Status: Very Rare Migrant

Dates: One Record: ♀?, Washington Park, August 31 – September 1, 2000.

I found and scrutinized this vireo, at times with a telescope, for at least an hour on two days. Having seen 1,940 Blue-headed Vireos, plus banding and making study skins of that species, I knew this one was different. It had dull coloration overall, with little or no delineation between the back and the head, the throat was not white or set off from the rest of the underparts, and the primaries (noted with a scope) were edged with olive (for a detailed description see Bohlen, 2001). The photographs of this bird were taken in the shade at dusk and were too yellow; this bird in bright sun looked mostly gray. The vireo stayed in an oak area of the park and fed on spiders and caterpillars sometimes with a flock of titmice and warblers. The Cassin's Vireo breeds in western North America east to Montana, and migrates to some extent on the Great Plains, and winters in the southwest and Mexico.

Documentation: Photographic: IL. Sangamon Co., DO and drawing and notes HDB - on file ISM.

Blue-headed Vireo

Vireo solitarius

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	907/473 (37)	1/1 (1) sp mig	1029/612 (37)	3/3 (2) fall mig	1940/1089
Average/day	1.92	1.0	1.68	1.0	1.78
Average/season	24.51	1.0	27.81	1.5	

Status: Uncommon Migrant

Dates:

- Spring: Earliest arrival = April 12, 2005 Lake Springfield Average arrival (35 years) w/range April 12 – May 2 = April 24 Average departure (35 years) w/range May 11 – June 2 = May 21 Latest departure = June 2, 2002 ♀ Center Park
- Fall: Earliest arrival = August 29, 1977 WP & 2001 two Carpenter Park Average arrival (36 years) w/range August 29 – September 27 = September 14 Average departure (36 years) w/range October 11 – December 11 = November 2 Latest departure = December 11, 1992 Lincoln Gardens

This vireo occasionally appeared early in **spring** since they wintered as close as the Gulf States. Other early dates included: April 15, 1994 & 2002 both at Adams Sanctuary; plus six dates of April 19; but it was not seen until May in three years. High counts for spring were low with 3-6usual, but higher counts were 15, May 6, 1994; and 8, May 8, 1997 and May 3, 1999. This vireo fed from mid- to high in the vegetation in woodland, and its slow, sweet song helped detect it. Its call was harsh notes like the Yellow-throated Vireo and if provoked by spishing or a predator these calls brought in other woodland species. Besides the only departure date into June (above), a singing male was at Lincoln Gardens, May 31, 2008 and one was at Washington Park, May 31, 2009 (photograph). The Blue-headed Vireo nests in the northern US and southern Canada. There were only two August (the rest in September) fall arrival dates in 39 years, as this vireo was fairly late in returning. High fall counts were usually from 3 – 7 birds, but 15 on October 14, 1985 was the highest. I noted a fair amount of singing in fall in this vireo and three were singing September 22, 1999 at Carpenter Park. Besides insects (including moths and a preving mantis), these vireos fed on sassafras and dogwood berries. November dates were not particularly unusual in Sangamon County as I had recorded it 21 years with 37 individuals in November - some years multiple times (see Table 30). This vireo, at these times, was usually found in sheltered areas with woodland flocks. Some of the later dates included: November 16, 1982 at Lick Creek; November 17, 1991 in Springfield (T.Teeter); and November 19, 1998 at Sangchris. There were two records into winter: December 10 and 11, 1992 at Lincoln Gardens and December 8, 2004 at Washington Park (B.Atwood). Both were probably very late fall migrants. The subspecies in the county is the nominate form, which winters from the Gulf States south to Costa Rica.

Documentation: Specimens = 20) IL. Sangamon Co., all Fall and all from tv towers east Springfield; adult $\sqrt[3]{2} = 4$, September 26 – October 14, wts. = 16.3 – 18.9 gms; immature $\sqrt[3]{2} = 4$

6, October 13 – 14, wts. = 15.3 - 18.6 gms; adult $\bigcirc \bigcirc \bigcirc = 4$, October 1 – 18, wts. = 15.8 - 19.5 gms; immature $\bigcirc \bigcirc \bigcirc = 6$, September 21 – October 14, wts. = 14.9 - 18.8 gms.

Highest # Days/Season

Spring23 (2006)Summer1 (2002)Fall33 (2004)Winter2 (1992)

Highest # Birds/Season

Spring64 (1999)Summer1 (2002)Fall72 (2004)Winter2 (1992)

Table 30. November Records of Blue-headed Vireos in Sangamon County(1970–2006 + Addendum)

1972	November 3	Washington Park
1974	November 1	Oak Ridge Cemetery
1977	November 1	Oak Ridge Cemetery
1978	November 3	Oak Ridge Cemetery
1981	November 2	Washington Park
1982	November 10 November 16	Lake Springfield Refuge Lick Creek
1985	November 1	Lake Springfield
1990	November 5	Washington Park
1991	November 2 November 4 November 5 November 14 November 17	North Pt. Oak Ridge Cemetery (2) Adams Wildlife Sanctuary & (1) Riverside Park Washington Park west side Springfield
1992	November 5	Oak Ridge Cemetery
1994	November 3 November 6 November 9	Washington Park Riverside Park Sangchris State Park
1995	November 5	Oak Ridge Cemetery
1997	November 3	Washington Park
1998	November 19	Sangchris State Park
2000	November 2 November 7 November 10	Washington Park Warm water ditch Lake Springfield Warm water ditch Lake Springfield
2001	November 6	Carpenter Park
2002	November 3	Hunter Lake
2003	November 8	Linden Lane Lake Springfield
2004	November 2 November 6	(1) Center Park & (1) Lincoln Gardens Spruce Lake Springfield
2005	November 1	(2) Lake Springfield
2006	November 5 November 10 November 11	Riverside Park Cinder Flats Oak Ridge Cemetery

Addendum:

2007 N	November 3	Oak Ridge Cemetery
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Warbling Vireo

Vireo gilvus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	4374/1178 (37)	3881/1306 (37)	2013/972 (37)	0/0	10268/3456
Average/day	3.71	2.97	2.07		2.97
Average/season	118.22	104.89	54.41		

Status: Common Migrant and Summer Resident

Dates:

- Spring: Earliest arrival = April 15, 2001 & 2006 Sangchris & Lake Spfld Average arrival (37 years) w/range April 15 – May 1 = April 22
- Fall:Average departure (37 years) w/range September 11 –October 15 = September 28Latest departure = November 15, 2009 Lake Springfield (photograph)

A rather plain-colored vireo that was an incessant singer, it stayed mostly in the canopy, and was heard much more often than seen. The Warbling Vireo preferred open tall trees usually near water. Other early spring arrivals were April 16, 1977 and April 17, 2002, plus April 18 for five springs. High counts were: 14, May 10, 1986; 17, May 9, 1998; 17, May 29, 2000; 16, May 8, 2004; and 20, May 7, 2005. There were 2.2 times more Warbling Vireos in spring than fall almost surely due to detectability because of singing. This species seemed to increase during the study, and it was the most numerous vireo in summer. These observations agreed with the Sangamon County BBS, in which it ranked 30th of all species and was increasing, but the numbers were more equal in the Sangamon River Census. Nest building was observed from April 30 – May 25, and a nest was completed on May 31. An adult was on a nest June 25, and young were being fed in the nests from June 12 and July 2. Fledged young, usually with adults, were noted between June 24 and August 2. Two cowbirds were being fed by adult vireos on August 18. High counts for summer were 20, June 13, 1978 and 15, June 9, 2002. Molt was noted from July 12 to August 13. Though they sang all summer, there was a hiatus in late August, but singing began again the first week of September though mostly in the morning and less often. One was giving a whisper song September 15, 1985. The last singing dates were September 13, 1999 and September 15, 2000. Most of **fall** migration consisted of summer residents leaving, but there was some influx from the north. Loose flocks occurred with other vireos and migrants, especially when they were feeding on wild cherry and dogwood berries. On September 7, 2006 a flock of nine Warbling Vireos was found at Sangchris. High counts for fall were: 10, September 2, 1983; 10, August 31, 1998; 14, September 4, 1999; and 15, September 7, 2006. Other late records besides the one above were: October 15, 1977 at Carpenter Park; October 14, 1985 tv tower kill; and October 12, 1984 at Washington Park. The subspecies found here is the eastern V. g. gilvus, but I noted a possible western type V. g. swainsoni (?) at Center Park on October 10, 2002 which had a smaller bill, darker crown and was grayer below. The Warbling Vireo winters from southern Mexico to northern Central America.

Documentation: Specimens = 9) IL. Sangamon Co., Spring = $2 \stackrel{\frown}{\circ} \stackrel{\frown}{\circ}$, tv tower & LSpfld, May 8 & 18, wts. = 14.0 - 14.4 gms, testes = 5 - 6.5 mm; Fall = 7, adult $\stackrel{\frown}{\circ} \stackrel{\frown}{\circ} = 2$, tv tower, September

16 – October 14, wts. = 15.7 – 18.1 gms; immature 3° = 1, tv tower, September 18, wt. = 14.7 gms; adult $2^\circ = 3$, tv tower (2) & Buckhart, August 30 – September 16, wts. = 13.2 – 15.8 gms; immature $2^\circ = 1$, tv tower, September 16, wt. = 15.8 gms (all specimens show a whitish throat, with spring birds being grayer over all than fall birds).

Highest # Days/Season

Spring45 (2002)Summer59 (2000)Fall45 (2006)

Highest # Birds/Season

Spring273 (1999)Summer290 (2000)Fall119 (1998)

Philadelphia Vireo

Vireo philadelphicus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	619/326 (37)	21/14 (9) sp mig	1099/530 (37)	3/3 (1) fall mig	1742/873
Average/day	1.90	1.50	2.07	1.0	2.00
Average/season	16.73	2.33	29.70	3.0	

Status: Uncommon Spring Migrant and Fairly Common Fall Migrant

Dates:

- Spring: Earliest arrival = April 24, 1987 ♂ Lick Creek Average arrival (37 years) w/range April 24 – May 17 = May 7 Average departure (37 years) w/range May 16 – June 6 = May 28 Latest departure = June 6, 1998 ♂ Lincoln Park
- Fall: Earliest arrival = August 25, 1980 LSpfld & 1987 Washington Park Average arrival (38 years) w/range August 25 – September 23 = September 6 Average departure (38 years) w/range September 25 – October 31 = October 7 Latest departure = October 31, 1985 Lincoln Gardens [but see WR = December 1- 10, 2003 Lake Springfield]

This elusive, pastel vireo arrived in spring when leaves were already out and foraged fairly high in the canopy. The song of the Philadelphia Vireo sounded like a Red-eyed Vireo, and visually this species resembled a Warbling Vireo. Thus, it was somewhat difficult to recognize this species without a good look. I saw these birds in **spring** in woodland, city parks, and shade trees. They sang as soon as they arrived, and their singing was the best way to find them. They also came to spishing, and when highly agitated they gave rather harsh wheezing notes similar to other vireos. I had only four April dates of arrival: April 29, 1974; see above; April 28, 1990; and April 27, 2009. May was the primary month this vireo was present in spring. High counts for spring were meager with 3 - 8 per day, with the exceptions 9, May 20, 1979 and 10, May 20, 1988. Nearly all maximums occurred in mid- to late May. This species lingered late in spring, and all summer numbers above were actually late spring migrants. They occurred in early June in nine years, plus once in the addendum. Some of the late spring records were: 3, June 2, 1975; a male, June 4, 1976; 3, June 1, 1983; 2, June 4, 1993; and one, June 2, 2008 mostly at Washington Park. This vireo breeds north of Illinois in the very northern parts of the US and in eastern Canada. Fall migration could sometimes be detected in late August (11 times in 40 years), but more often September was the time of arrival. One had to be very careful in separating Philadelphia and Warbling Vireos in fall, but note the dark area between the bill and eye, positioning of the yellow especially on the throat and the smaller bill of the Philadelphia Vireo. Of 147 birds banded, tv kills, and specimens only one was from August – a banded juvenile on August 29. So most of fall migration took place in September and early October. My data showed a tendency for juveniles to arrive earlier than adults, but with some overlap. It was also interesting to note that of 147 aged birds in fall only 46 (31%) were adults. In addition to habitats in spring, in fall this vireo was occasionally found in thickets and could occur quite close to the ground. Most high counts in fall ranged between 3-9 birds per day with a maximum

count of 12 on October 14, 1985. Apparently some years most of the birds passed through in a short span of time as was noted in 1994 (September 13 - 26). There was some partial singing in fall migrants and it was noted on September 1, 1977 at Lincoln Gardens and September 11, 1987 at Lake Springfield. Not only does this vireo eat insects, but was seen eating dogwood berries September 5, 1995, pokeberries September 14, 2001 and sassafras berries September 4, 1997. Occasionally, Philadelphia Vireos form loose flocks with other vireos and these can include warblers, chickadees, titmice and others. Total fall numbers were usually higher than spring (1.7 to 1). Fall migration usually extended into October except for five years which ended in September. Stragglers occurred: October 31, 1985 at Lincoln Gardens; October 20, 1995 at Center Park; and October 22, 2001 at Sangchris. A very late bird into the **winter** period which I saw at close range several times (including the yellow throat, the small hooked bill, and the rather thick gray tarsi) stayed at the Lake Nursery (in thick vegetation) from December 1–10, 2003. The Philadelphia Vireo mainly migrates to Central America for the winter.

Documentation: Specimens = 52) IL. Sangamon Co., Spring = 1 \bigcirc , tv tower, May 19, 1974, wt. = 12.2 gms; Fall = 51, adult $\bigcirc \bigcirc \bigcirc = 8$, all tv tower, September 25 – October 14, wts. = 11.7 – 14.6 gms; immature $\bigcirc \bigcirc \bigcirc = 10$, all tv tower, September 2 – October 14, wts. = 11.4 – 18.6 gms; adult $\bigcirc \bigcirc \bigcirc = 18$, tv tower (17) & LSpfld, September 16 – October 14, wts. = 11.3 – 14.9 gms; immature $\bigcirc \bigcirc \bigcirc = 15$, tv tower (14) & LSpfld, September 2 – October 14, wts. = 11.5 – 15.5 gms.

Highest # Days/Season

 Spring
 16 (1981 & 1993)

 Summer
 4 (1998)

 Fall
 25 (1981)

 Winter
 3 (2003)

Highest # Birds/Season

Spring40 (1995)Summer4 (1993 & 1998)Fall56 (1979 & 1998)Winter3 (2003)

Red-eyed Vireo

Vireo olivaceus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	7243/1073 (37)	2432/865 (37)	7722/1534 (37)	1/1 (1)	17398/3473
Average/day	6.75	2.81	5.03	1.0	5.01
Average/season	195.76	65.73	208.70	1.0	

Status: Common Migrant and Fairly Common Summer Resident

Dates:

- Spring: Earliest arrival = April 17, 2002 ♂ CP & 2006 ♂ Lincoln Gds Average arrival (36 years) w/range April 17 – May 2 = April 24 Average departure (12 years) w/range May 30 – June 7 = June 3 Latest departure = June 7, 1998 nine Sangamon Co.
- Fall: Earliest arrival = August 3, 1989 Lincoln Gardens
 Average arrival (18 years) w/range August 3 31 = August 20
 Average departure (37 years) w/range September 27 October 28 = October 11
 Latest 'normal' departure = October 28, 2002 Lick Creek
 [when stragglers were added, average departure = October 17 and the latest bird was December 7, 2004 Woods by Lake see dates of other stragglers]

This olive and white vireo in which the adults had red eyes was found in woodland. All spring arrival dates were in April except May 2, 1980. Besides the early arrivals above, there were four dates for April 19 (1977, 1981, 1992, 1993). This very vocal bird began singing as soon as it arrived. The highest counts were in the early part of the study indicating that this species might have declined in numbers. High spring counts were: 55, May 19, 1974; 50, May 24, 1976; 60, May 27, 1979; and 50, May 24, 1982. Some fairly good counts into early June point to spring migration continuing into that month. These counts were 37, June 2, 1975; 22, June 6, 1991; 22, June 1, 1997; and 21, June 5, 2003. The Sangamon River Census had 1.5 more birds in the summer 1991 than 1976, but this vireo was only recorded on 16 of the 31 years of the BBS. This gave a rather mixed view of its summer status. Breeding in this county could have occurred about any place that mature trees form a woodlot, unfortunately these vireos were not very successful. The main breeding area was Carpenter/Riverside Park and other wooded places along the Sangamon River. These fairly small birds aggressively defended their nesting area and were seen to chase off grackles and jays. Nest building was seen June 1 to 20. Fledged young were noted between July 17 to August 26; and a very late young at Washington Park was being fed by an adult September 6, 1983. Plus, adults feeding cowbirds were seen six different times from June 18 to August 25. Singing males were noted in unusual places such as the island off Marine Pt. (2006) and near I-55 (2003). Singing dropped off about July 30, but started again August 23 and continued until September 18, 2000. The song was usually monotonous, but twice I have heard pewee-like notes interspersed in normal song. Several times I had seen this vireo in molt, but still singing and photographed this behavior on August 10, 2008. Molt was observed between July 18 and October 3 (summer residents?), but many birds that were migrating were already in basic plumage in late August and September. Food taken, besides insects, was mulberries May

30, sassafras berries September 4, pokeberries September 14, and dogwood berries September 7-10. In **fall**, Red-eyed Vireos were sometimes in woodland flocks with many other species and other times in pure vireo flocks. High counts for fall were: 33, August 29, 1977; 50, September 6, 1980; and 39, October 4, 1983. However, tv transmitting towers in the county killed 177 on the single night of September 2, 1972. Usually by mid-October this vireo had departed, but there were six November records: November 30, 1973 at Washington Park; November 9, 1975 at Carpenter Park; November 19, 1992 at Lincoln Gardens; November 12, 2003 at Riverside Park; November 3, 2004 at Washington Park; and November 11, 2004 at Oak Ridge. Also, one was observed into **winter** on the very late date of December 7, 2004 at Lake Springfield feeding on honeysuckle berries. I was able to approach it closely and saw the brown eye of a juvenile. The nominate form is the subspecies in the eastern US and the great majority in the county. A couple of specimens approached the coloration of the western subspecies *V. o. caniviridis* which were lighter on the crown and back and had very little black above the eye. Red-eyed Vireos winter in South America.

Documentation: Specimens = 47) IL. Sangamon Co., Spring = 6, $\Im \Im = 4$, tv tower (3) & Spfld, May 8 – 23, wts. = 19.5 – 26.2 gms, testes = 4 – 8 mm; $\Im \Im = 2$, tv tower, May 19, 1974, wts. = 16.6 – 16.9 gms, ovaries = 6 – 7 mm, one gizzard with Curculionidae, Chrysomellidae, bean leaf beetle, spider, Hemiptera, & crane fly; Fall = 41, adult $\Im \Im = 5$, tv tower, August 28 – September 16, wts. = 17.9 – 21.9 gms; immature $\Im \Im = 11$, tv tower (10) & Spfld, August 24 – October 4, wts. = 17.1 – 23.6 gms; adult $\Im \Im = 14$, tv tower, August 31 – September 20, wts. = 16.2 – 21.6 gms; immature $\Im \Im = 4$, tv tower, August 27 – September 23, wts. = 18.5 – 23.6 gms; plus 7 with unknown sex and/or age, September 2 – October 8.

Highest #Days/Season

Spring39 (2002 & 2006)Summer46 (2004)Fall61 (2002)Winter1 (2004)

Highest # Birds/Season

 Spring
 391 (1979)

 Summer
 142 (2003)

 Fall
 349 (1977)

 Winter
 1 (2004)

Blue Jay

Cyanocitta cristata

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	33680/3114 (37)	12459/1727 (37)	58713/4031 (37)	32204/2549 (37)	137056/11421
Average/day	10.82	7.21	14.57	12.63	12.0
Average/season	910.27	336.73	1586.84	870.38	

Status: Common Migrant and Permanent Resident.

Dates:

- Spring: Earliest arrival = March 27, 2004 (arbitrary due to PR) Average arrival (35 years) w/range March 27 – April 30 = April 17 Average departure (28 years) w/range May 2 – 27 = May 13 Latest departure = May 27, 2001 (arbitrary due to PR)
- Fall: Earliest arrival = August 23, 1992 (arbitrary due to PR)
 Average arrival (33 years) w/range August 23 September 23 = September 6
 Average departure (21 years) w/range October 6 November 25 = October 25
 Latest departure = November 25, 1992 (arbitrary due to PR)

The Blue Jay was present all year and was recorded in all 148 seasons of the study. However, there was also considerable migration that occurred of the more northern populations through this area in fall with returning birds in spring. Migration was diurnal with flocks flying from one group of trees to the next or following water courses. It was best to observe this migration either over water in places like Marine Pt. where I saw over 100 on September 30, 1993 and three flocks totaling 57 birds September 23, 1993 or at Carpenter Park along the railroad tracks where 40 were seen on September 29, 1976. In spring, 18 were seen migrating over Lincoln Gardens on May 8, 1996 and 50 were moving northeast at Carpenter Park between rains on April 29, 1974. Recently, their migrations have not been as obvious. Other high counts for spring were 100, May 5, 1979 and 42, April 1, 2000. Jays produced many different sounds, but one was singing like a finch at Sangchris on April 13, 1993. The Blue Jay was ranked 18th on the BBS and was recorded all 31 years. The numbers dipped in 1972-73 and 1993-96. High counts for summer were 53, June 13, 1978 and 31 June 22, 1997. Nest building took place between March 23 and May 24, but was mostly in April, and suggested more than one brood per season. The only egg dates were April 26 and 27, but females were seen on the nest from April 11 to May 31. Young were seen in nests from May 17 - 27, and fledged young were found from May 28 to July 26. The numbers in **fall** were larger than spring (1.7 to 1), which was probably due to young produced. Besides the high counts for fall above there were: 75, October 4, 1973; 85, September 25, 1983; 165, September 28, 1985; 140, October 7, 1985; 113, September 24, 1993; 155, September 30, 1993; and 116, September 29, 1996. In late fall and winter, I noticed that jays were active in the morning and early afternoon, but then frequently went to roost early. Two showed this behavior on November 28, 2004 when they went to roost about eight feet up in a pine tree with still plenty of daylight left. Others would roost in oak trees that had retained their leaves. These intelligent birds, even though legally protected, were often maligned by humans; and I saw ten or more lined up on a lawn east of Springfield that had been shot on October 22,

1994. The West Nile Virus took a toll of this beautiful bird from 2001 to at least 2006. By 2009, the numbers at Lake Springfield still had not recovered (see Figure 21). The ones that did stay for winter brighten up a dull day. Even though they may dominate a feeder, jays were the first to warn other birds of a Cooper's Hawk for which the jays had a special nasal alarm call. Blue Jays stored food for later use. Thus they could apparently assess the amount of acorns and other foods available to determine whether they stayed in a given area for winter. In August, I have noted jays silently stalking annual cicadas and in November one was eating a small mammal. High counts for winter were 101, December 19, 1976 and 128, December 18, 1977. Two odd plumaged jays were noted, both probably due to leucism. One was near Washington Park on August 8, 1972 (drawing on file ISM) and was mostly gray with a small amount of blue in the wing. The other was seen October 18, 1978 and was whiter, but still showed the outlines of a Blue Jay. The subspecies in the county and the migrant form is the northeastern *C. c. bromia.* However, the nominate form exists just to the south in Southern Illinois. It is uncertain whether northern Blue Jays migrate through the southern population or if both are displaced further south in winter. A few specimens in the ISM collection have measurements in the *C. c. cristata* range.

Documentation: Specimens = 14) IL. Sangamon Co., $\bigcirc \bigcirc \bigcirc = 4$, October 10 – November 29, wts. = 87.7 – 94.6 gms, testes = 2.5 – 7mm; $\bigcirc \bigcirc = 10$, Sangamon Co., February 6 – November 10, wts. = 80.0 – 93.8 gms, ovaries = 2 – 14 mm (August 22 adult specimen in heavy molt and June 23 & August 2 specimens were juveniles, plus an April 17 adult \bigcirc was much grayer on the crown and back and had reduced black on the head and face).

Highest # Days/Season

Spring92 (9 years) maxedSummer61 (5 years) maxedFall122 (6 years) maxedWinter89 (2003)

Highest # Birds/Season

Spring1341 (2000)Summer710 (2000)Fall2414 (1982)Winter1601 (2000)

American Crow

Corvus brachyrhynchos

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	31066/3064 (37)	14603/1656 (37)	70407/3925 (37)	70669/2489 (37)	186745/11134
Average/day	10.14	8.82	17.94	28.39	16.77
Average/season	839.62	394.68	1902.89	1909.97	

Status: Common Permanent Resident with some Migration

Dates: (see text)

Everyone knows the crow, whether as a nest robber and pest or as a clever and comical bird. The American Crow was 14th in numbers and 3rd in number of days of all species in this study. Numbers in spring were lower (2.3 times lower than fall) because crows broke up into pairs to breed and some migrants went back north (?). This transition occurred in February and March as these numbers were higher than April and May. Small roosts (40 - 50 birds) of non-breeders were found at Horse Creek in May 1996 and July 1998. High counts for spring were 520, March 2, 1986 and 130, March 5, 2001. The crow ranked 17th on the BBS with slowly increasing numbers until 2003 when numbers dropped because of West Nile Virus. High counts in summer were: 40, July 31, 1977; 65, July 19, 1997; but increased to 110, July 2, 2001. Then after 2003 the numbers were much lower. Nest building was seen February 26 to April 7, but mostly in March. Copulation was noted March 30 and April 6. Of 19 nests that were observed, adults were sitting from March 29 to May 10, but mostly in April. The nests were always too high to see the eggs. Young were in the nest April 29 to May 8, and fledged young were seen from May 7 to June 28. Crows apparently migrated diurnally in fall as I saw flocks moving from September 3 to at least November 11. High counts for fall were: 170, November 9, 1977; 100, September 9, 1979; 350, November 24, 1989; 250, November 27, 1998; 135, August 24, 1999; 400, November 22, 2002; 200, September 28, 2003; and 400, November 8, 2006. Winter was the time to count crows because they formed communal roosts. Not counting the one above, I found eight such roosts: south part of Lake Springfield 1976 - 1992 (125 birds); north of Lincoln Gardens 2003-2006 (200 birds); west of Buffalo 1978 - 1993 (300 birds); Sangchris 1987 - 1992 (100 birds); Washington Park 1978 – 2001 (200); south of Curran 1983 (100 birds); Cinder Flats 1983 – 1985 (100 birds); south of the State Capitol 1991 - 2006 + (6000 birds). These roosts could start forming as early as July 18 and went into spring until April 16. High counts for winter were: 100, January 21, 1973; 320, December 15, 1993; 500, January 1, 1996; 500, December 13, 1997; 310, January 23, 2001; 400, December 16, 2001; and 510, February 9, 2007. I had been wondering what kept crow numbers in check before the arrival of Europeans, when West Nile Virus hit (2001) and cut the numbers by more than 50% (see Figure 21). Plus, there would have been less numbers if it was not for the northern migrants arriving in fall. In 2002 I saw dead and dying crows in Washington Park, and where there had been 200 birds, there were then only four or five. Numbers bottomed out by 2004, but West Nile was still killing crows when this study ended (2010). Crows were very adaptive birds and they could take a fish off the middle of Lake Springfield or away from a flock of gulls. I watched them at tv tower kills hiding dead birds for later consumption by piling corncobs and clods of dirt on top of them. One crow at Washington Park had pestered me for years because I threw sticks toward it to try to stop the crow from

chasing off the songbirds. It even recognized my truck and gave alarm and harassing calls as it would for a Great Horned Owl, and would pick me out of a crowd of people, not bothering anyone else! This crow lived through the worst of the West Nile years and was still at Washington Park in 2009. The subspecies in this area is the nominate form.

Documentation: Specimens = 6) IL. Sangamon Co., $\bigcirc \bigcirc = 4$, west Buffalo (2) & Spfld & Farmersville, January 15 – April 15, wts. = 458.1 – 532.7 gms, testes = 3 – 11 mm (Farmersville specimen ca. 1902 mounted by Worthen is mostly white); $\bigcirc = 1$, west Buffalo, February 15, 1981, wt. = 491.0 gms, ovary = 10 mm; unsexed = 1, Chatham, April 9, 1970.

Highest # Days/Season

Spring92 (8 years) maxedSummer61 (4 years) maxedFall122 (6 years) maxedWinter90 (2003) maxed

Highest # Birds/SeasonSpring2272 (2001)Summer1579 (2001)Fall6365 (2001)Winter7038 (2000)

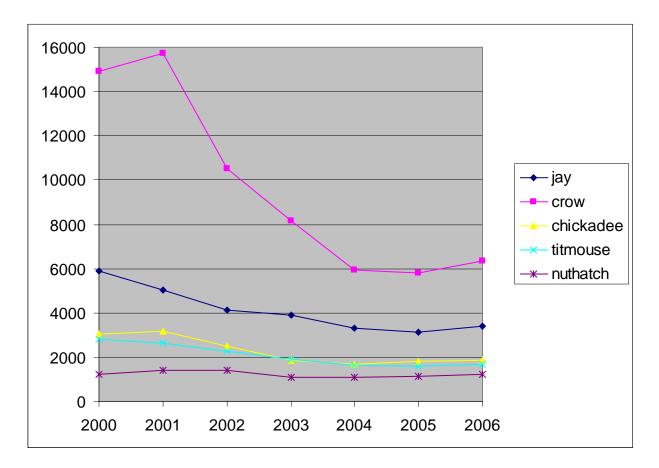


Figure 21. Decline in Bird Species Correlated with West Nile Virus.

Horned Lark

Eremopl	hila	alpestris	
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	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	19736/2636 (37)	9588/1207 (37)	24754/2638 (37)	52728/1795 (37)	106806/8276
Average/day	7.49	7.94	9.38	29.37	12.91
Average/season	533.41	259.14	669.03	1425.08	

Status: Common Permanent Resident with some Migration especially in Winter

Dates: (see text)

This was a species of flat wide open spaces, the types of areas that were being lost to development, especially near the city of Springfield. The Horned Lark was still one of the more prevalent species and was 24th in total numbers and 18th in days found. Although this lark was present in all seasons, migration occurred of northern birds which came south, probably starting in late September with the return flight in February. Many of these sightings consisted of larks flying over Lake Springfield. These movements included not only the Prairie Horned Lark (E. a. *praticola*) the breeding subspecies in the county, but the Northern Horned Lark (*E. a. alpestris*) and maybe to a much lesser extent Hoyt's Horned Lark (E. a. hoyti) from the northwest. The Northern Horned Lark was noted at least from November 24 to February 12. Another indication that migration occurred was the drop in numbers as spring progressed. High counts for spring were: 200, March 4, 1978; 130, March 2, 1980; 230, March 24, 1990; and 290, March 9, 1999. I had seen flocks of larks as late as March 29. The Prairie form that nested here paired up and was on territory by February and sometimes in late January. They started singing February 12, 2001, February 2, 2003, and January 30, 2006. The lark was 7th in rank on the BBS and was seen every year with higher numbers early and lower numbers later in the survey. The high **summer** counts were: 60, June 13, 1974; 80, July 11, 1982; 200, July 2, 1989; and 113, July 9, 1993. Lower summer counts occurred near the end of the study. Nest building was seen in late February, and eggs by March 16 through May 3. Of 13 nests, five had 4 eggs (March 23 – April 29), five had 3 eggs (March 19 – May 3) and three had 1 egg (March 30 – April 23). Young were seen in the nest April 1 - 23, and fledged young were found April 3 to August 5, but the majority was in April. On April 3, 1977 near Carpenter Park a female flew right at my face to protect newly hatched young. An adult was attending a young cowbird east of Springfield on June 22, 2003. Flocks of adults and young of the year could be seen in late June. My records showed molt only between July 18 to August 3. High counts for fall were: 100, September 9, 1977; 100, November 16, 1997; and 105, September 1, 1998. Winter was the season for numbers of these larks, but in early winter before the snows many times they were inexplicably scarce. When the snow and ice occurred they, augmented by northern birds, along with longspurs and some times Snow Buntings were forced up by the roads to forage for grain. Some were inevitably killed by unsympathetic passing motorist. Near Stewart Park on December 27, 2000 I was watching a flock feeding on the ground, when a harrier flew in and chased up the larks. One lark was killed when it flew into a wire. High counts for winter were: 600, January 22, 1977; 550, February 9, 1985; 1000, December 27, 1989; 1450, January 26, 1991; 1300, January 10, 1993; 1385, January 9, 1996; 805, January 30, 2000; and 710, February 27, 2002. There were several white larks

seen, and one January 22, 1977 with white primaries and tail could have passed for a Snow Bunting in flight.

Documentation: Specimens = 19) IL. Sangamon Co., *E. a. praticola* = 15, juveniles = 5 (3 $\Diamond, \uparrow, \uparrow$, sex?), east Spfld, April 5 – July 24, wts. = 25.0 – 30.5 gms; $\partial \Diamond = 5$, southeast Spfld (3) & south Spfld & west Spfld, January 28 – May 2, wts. = 36.3 – 43.4 gms, testes = 3 – 8 mm; $\bigcirc \bigcirc = 5$, near New City (4) & west Berlin, January 22 – November 19, wts. = 29.6 – 36.5 gms, ovaries = 6 mm; *E. a. alpestris* = 3 all $\partial \Diamond$, near Pawnee (2) & west Berlin, January 19 – 22, wts. = 41.3 – 49.7 gms, testes = 1 – 1.5 mm; *E. a. hoyti* = 1 ∂ , near Pawnee, January 19, wt. = 51.4 gms, testes = 1 mm.

Highest # Days/Season

Spring89 (1990)Summer47 (1990)Fall112 (1989)Winter75 (1990)

Highest # Birds/Season

Spring993 (1999)Summer657 (1993)Fall1136 (1977)Winter3660 (1990)

Purple Martin

Progne subis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	5623/1267 (37)	9119/1199 (37)	10815/669 (37)	0/0	25557/3135
Average/day	4.44	7.61	16.17		8.15
Average/season	151.97	246.46	292.30		

Status: Common Migrant and Summer Resident

Dates:

- Spring: Earliest arrival = March 17, 2007 ♂ Lake Springfield Average arrival (35 years) w/range March 17 – April 9 = March 30
- Fall:Average departure (37 years) w/range August 20 October 16 = September 12Latest departure = October 16, 1977 \bigcirc Lake Springfield

The Purple Martin was one species that was encouraged in the county because it ate flying insects and a nesting colony could be started by setting up a nest box in the yard. Early spring arrivals many times had to endure severe weather and some mortality must have occurred. My records indicated that spring arrival was becoming earlier as the study progressed. Another early arrival date besides the above was a female on March 19, 2001 at Sangchris. High counts in spring usually occurred in cool rainy weather over Lake Springfield or at nesting colonies. They were: 40, May 3, 1976; 30, April 25, 1977; 37, April 26, 2005; and 50, May 13, 2006. The martin ranked 57^{th on} the BBS, but this species was local and unless the observer was near a colony, it could be considered scarce in summer. Fledged young were seen by June 9 and into July suggesting two broods. At Marine Pt., the adults brought the young to sit on the sand while they fed them. On June 19, 1998, an adult took a periodical cicada on the wing. By July 10 or later, these swallows were moving south and/or were forming roosting areas. The martins gathered at roosts, which were located on high wires, especially over Lake Springfield, or in the tops of tall trees. Roosts were maintained usually until early September. One roosting area was near Lindsay Bridge which became noticeable in 1998, but other roosts were at the Lake Springfield area as early as 1976. As a consequence of the roosts, summer and fall numbers were almost twice spring numbers (1.9 to 1). High counts for summer and **fall** were: 113, August 11, 1998; 100, September 1, 2000; 107, July 31, 2002; 120, July 29, 2003; 300, July 24 & 28, 2004; 1300, August 15, 2004; 352, August 8, 2007; and 400, August 17, 2008. This species, to my notion, usually left inordinately early in fall, when compared to its early spring arrival. Other late fall departures were: September 25, 1970 & 1974 & 1997 and September 29, 2002. I noted a migrating flock of 30 birds on September 1, 1976 moving very fast to the south at dusk flying about one and a half times higher than the trees. This swallow winters in South America and the subspecies here is the eastern nominate form.

Documentation: Specimens = 5) IL. Sangamon Co., $\bigcirc \bigcirc = 3$, ISM# 607615 adult \bigcirc , 8 mi east Spfld, April 11, 1983, wt. = 35.9 gms, testes = 5 mm; ISM# 660370 adult \bigcirc , north side Spfld, April 21, 1993, wt. = 48.8 gms, testes = 8.5 mm; ISM# 607197 immature \bigcirc , Buffalo sewer pond, September 4, 1980, wt = 49.4 gms; $\bigcirc \bigcirc = 2$, ISM# 660352 adult \bigcirc , 4 mi southwest Spfld, June

29, 1993, wt. = 50.7 gms, gizzard with carpenter ants & Coleoptera; ISM# 609790 immature \Im ?, Sangchris, August 9, 1989, wt. = 41.6 gms, infested with mallophaga.

Highest # Days/Season

Spring62 (2006)Summer58 (2005)Fall31 (1982 & 2004)

Highest # Birds/Season

Spring499 (2006)Summer1983 (2004)Fall4461 (2004)

Tree Swallow

Tachycineta bicolor

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	53889/1771 (37)	2933/498 (34)	109378/1057 (37)	0/0	166200/3326
Average/day	30.43	5.89	103.48		49.97
Average/season	1456.46	86.26	2956.16		

Status: Common Spring Migrant, Very Common Fall Migrant and Uncommon Summer Resident

Dates:

- Spring: Earliest arrival = March 6, 2009 north of Sangchris Average arrival (36 years) w/range March 7 – April 1 = March 18 Average departure (37 years) w/range May 3 – 29 = May 13 Latest departure = May 29, 1983 Lake Springfield (arbitrary due to SR)
- Fall: Earliest arrival = July 11, 1993 (arbitrary due to SR)
 Average arrival (37 years) w/range July 11 October 15 = August 31
 Average departure (36 years) w/range October 16 November 15 = October 31
 Latest departure = November 15, 1995 Lake Springfield

The arrival of this steely-green backed swallow was always a treat after a long winter, and it was the earliest swallow to return. It many times had to endure cold and snowy weather and they could be seen circling over lakes and ponds waiting to go on north. Other early **spring** arrivals were: March 8, 1983; March 9, 2002; March 7, 2005; and March 8, 2007. During migration, they roost in cattails and other marshy vegetation. On the evening of April 10, 1995 I was at the Cinder Flats where thousands of blackbirds were roosting occupying every square foot of area. Many blackbirds were still flying around, when I saw what looked like a swarm of bees come in, but it was a huge flock of Tree Swallows. These swallows, acting as one flock were strongly synchronized, and lower themselves to just above the pond while flying through the blackbirds, which were going in every direction. The swallows moved as one, a thousand birds turning dark, then light, then dark, then light. Several times they nearly landed – the whole flock could hold steady in flight – then they would lift up about 100 - 200 feet and then down again. Finally not finding any place to set down they flew northwest out of sight. On May 1, 1996 there was another flock of 3000 flying in unison. Other high counts for spring were: 300, April 20, 1978; 800, May 5, 1990; 500, April 25, 1992; and 500, April 30, 2005. Second year birds were distinguishable in spring by much duller upperparts noted from March 30 to May 3. On April 14, 1992 I salvaged a road killed swallow at Sangchris that had been banded as a young bird (unable to fly) at Flushing, Michigan on June 16, 1990. Most of these swallows went on north by May, and I did not find any potential breeding in the county until the summer of 1976. Numbers were low in summer until 1981, increased again in 1990, then decreased in 1999 with moderate numbers the rest of the study. This swallow sang from a perch and was noted doing so from April 19 at least into June. They nest in cavities in dead trees, bluebird boxes, wood duck boxes, and one pair tried to nest in a soccer goal. Nest building was seen May 15. All young were seen from June 12 to July 26. They nested in 15 different areas from Sangchris to Pleasant Plains and

from sewer ponds to Lincoln Gardens where they provided special nest boxes. The high count for the summer period was 150, July 31, 1993, but these were probably fall migrants. Fall migration could be under way as early as July. Fall migrants were found with other swallows over cornfields, in open areas usually near water, and on power lines or roosting on lily pad stems. Numbers in fall were two times higher than spring. October was the time for the big fall push, usually on a broad front as they were frozen out further north. This was very evident on October 20, 1982. While on October 19, 1980, they moved fairly high with a northwest wind in small groups along the bluff of the Sangamon River northwest of Springfield. I noted them moving on a north wind October 31, 2004, and when the wind stopped so did they. About 4000 were present at Lake Springfield October 15, 2006 after a flight and several were killed by passing motorists at Lindsay Bridge. I also saw these swallows at Sangchris October 28, 1997 and October 10, 2001 taking dogwood berries in flight. Some individuals did land to feed on the berries. Other high counts for fall were: 1500, October 4 & 5, 1980; 3500, October 4, 1999; 3200, October 9, 2000; and 3000, September 30, 2003. On October 6, 2002 a leucistic Tree Swallow was flying low over Lake Springfield and on October 3, 2009 a swallow with a white rump and secondaries (resembling the South American, White-winged Swallow *T. albiventer*) was seen at Lake Springfield. Other late departure dates were: November 12, 1975; November 10, 1977; (10) November 10, 2008; and (6) November 13, 2009. The Tree Swallow winters from the Gulf Coast south to Nicaragua.

Documentation: Specimens = 6) IL. Sangamon Co., Spring = 1 $\stackrel{\bigcirc}{\rightarrow}$, Sangchris, April 14, 1992, wt. = 22.3 gms, ovary = 4 mm; Fall = 5, $\stackrel{\bigcirc}{\rightarrow} \stackrel{\bigcirc}{=} 4$, LSpfld (3) & 1 mi west Rochester, October 9 – 15, wts. = 18.3 – 21.6 gms, gizzard with Coleoptera, Lepidoptera, Diptera, (3 were immature w/ outer primary still sheathed); $\stackrel{\bigcirc}{=} = 1$, LSpfld, October 15, 2006, wt. = 21.0 gms (had internal segmented worms).

Highest # Days/Season

Spring73 (1991 & 2006)Summer46 (1991)Fall44 (1992 & 1999)

Highest # Birds/Season

Spring6145 (1996)Summer592 (1994)Fall16694 (2006)

Northern Rough-winged Swallow

Stelgidopteryx serripennis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	4961/1311 (37)	2686/843 (37)	297/131 (34)	0/0	7944/2285
Average/day	3.78	3.19	2.27		3.48
Average/season	134.08	72.59	8.74		

Status: Common Spring Migrant and Summer Resident and Occasional Fall Migrant

Dates:

Spring: Earliest arrival = March 22, 2006 Lake Springfield Average arrival (37 years) w/range March 22 – April 21 = April 5

Fall:Average departure (36 years) w/range July 27 – October 28 = September 25Latest departure = October 28, 2006 Lindsay Bridge

This was mainly a plain brown swallow with a buffy-gray throat and whitish belly. They were usually found along lake edges, the Sangamon River, some creeks, or at ponds. The Rough-wing usually arrived in spring in early April, but was recorded nine times in March (more often recently). The next earliest arrival was March 26, 1977 at Sangchris. High counts were: 50, May 14, 1970; 50, May 11, 1981; 30, April 28, 1986; 40, May 1, 1995; and 37, April 22, 2004. During cold periods in spring they perched in dead twigs over lakes and sallied out over the water. It ranked 63rd on the BBS in summer, was found on about half the surveys, and was slightly more numerous in the recent part. Birds were seen with nesting material May 5 - 29 and were at the nest holes in a stream banks May 25 – June 3. Fledged young were seen June 6 to August 6, but most were seen in July. Some young were noted at burrows in a Bank Swallow colony at the Cinder Flats July 25, 1975. Young Rough-wings were distinctive, having rusty wingbars and tertial edgings and buffier throats. High summer counts were 21, June 22, 2000 and 33, July 2, 2003. Spring birds out numbered fall birds by 16-17 to one, but this was due to the birds leaving this area in late July to go to the Illinois and Mississippi Rivers as a stopover site before migrating further south. A few of these swallows were seen later in fall most years, especially in flocks of Tree Swallows, but in fall the numbers were low. The only high counts for fall were: 10, October 12, 2001; 10, August 3, 2003; 30, September 13, 2006 and 55, September 12, 2007. Other late fall dates were: October 20, 1971; October 23, 1997; and October 20, 2007. On May 22, 2003 a sooty-colored swallow at the Rochester sewer ponds was viewed and photographed. I also kept track of this swallow in 2004 and 2005 and decided it was a melanistic Northern Rough-winged Swallow. It probably had offspring in 2005 when other darker birds were found (see Bohlen, 2005-06) and, overall a very small percentage of this swallow's population was the darker form. This swallow winters from the west Gulf Coast south to central South America. The subspecies is the eastern nominate form.

Documentation: Specimens = 2) IL. Sangamon Co., ISM# 606748 \Diamond , north Rochester, April 19, 1978, coll. by HDB, wt. = 19.7 gms, testes = 4 mm, gizzard with Diptera; ISM# 606749 \Diamond , north Rochester, April 19, 1978, coll. by HDB, wt. = 19.0 gms, testes = 7 mm.

Highest # Days/Season Spring 54 (2006)

 Spring
 54 (2006)

 Summer
 37 (2003)

 Fall
 19 (2006)

Highest # Birds/Season

Spring255 (1981)Summer217 (2003)Fall74 (2006)

Bank Swallow

Riparia riparia

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	17991/870 (37)	29533/816 (36)	6025/502 (36)	0/0	53549/2188
Average/day	20.68	36.19	12.0		24.47
Average/season	486.24	820.36	167.36		

Status: Common Spring Migrant and Local Summer Resident and Fairly Common Fall Migrant

Dates:

Spring: Earliest arrival = March 28, 1995 Lake Springfield Dam Average arrival (37 years) w/range March 28 – May 2 = April 13

Fall:Average departure (36 years) w/range August 13 – November 3 = September 20Latest departure = November 3, 1989 Lake Springfield

Brown-backed with a thick band on the breast separating the white throat and the remainder of the underparts, the Bank Swallow was the smallest swallow in the county. Since swallows migrated diurnally they could usually arrive fairly early in **spring** if the days were warm. Other early arrivals besides the one above were three at Buckhart on March 31, 1985 and one at Sangchris on March 30, 1991. High counts for spring were: 200, May 14, 1981; 150, May 14, 1992; 300, May 26, 2001; and 200, May 13, 2006. They, like other swallows, flew low over the lakes during cold, wet weather and were more difficult to find in warm, sunny weather. [Note that all species of swallows flying low over lakes frequently went unidentified because of distance, and these were not counted in the totals.] Most departure dates in spring were in late May. Although summer residents were seen from the beginning of the study (1970) they were few and nesting in the early 1970s was uncertain. There were no Bank Swallows seen in summer or fall in 1973. It was not until July 13, 1975 that I found a small colony of 10 burrows at the Cinder Flats. That colony, and later (1980) one at Buckhart, and a small colony northwest along the Sangamon River (1976) continued to be monitored the remainder of the study, although the colonies were not present every year at least in the same places. Others may have existed along the Sangamon River to which I did not have access. They were noted making nest burrows from April 19 to May 29. Copulation in this swallow was cute to watch. The female landed on the ground with tail up, and the males piled on top. They took grass to the nest burrows after copulation on May 16 at the Cinder Flats. Many nest burrows were destroyed at the Cinder Flats and at Buckhart by bulldozers, until the workers found out the birds were there and how beneficial these swallows really were in eating flying insects. From about 1995 to the present there have been colonies at both Buckhart and the Cinder Flats, while the colony northwest along the Sangamon River was last seen in 1995 when a hundred birds were there. This swallow could be very scarce in summer away from the breeding areas. In 2004 I counted 400 nest burrows at the Cinder Flats May 21 – 23 and 80 nest burrows at Buckhart in 2002. Feeding young in the nests took place from June 13 to August 3, and fledged young were seen June 25 to July 15. Most nesting was over by July 17 - 21. On July 18, 2005 at the Cinder Flats there were a large number of swallows sitting on the flat and all were leaning to one side to expose the white in

their underparts apparently to reflect the sun. Summer was the season with the most numbers: 180, July 30, 1996; 200, July 8, 2002; 350, July 27, 2003; 150, June 20, 2004; 300, June 25, 2005; 620, July 10, 2005; and 400, July 13, 2006. On the years I could determine **fall** arrival, it was in July, but mostly these swallows left after nesting. The result was the numbers in fall were three times less than spring. They were noted moving before a cold front August 4, 1998. Migrating flocks were seen August 11, 1990, and 150 were on power lines next to a cornfield (where they roost) with other swallows July 25, 1995. High counts for fall were: 100, August 1, 1982; 100, August 15, 1996; 400, August 23, 1999; and 250, August 3, 2003. Most departure dates were in September, but seven were in October with the later ones being October 19, 1985 at the Buffalo sewer pond and October 29, 2002 at Lake Springfield. The November date above stands alone. Bank Swallows winter in South America. The subspecies in North America and in the county is the nominate form.

Documentation: Specimens = 5) IL. Sangamon Co., ISM# 660747 \Diamond , LSpfld, July 31, 2004, coll. by HDB, wt. = 12.7 gms, testes = 2.5 mm; ISM# 661909 juvenile \heartsuit ?, LSpfld, June 22, 2008, coll. by HDB, wt. = 7.6 gms; ISM# 660514 \heartsuit , Sangchris, May 20, 1998, coll. by HDB, wt. = 15.6 gms, ovary = 5 mm; ISM# 660748 immature \heartsuit , Sangchris, August 3, 2004, coll.by HDB, wt. = 14.5 gms; ISM# 607194 immature \heartsuit ?, SW Buffalo, August 26, 1980, coll.by HDB, wt. = 15.3 gms.

Highest # Days/Season

Spring48 (2005)Summer61 (2004 & 2005)Fall28 (1999)

Highest # Birds/Season

Spring2728 (2005)Summer7100 (2005)Fall1098 (1999)

Cliff Swallow

Petrochelidon pyrrhonota

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	20515/774 (37)	15332/774 (33)	14926/774 (37)	0/0	50773/2322
Average/day	26.51	19.81	19.28		21.87
Average/season	554.46	464.61	403.41		

Status: Common Migrant and Summer Resident

Dates:

- Spring: Earliest arrival = March 30, 1985 south end Lake Springfield Average arrival (37 years) w/range March 30 – May 7 = April 18
- **Fall:** Average departure (38 years) w/range August 28 October 21 = **September 23** Latest departure = **October 21**, 1988 Sediment Retention

When these swallows arrived in **spring**, they were usually seen flying over water and the observer scanned for the buffy rump and the squared tail. Another early spring arrival was March 31, 1990 at Sangchris. Many of the high counts were from cloudy, cool, rainy days in which migrant swallows flew low over Lake Springfield. High counts were: 50, May 14, 1970; 200, May 12, 1979; 350, May 13, 1990; 1000, May 13, 1996; 550, May 26, 2001; and 400, May 13, 2006. Most migrants left by May 20, but they were detected as late as June 3 in 1983. By 1997, migrants were no longer distinguishable from **summer** residents (see Figure 22). This swallow nested under bridges, dams, highway over passes, and other structures. The first place they were found nesting was under the Sangamon River bridge on the Mt. Auburn road in 1982. A larger colony which started in 1990 was under Lindsay Bridge. Other colonies were at the dam at Lake Springfield, the dam at Sangchris, under Irwin Bridge and on a concrete building at the East side sewer ponds. They made adobe globe-like nests of mud and the swallows could be seen obtaining mud at the beach at Lake Springfield in May. I had seen a few young out of the nest and capable of flight by June 4, 2008, but most young were usually out in late June and early July. On July 2, 2001 near the Lindsay Bridge colony a large gathering of young were on the pavement of a parking lot and adults were flying back and forth with food. The juveniles were extremely variable in plumage, with some having whitish feathering on the forehead, throats, or even on the rump patch, presumedly so they could be detected in the dark nests. Likewise, the adults 'headlights' may serve the same function. Other juveniles had the appearance of Cave Swallows with no black on the throat and rusty foreheads. On July 4, 2008 at Lindsay Bridge a young swallow fell into the water, but swam a long distance to shore using its wings as paddles. Nests were still being occupied August 9, 1998 at the East side sewer ponds. Early in the study, numbers for summer were low with only 75, July 31, 1977 (the high), and these were probably early returning migrants. However, the numbers increased dramatically from 1992 – 2009. High counts were: 100, July 11, 2002; 250, July 31, 2003; 200, June 29, 2004 and 160, July 10, 2005. Fall migration was under way in July with the earliest discernible date July 3, 1989, and the average of 27 years was July 18. Many migrants could be seen with other species of swallows on utility wires or foraging over fields. Some were in molt or worn plumage while migrating and could look quite dull, even to the point that they could be mistaken for Northern Rough-winged

Swallows. I counted 150 Cliff Swallows with Tree Swallows on September 16, 1980 fluttering over a soybean field, and going down among the bean leaves picking insects off the plants. A large flock of 500 Cliff Swallows were grounded at Sangchris due to the weather September 13 – 15, 1989. Other high counts were: 100, August 10, 1974; 300, September 7, 1990, 500, August 12, 1998; and 400, September 11, 2005. Most of these swallows were gone by the end of September and I had only four October departure dates: see above; October 9, 1977; October 2, 1986; and October 5, 1991. The subspecies in Illinois is the northern *P. p. pyrrhonota* and they winter mostly in southern South America.

Documentation: Specimens = 8) IL. Sangamon Co., $\Im \Im = 2$, Sangchris & L Spfld, May 4 – June 2, wts. = 24.2 – 24.3 gms, testes = 9 – 11 mm; juvenile $\Im \Im = 2$, southwest Buffalo & west Sangchris, July 24 – August 26, wts. = 16.9 – 20.6 gms; adult $\Im ? = 1$, east Spfld, May 16, wt. = 22.4 gms; juvenile $\Im \Im = 3$, Lindsay Bridge, near Clear Lake, southwest Buffalo, July 16 – August 26, wts. = 15.7 – 25.7 gms.

Highest # Days/Season

Spring50 (2006)Summer60 (2004)Fall40 (1993)

Highest # Birds/Season

Spring2307 (1996)Summer2393 (2004)Fall1197 (1989)

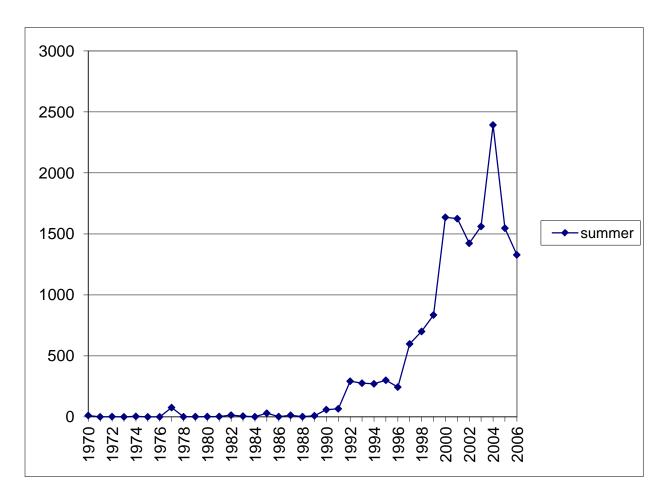


Figure 22. Summer Numbers of Cliff Swallows.

Barn Swallow

Hirundo rustica

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	22311/1727 (37)	22219/1768 (37)	29830/2010 (37)	2/2 (1)	74362/5507
Average/day	12.92	12.57	14.84	1.0	13.50
Average/season	603.0	600.51	806.22	2.0	

Status: Very Common Migrant and Summer Resident and Very Rare Winter Resident

Dates:

Spring: Earliest arrival = March 22, 1994 Lake Springfield Average arrival (37 years) w/range March 22 – April 16 = April 4

Fall:Average departure (37 years) w/range September 25– November 20 = October 21
Latest departure = November 20, 1988 Lake Springfield (also see WR)

Although in **spring** this fork-tailed swallow mostly arrived in April, it was found in March in six years. They usually had to endure bouts of severe weather, and I saw one at Sangchris flying north into a snow storm on March 30, 1974. Another early arrival was March 24, 2007 west of Chatham. Barn Swallows like other swallows could be seen in spring flying low over lakes in rainy or cold weather in numbers and this was the best time to count them. High counts for spring were: 150, May 20, 1978; 145, May 6, 1989; 210, April 29, 1994; 165, April 28, 1999; 180, May 2, 2004; and 150, May 13, 2006. The Barn Swallow was recorded on all 31 years in summer on the BBS and was ranked 13^{th with} the numbers rather even over the years. Copulation on a power line was seen on July 4, 2005. Nest building was observed from April 28 to June 4, and females were on the nest from May 31 to July 27. This species was at least double brooded. Young were seen in the nest June 27 and July 1 and a fledged young specimen was found as early as May 30. Many fledglings were seen in late June and July. Some years in late summer and early fall the Barn Swallow (and other swallows) seemed to disappear and numbers were lower, for example in 1994, 1997, and 2003. This might be caused by a hiatus when the breeding population left and before the more northerly birds arrived in fall? I had noted these swallows moving on or before cold fronts as early as July 21 (1977) and also later in fall. High summer counts were: 100, July 31, 1977; 88, July 18, 1993; and 93, July 28, 1999. They gathered in groups and roosted in standing cornfields or in the tops of lily pad stems at Lake Springfield and Sangchris. There were 1.3 birds in **fall** for every one seen in spring. High counts for fall were: 100, August 28, 1982; 100, September 7, 1990; 160, September 17, 1998; 107, August 7, 1999; and 125, August 12, 2004. The departure date was almost always in October, but there were a few November dates: 2, Lake Springfield, November 3 – 10, 1983; one, Lake Springfield, November 20, 1988; 2, Lindsay Bridge, November 6 & 7, 2002; and one, Lindsay Bridge, November 14, 2003. Plus, there was one that stayed near the power plant at Lake Springfield December 9 & 10, 1988 – the only winter record (photograph). This swallow winters in Central and South America. The subspecies in most of North America is H. r. erythrogaster.

Documentation: Specimens = 9) IL. Sangamon Co., $\bigcirc \bigcirc = 8$ (2 adults & 6 immatures), May 14 – October 28, wts. = 13.2 – 19.2 gms, adults testes = 6 – 10 mm; $\bigcirc = 1$ juvenile, Buffalo sewer pond, May 30, 2001, wt. = 18.9 gms, ovary = 3 mm.

Highest # Days/Season

 Spring
 60 (2005)

 Summer
 61 (6 years) maxed

 Fall
 79 (2002)

 Winter
 2 (1988)

Highest # Birds/Season

Spring1066 (1992)Summer1645 (2000)Fall2047 (2002)Winter2 (1988)

Black-capped Chickadee

Poecile atricapillus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	19978/2980 (37)	7680/1489 (37)	32116/3834 (37)	17197/2410 (37)	76971/10713
Average/day	6.70	5.16	8.38	7.14	7.18
Average/season	539.95	207.57	868.0	464.78	

Status: Common Permanent Resident

This small woodland species was recorded in all 148 seasons of the study. Though Sangamon County was only about 50 miles north of Fayette County and east of Champaign County where populations of the similar Carolina Chickadee (P.carolinensis) exist, none were found in the county during the study. The Black-capped Chickadee was 31st on the numbers list (see Appendix O) and 5th on the days list (see Appendix P). These birds actively attended feeders not only in winter but all year, which helped them survive and raise their broods. However, as Sangamon County became more urbanized these feeders made it more difficult to obtain accurate counts on species attending feeders and also made these birds vulnerable to road kills, window kills, and predation by cats and hawks. The chickadee was a core species of woodland foraging flocks, and migrants depended on them for knowledge of the area and the presents of predators. Though these chickadees appeared to be sedentary, I rarely saw possible migration or dispersal as indicated by 1) one out in the open flying close to the ground on March 1, 1988; 2) two at a pasture with only a few small trees and no near by forest November 25, 1990; 3) one in a farmyard about a mile from the woods on August 21, 1995; and 4) one that flew in from across Lake Sangchris on March 29, 2004. High counts for spring were: 20, May 6, 1978; 20, April 4, 1982; 25, March 22, 1987; 28, April 2, 2000; and 25, April 14, 2002. The chickadee was recorded in summer 29 years on the BBS, with increases from 1992 to 2001, but then dropped the last two years. This drop in numbers correlates with West Nile Virus. This species increased in 1991 over two times the numbers from 1976 on the Sangamon River Census. Singing usually began in January, but sometimes not until February. Fighting over territory was seen on April 1 and copulation on April 5 and 25. Chickadees used cavities in trees or fence posts in which to nest and excavated and built the nest from February 26 to May 1, though mostly in March and April. Young were noted in the nest from March 28 to June 5, and fledged young were seen from May 14 to July 14 with most in May and June. High counts for summer were 28, June 18, 1976 and 35, June 13, 1991. One was eating a periodical cicada on June 3, 1998. Singing of the spring song became sporadic by August. Molt was seen from August 18 to November 12, but most were in basic plumage by October 20. The numbers were highest in **fall** (1 in spring to 1.6 in fall) probably due to production of young. High fall counts were: 30, September 6, 1980; 37, November 6, 1983; 35, September 4, 1993; and 40, August 28, 1998. High counts for winter were: 50, December 21, 1986; 60, December 17, 1989; 53, December 16, 2001; and 33, January 1, 2002. West Nile Virus also hit this species especially in 2002 – 2004 with numbers declining 30% (see Figure 21). On December 26, 1999, a leucistic chickadee was at the East side sewer pond woods, it was all white, but had dark eyes, and seemed to bounce around like a ping-pong ball through the woods. The subspecies here is the eastern nominate form.

Documentation: Specimens = 15) IL. Sangamon Co., $\bigcirc \bigcirc \bigcirc = 5$, January 28 – December 5, wts. = 11.1 – 12.2 gms, testes = 0.5 – 6 mm; $\bigcirc \bigcirc \bigcirc = 9$, Sangamon Co., February 2 – November 22, wts. = 9.9 – 12.3 gms, ovaries = 1.5 – 9 mm, gizzard (Nov 12 bird) with Diptera- Cecidomyidae larva & Homoptera; sex? = 1, Sangamon Co., September 16, wt. = 11.4 gms.

Highest # Days/Season

 Spring
 92 (2000 & 2001) maxed

 Summer
 60 (2000)

 Fall
 122 (1980 & 1983) maxed

 Winter
 85(1993)

Highest # Birds/Season

Spring942 (1979)Summer450 (2000)Fall1502 (1982)Winter1031 (1993)

Tufted Titmouse

Baeolophus bicolor

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	19919/2959 (37)	6820/1414 (37)	20246/3549 (37)	9903/2188 (37)	56888/10110
Average/day	6.73	4.82	5.70	4.53	5.63
Average/season	538.35	184.32	547.19	267.65	

Status: Common Permanent Resident

This gray bird with a top knot and buff orange sides and flanks was a woodland species that had adapted to residential areas especially ones with feeders. It was 43rd in total numbers and 12th on the total days lists, which in both cases was lower ranked than the Black-capped Chickadee. However, it was higher in numbers on the BBS, ranked 28th, while the chickadee was 33^{rd,} but this may be due to the louder calls of the titmouse. The titmice numbers dropped from 1979 – 1981 probably due to a string of severe winters, since titmice in general, had a more southern distribution than chickadees. There was only a moderate drop in numbers apparently associated with West Nile Virus (see Figure 21). Numbers increased on the Sangamon River Census from 1976 to 1991. No apparent migration occurred in this species, but one at Sangchris on May 5, 2004 was sitting in the open on a power line a quarter of a mile from any forest. The titmouse was one of the core species in woodland foraging flocks. There were definitely times of the year that this species was more detectible, such as early spring when they began to sing. The titmouse had many different songs, most of them were loud, and one sounded like an oriole April 6, 1983. They began singing in January and February, and displays were seen February 5 and March 7. A male was seen feeding a female March 18. Copulation was noted on April 9 and nest building was March 22 to May 23. On the latter date, they were gathering moss. Interestingly, a titmouse was standing on a road killed raccoon on April 25, 2004 pulling hair out of the carcass for nest lining. Adults were carrying food to nest holes May 3 to June 15, and young could be heard in the nest May 28 to June 1. A female cowbird was seen at the nest cavity entrance at Washington Park on May 27, 2004. Fledged young were seen May 19 to August 22 (mostly in May), and family groups were seen with migrant woodland flocks in early fall. Many titmice were in molt from at least July 28 to September 25. High counts for all seasons were: 45, June 18, 1976; 30, February 16, 1981; 27, September 8, 1990; 45, June 11, 1991; 31, February 21, 1994; 38, January 31, 1998; 33, April 2 & 15, 2000; and 29, December 16, 2001. The titmouse used the "plop and snatch" method of getting insects, in which they plopped on a branch or a cluster of leaves and then snatch any insects that flew out. They were great chasers of cicadas and were seen taking wooly bear and leopard moth caterpillars. Twice, I had encountered titmice with all orange underparts, at Lake Springfield on November 19, 1998 and at Oak Ridge Cemetery from September 19, 2004 to March 12, 2006 (photograph and drawing). The subspecies here is the nominate form.

Documentation: Specimens = 14) IL. Sangamon Co., $\bigcirc \bigcirc = 8$, March 24 – November 29, wts. = 19.9 – 23.5 gms, testes = 1 – 8.5 mm (two were immatures July 2 & August 10); $\bigcirc \bigcirc = 5$, Sangamon Co., January 17 – October 26, wts. = 21.6 – 23.9 gms, ovaries = 3 – 5 mm (three had unossified skulls October 1 – 26); sex? = 1, Sangamon Co., December 22, wt. = 23.5 gms.

Highest # Days/Season Spring 92 (3 years) maxed Summer 60 (2002) 120 (1983) Fall Winter 84 (1993)

Highest # Birds/Season

Spring 1032 (2000) Summer 416 (2000) 965 (1981) Fall Winter 517 (1997)

Red-breasted Nuthatch

Sitta canadensis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	392/266 (28)	1/1 (1) sp mig	1653/774 (35)	577/314 (32)	2623/1355
Average/day	1.47	1.0	2.14	1.84	1.94
Average/season	14.0	1.0	47.23	18.03	

Status: Uncommon Irregular Migrant and Winter Resident

Dates:

Fall:Earliest arrival = August 21, 1999 Island Grove
Average arrival (36 years) w/range August 21 – October 21 = September 17

Spring: Average departure (29 years) w/range March 10 – June 4 = May 6 Latest departure = June 4, 1976 ♂ Washington Park

This small nuthatch with a white line over the eye sounded and acted like a toy bird and was a favorite at feeders. It breeds in conifers in the northern US, including southeastern Alaska, boreal Canada and rarely in Illinois (north and central). During migration it could be found in deciduous woods, but mostly it was in coniferous areas. In Sangamon County, it was seen at Oak Ridge and other cemeteries, conifer areas around Lake Springfield, Washington Park, and other places that had conifers. Numbers of these birds from year to year were variable. A year can be calculated from fall and winter and the next spring for this species (see Figure 23). Migrants from further south came back and added to the numbers in spring, but fall had the highest numbers (4.2 to 1). The years (including addendum) with the biggest influx were 1975, 1976, 1977, 1980, 1981, 1993, 1995, 1997, 1999, 2001, 2005 and 2008. Years of low numbers were 1970, 1984, 1992, 1996, 1998, and 2002 (see Figure 23). Other early fall arrivals were: August 30, 1976 at Carpenter Park; August 25, 1980 at Lake Springfield; August 29, 1993 north of Springfield; August 30, 1997 at Island Grove; and August 30, 2007 at Lake Springfield and Riverside Park. High counts for fall were: 11, November 17, 1981; 19, September 16, 1995; 11, November 23, 1997, and 12, October 10, 1999. By winter, many had located a feeder and were not as obvious as in fall. They stored food in tree bark and other crevices for later use. This nuthatch could be attracted by imitating its high pitched nasal call. High counts for winter were: 11, December 20, 1981; 10, December 2, 1997; and 8, December 5, 1999. Numbers seemed to decline by February, but by late April or early May migrants from the south started arriving for spring, and this was obvious because they were seen in deciduous woodland. High counts for spring were mostly 3 -4, but there were 5, April 27, 1976 and 7, April 28, 2005. Other late spring departures were: May 19, 1978 at Carpenter Park & 1981 at Washington Park; May 23, 1982 at Oak Ridge; May 29, 1990 at Washington Park; and May 21, 1994 at Oak Ridge Cemetery.

Documentation: Specimens = 6) IL. Sangamon Co., all Fall, immature $\Im \Im = 3$, tv tower & north Andrew & Spfld, September 29 – November 21, wts. = 11.3 – 12.3 gms; immature $\Im \Im = 3$, tv tower, October 5 –10, wts. = 10.5 – 10.9 gms.

Highest # Days/Season

 Spring
 31 (1994)

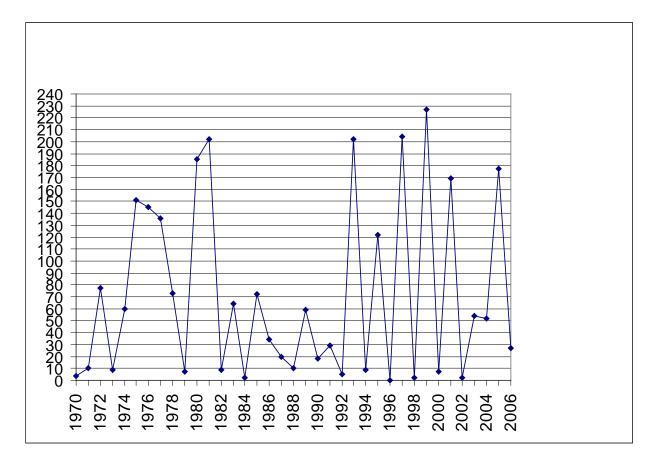
 Summer
 1 (1976)

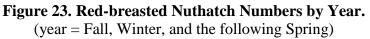
 Fall
 53 (1981 & 2001)

 Winter
 34 (2005)

Highest # Birds/Season

Spring49 (1994)Summer1 (1976)Fall151 (1999)Winter67 (2005)





White-breasted Nuthatch

Sitta carolinensis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	6172/2235 (37)	2495/953 (37)	8196/2878 (37)	4056/1501 (37)	20919/7567
Average/day	2.76	2.62	2.85	2.70	2.76
Average/season	166.81	67.43	221.51	109.62	

Status: Common Permanent Resident

This was a woodland species found mostly along the Sangamon River and its tributaries, but had also managed to maintain populations in city parks, around Lake Springfield, and other areas with large trees. In the non-breeding season, they foraged with other woodland species such as chickadees and titmice. One nuthatch was seen feeding on the brick wall of a building at Carpenter Park June 19, 2005. While it was nearly always sedentary, I rarely saw it migrate such as one flying by Marine Pt. on September 30, 1993. When West Nile Virus was killing off crows and chickadees, the nuthatch population was seemingly unaffected except in 2003 when the population dropped 13 % (see Figure 21). Fall numbers were higher than spring numbers (1.3 to 1) which was probably due to production of young of the year. High counts for spring were: 11, April 25, 1990; 16, April 2, 2000; 17, April 14, 2001; and 13, March 17, 2006. Both the BBS and the Sangamon River Census showed that the population in **summer** was lower early in the study and then increased. High summer counts were 15, June 11, 1991 and June 3, 2001. On March 12, 1985 a pair was displaying on the sides of branches and tree trunks, and on April 5, 2006 a male was feeding a female. The nest was most often in a knot hole of a tree. Excavation and nest building were noted from March 27 to April 30. Adults were seen feeding young in the nest April 29 to June 1, and fledged young were seen May 14 to August 3. One nuthatch at Horse Creek on August 15, 1989 was in molt. High counts for fall were: 15, August 22, 1998; 15, August 15, 1999; and 15, September 1, 2001. High counts for winter were: 12, December 9, 1999; 20, January 1, 2002; 13, February 2, 2003; and 16, January 6, 2006. The subspecies found here is the nominate form, unless the more northerly S. c. cookei is recognized, in which case it would be the subspecies.

Documentation: Specimens = 4) IL. Sangamon Co., ISM# 609481 \Diamond , LSpfld, March 9, 1988, coll. by HDB, wt. = 21.2 gms, testes = 3 mm; ISM# 661793 \Diamond , half mi west of Buckhart, March 20, 2006, coll.by HDB, wt. = 20.3 gms, testes = 5 mm; ISM# 660526 \Diamond , Spfld, September 11, 1997, coll. by DO, wt. = 22.1 gms, testes = 3 mm; ISM# 609311 \heartsuit , intersection Clear Creek & Sangamon River, February 10, 1987, coll. by M. Anderson, wt. = 22.8 gms, ovary = 5 mm, gizzard with seeds & Coleoptera (crown blue-gray).

Highest # Days/Season

Spring89 (2002)Summer54 (2000)Fall121 (2002)Winter79 (2005)

Highest # Birds/Season

Spring399 (2002)Summer226 (2000)Fall587 (2002)Winter297 (2005)

Brown Creeper

Certhia americana

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	2327/991 (37)	40/35 (18)	2571/1200 (37)	1672/851 (37)	6610/3077
Average/day	2.35	1.14	2.14	1.96	2.15
Average/season	62.89	2.22	69.49	45.19	

Status: Common Migrant, Fairly Common Winter Resident and Rare Summer Resident

Dates:

Fall:

Earliest arrival = **September 16**, 2004 Riverside Park Average arrival (37 years) w/range September 16 – October 10 = **September 28**

Spring: Average departure (37 years) w/range April 12 – May 4 = April 22 Latest departure = May 4, 1982 Carpenter Park (arbitrary due to SR)

Because of its small size and cryptic coloration and weak, high call notes this woodland bird was difficult to detect. Brown Creepers were usually found in the woodland flocks with chickadees and titmice, and specialized in bark gleaning with their tweezer-like bill. Usually when feeding, the creeper started at the bottom of a tree trunk and worked up the tree, and occasionally they flew quickly in a spiral around the trunk. Arrival in **fall** was usually in September (27 years), but was in October in ten years. It was found early also on September 18, 1971 & 2000. Migration was at night as was shown by tv tower kills. High counts for fall were: 10, November 24, 1978; 13, October 14, 1985; 14, November 22, 1994; and 10, November 18, 2002. If there were detectable fall departures they would be in late December. Numbers varied in winter and some years they seemed to be displaced further south especially if snow and ice covered the trees. Years of low numbers were 1971-72, 1972-73, 1974-75, 1975-76, 1983-84, 1985-86, 1988-89, 2004-05 (note that low numbers in early years might be because of low hours in field). High counts for winter were: 8, January 15, 1977; 7, February 28, 1980; 9, January 15, 1983; 10, December 16, 1984; 11, December 9, 1990; and 11, December 11, 2002. On January 31, 2000 south of Washington Park one was feeding on the inside of a hallow in a tree trunk. Usually by the end of winter the population was low, but an increase occurred in late March for spring. I noted this bird flycatching on April 7, 1994 and March 5, 1998 at Lake Springfield, and one was feeding uncharacteristically on the ground with juncos April 10, 2003 at Carpenter Park. High counts for spring were: 11, April 5, 1978; 10, April 16, 1984; 13, March 31, 1998; 13, April 2 & 11, 2000; and 11, April 4, 2002. There were only three years spring departure was in May (May 4, 1982, May 3, 1996, and May 2, 1998), with the rest in April. Most of the creepers went further north, usually to the coniferous zone to breed; but some stayed in summer to breed here in bottomland forest and willows. I referred to these as the "Lowland Creeper" and these birds may be resident all year; but no one knows for sure. The main places they bred in the county were bottomland forest at Carpenter Park/Riverside Park and Lick Creek, but also they were observed in summer at Riverton and other places along the Sangamon River. Summer residents were found nearly every year after 1971 but were recorded in small numbers not only in the summer season but in April and May (singing) and in August and early September (in molt). These creepers may sing sporadically all year, but the "too- dolee- doo" song usually began in March,

though my earliest was February 24, 1981. The singing continued until September 15 (1980). Nest building was seen April 2, 14 and May 6; and the nest (in the few seen) was placed behind loose bark. Adults were seen feeding young in the nest on May 19 (2001) and June 17 (1977), and young were out of the nest May 6 to June 12. The last nest observed in the county during the study (addendum) was at Lick Creek on April 2, 2008. Birds in molt were noted July 3 to September 1. If these Lowland Creepers went further south in winter it was not known. Numbers of nesting creepers declined toward the end of the study. The migrant subspecies is the northern and eastern nominate form. While the nesting subspecies is presumed to be the same.

Documentation: Specimens = 23) IL. Sangamon Co., all Fall except one Winter, $\bigcirc \bigcirc \bigcirc = 10$, tv tower (9) & Spfld, October 5 – December 18, wts. = 6.3 – 9.7 gms, (December bird gizzard contained mostly spiders & leaf hoppers & one Coleoptera); $\bigcirc \bigcirc = 13$, all tv tower, September 27 – October 16, wts. = 7.1 – 9.5 gms.

Highest # Days/Season

Spring43 (1983)Summer6 (1982)Fall49 (1979)Winter40 (2002)

Highest # Birds/Season

Spring118 (1983)Summer6 (1982)Fall139 (1978)Winter115 (2002)

Carolina Wren

Thryothorus ludovicianus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	6964/2092 (37)	3508/1088 (37)	8828/2721 (37)	3864/1305 (37)	23164/7206
Average/day	3.33	3.22	3.24	2.96	3.21
Average/season	188.22	94.81	238.59	104.43	

Status: Common Permanent Resident

For such a small bird the Carolina Wren had a loud song which it delivered all year. It was seen in all 148 seasons of the study and was 22nd in number of days, but was out numbered by the migrant House Wren in total numbers. This wren of southern origins was periodically killed back due to extremely cold winters with heavy snow cover. A prime example of this phenomena was the severe winters of the mid- to late 1970s (from the winter of 1976-77) and into the 1980s (until 1986). The numbers during 1977 – 1979 were critically low. I recorded one wren in the spring of 1977 (there were 272 in the spring of 1976!), and one in the summer of 1978, the lowest numbers in the study (see Figure 24). Later winter kills, especially 1998-99, showed that occasionally dead wrens could be found on the top of the snow. The survivors made it by living in garages and out buildings and attending feeders. However, in the spring it was difficult for these remaining birds to find mates because there were so few birds. The numbers returned to "normal" by northward dispersal (?) and multiple brood breeding, which took 10 years (by 1987). High daily counts for all seasons were: 20, December 16, 1973; 15, November 17, 1974; 25, June 15 & 18, 1976; 18, June 6, 1991; 21, May 6, 1995; 13, January 31, 1998; 16, April 25, 1998; 18, December 14, 2003; and 20, December 17, 2006. In summer the BBS also showed the decline from 1977 to 1982 when none were recorded and the slow recovery in the late 1980's, plus another dip in numbers in 1999. These wrens nest in sheds and garages and in hanging flower baskets and potted plants near humans. In the woods, they favor bottomland and nest in logs, brush piles and downed trees. Nest building was seen from February 24 to June 19. Egg dates were April 13 (5 eggs) and May 2 (6 eggs). Young were in the nest April 22 and May 27, and fledged young were noted from April 21 to August 27. Many times family groups were seen such as six at Carpenter Park May 9, 1981 and four at Oak Ridge Cemetery July 6, 1981. Adults were feeding a cowbird July 25, 1996 at Lake Springfield. Molt was observed in this wren from August 10 to September 26. On August 19, 2001 at Washington Park a wren was sitting on a diagonal limb with wings drooped, tail fanned and back feathers sticking up apparently sun bathing. Like other wren species, they had white spots on the lower back and rump apparently for recognition in dark places. The higher numbers in **fall** (1.3 to 1) seemed to reflect production of young. This wren was mainly an insectivore, but ate bird seed in winter at feeders. When many of the insects were not available, they foraged in the leaf litter, while one at Oak Ridge Cemetery was investigating a wasp nest on November 11, 2006. The subspecies in this wren is the eastern nominate form. However, ISM # 660761 an adult 3° from January 28, 2005 appeared whiter on the throat, had white in the tail, and less rufous in the crown making it duller.

Documentation: Specimens = 9) IL. Sangamon Co., $\bigcirc \bigcirc \bigcirc = 7$, January 5 – December 18, wts. = 17.1 – 23.2 gms, testes = 1 – 2 mm, gizzard (Jan 28) with pillbugs; $\bigcirc \bigcirc = 2$, Sangamon Co., January 27 – April 13, wt. = 20.2 gms, ovaries = 5.5 – 10 mm.

Highest # Days/Season

Spring92 (2004) maxedSummer60 (2006)Fall120 (2002 & 2006)Winter78 (2005)

Highest # Birds/Season

Spring527 (2005)Summer319 (2006)Fall606 (1998)Winter322 (2005)

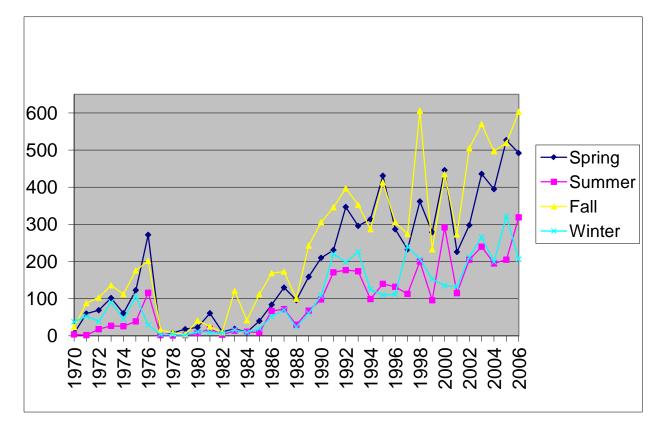


Figure 24. Carolina Wren Numbers 1970–2006.

Bewick's Wren

Thryomanes bewickii

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	33/32 (20)	6/5 (3)	3/3 (3)		42/40
Average/day	1.03	1.20	1.0		1.05
Average/season	1.65	2.0	1.0		

Status: Rare Spring Migrant and Very Rare Fall Migrant and Summer Resident.

Dates:

Spring: Earliest arrival= March 12, 1986 Lick Creek Average arrival (20 years) w/ range March 12-April 25 = April 8

Fall: Average departure (3 years) w/ range August 3- October 10 = **August 30** Latest departure = **October 10**, 1970 Carpenter Park

Of the 20 arrival **spring** dates, only four were in March and the rest were in April. Other early arrivals were: March 26, 1976 at Washington Park; March 24, 1991 at Oak Ridge Cemetery; and March 29, 1992 at the Refuge. Spring was the easiest time to find this difficult bird. If the Bewick's Wren was sitting up singing its backward Song Sparrow-like song, that made it fairly observable, but it was a finicky singer at best and a skulker near or on the ground otherwise. Most of these wrens occurred in brushy areas usually associated with poor soils, sand, or burned areas. The only counts of more than one bird were two on April 25, 1979 and June 15, 1994. Singing was noted from March 24 to July 19. One at Oak Ridge Cemetery April 3, 1981 was singing a different and shorter-buzzier type song. At Sangchris a male sang from the top of a tree, then flew to the base and foraged like a creeper on April 7, 1977. Others sang from hedges (April 9, 1975) or brush piles (April 25, 1979). I saw one singing at the sand prairie at Carpenter Park on April 3, 1988 and noted that its long tail shook as it sang. Many of the individuals had the habit of switching the long tail back and forth. Our population of Bewick's Wren was so fragmented it was difficult to know whether the birds that occurred in Sangamon County in spring were attempting to nest or were overmigrants from further south. If they were migrants passing through most departure dates ranged from April 8 – May 22. In summer there were two probable breeding records. One (possibly two) wren was at the shed on the north side of Carpenter Park on July 15, 1973. In 1994, northwest of Springfield on the bluff of the Sangamon River, a wren was gathering food May 18, a male was singing there with a female present June 15, the male was singing again in the same place on June 20, and a wren was again present there July 6. These observations occurred around out buildings on private property. Other wrens occurring during breeding season were 1) a wren August 3, 1971 east of Springfield at the South Fork; 2) two wrens present at Washington Park April 25 and one May 3, 1979 (but the habitat was destroyed); 3) one scolding and in partial molt (on breast and crown) south of Illiopolis August 15, 1981; 4) a male at Lake Springfield May 8, 1996; and 5) a male southeast of Chatham July 19, 1996. If these wrens seemed difficult in spring, they were many times harder to find in **fall**. Sometimes they could be located by their scolding notes. The latest fall departing wren was at Carpenter Park on October 10, 1970. No other fall records occurred after August 15, 1981. Two other spring records occurred in the addendum: a male at Center Park May 9, 2007

and one at Adams Sanctuary April 26, 2008. Sadly, this long-tailed wren is near extirpation and is on the Illinois Endangered Species List. According to Eifert (1930 - 40) it was once common here "as a migrant and nested in parks and cemeteries". It winters in the Gulf States. The birds I saw were fairly reddish-brown indicating the expected eastern subspecies *T. b. bewickii*.

Documentation: Notes & descriptions: IL. Sangamon Co., HDB – on file ISM (recent digital cameras have been developed, and I photographed this sneaky wren on March 23, 2011 at Riverside Park).

Highest # Days/Season

Spring3 (1984, 1986, 1992, 2003)Summer3 (1994)Fall1 (1970, 1971, 1981)

Highest # Birds/Season

Spring 3 (5years) Summer 4 (1994) Fall 1 (1970, 1971, 1981)

House Wren

Troglodytes aedon

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	8969/1502 (37)	10829/1727 (37)	10594/2366 (37)	15/13 (8)	30407/5608
Average/day	5.97	6.27	4.48	1.15	5.42
Average/season	242.41	292.68	286.32	1.88	

Status: Common Migrant and Summer Resident and Very Rare Winter Resident

Dates:

Spring: Earliest arrival = March 31, 1986 ♂ Lick Creek Average arrival (37 years) w/range March 31 – April 23 = April 15

Fall: Average departure (37 years) w/range October 14 – November 24 = **October 29** Latest departure = **November 24**, 2002 Carpenter Park (also see winter records)

This was a small brown bird with a bubbling song that was not only found in wren houses in yards but was numerous in forest and edge. I thought that a woodland with high numbers of breeding House Wrens was in degradation, and that part of the problem was these wrens punctured the eggs of other birds. A March 5, 1998 House Wren below the dam at Sangchris was probably a wintering bird. Except for one March date (above) all spring arrivals were in April. High spring counts were: 27, May 8, 1976; 26, May 5, 1984; 26, April 22, 1985; 34, May 9, 1987; 30, May 9, 1998; and 30, May 29, 2000. This wren was recorded in summer on all BBS and ranked 15th with a slight increase in numbers after 1987. The Sangamon River Census totaled 38 in 1976 and 149 in 1991, almost a four fold increase. Nest building was seen from May 11 - 22. Young were noted from June 10 to August 5. Young being fed in a nest box July 22, 2002, indicated multiple broods. High counts for summer were: 30, June 13, 1978; 33, June 12, 1986; 45, June 4, 1991; and 32, June 25, 2000. Singing stopped August 18, 1999 and August 17, 2000, but with an occasional song to September 24. One wren was singing on November 4, 1986. Molt was observed from August 16 to October 5. Fall migrants were moving by at least September 3 (tv kill). I saw numbers of these wrens in brush piles, weedy fields, and even grassy areas in fall. High counts for fall were: 26, September 12, 1985; 31, September 15, 1986; and 22, September 22, 1999. Though most migration was over by October, there were some stragglers into November: see above, November 16, 1981; November 8, 1991, November 22, 1993; and November 16, 2003. This wren sometimes tried to winter: one, December 2, 1975 at Oak Ridge; one, December 11 – 14, 1979 in rubble pile near Lake Springfield; two, December 7, 1981 in bulldozed stumps at Lick Creek; one, December 20, 1984 at Lick Creek; one, December 16, 1992 at Lake Springfield; two, December 8, 1993 at Carpenter Park; one, December 22 -January 6, 1996-97 Lake Springfield; one, December 23 – February 19, 1997-98 at Carpenter Park; plus in the addendum one, January 1, 2009 at Beamington and one, December 6, 2009 at the Cinder Flats. House Wrens winter more regularly in the Gulf States south into Mexico. The specimens below may be mostly T. a. parkmanii, but I agree with Mengel (1965) that they are not typical, and may represent a mixture of *adeon* and *parkmanii* (= *baldwini*). There are four specimens (two September and two October) which have no back barring and appear some what more rufous, and might be T. a. adeon. I rarely saw a more reddish brown bird during migration

with two dates May 8, 2002 at Washington Park and October 15, 2004 at Riverside Park, which could also have been this nominate subspecies.

Documentation: Specimens = 24) IL. Sangamon Co., Spring = 6, $\partial \partial = 5$, 2 mi north Spfld (2) & southwest Spfld & Spfld & tv tower, May 7 – 15, wts. = 10.2 – 11.4 gms, testes = 5 – 6.5 mm; Q = 1, tv tower, May 8, 1972, wt. = 10.4 gms, ovary = 7 mm; Fall = 18, adult $\partial \partial = 2$, LSpfld & tv tower, July 14 – October 14, wts. = 10.6 – 10.9 gms (July specimen testes = 9 mm); immature $\partial \partial = 2$, south Spfld & tv tower, August 28 – October 14, wts. = 10.0 – 11.3 gms; adult Q Q = 2, south Spfld & tv tower, July 13 – October 14, wts. = 10.7 – 11.2 gms (July specimen with brood patch) gizzard with Coleoptera & Diptera; immature Q Q = 9, LSpfld (3) & north Spfld (2) & tv tower (2) & Spfld (2), August 27 – October 15, wts. = 8.7 – 12.7 gms; plus sex? = 3, tv tower, September 20 – October 5, wts. = 10.3 – 10.5 gms (many specimens showed white spotting on the lower back or rump which might be used in sight recognition in the nest cavity ?).

Highest # Days/Season

 Spring
 52 (1986)

 Summer
 61 (5 years) maxed

 Fall
 81 (1983)

 Winter
 4 (1996)

Highest # Birds/Season

Spring522 (2000)Summer765 (2000)Fall508 (1999)Winter4 (1996)

Winter Wren

Troglodytes troglodytes

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1816/806 (37)	0/0	1929/968 (37)	453/306 (36)	4198/2080
Average/day	2.25		1.99	1.48	2.02
Average/season	49.08		52.14	12.58	

Status: Fairly Common Migrant and Uncommon Winter Resident

Dates:

- Spring: Earliest arrival = March 3, 1974 four Sangamon County (arbitrary due to WR) Average arrival (36 years) w/range March 3 – April 2 = March 21 Average departure (37 years) w/range April 17 – May 10 = April 28 Latest departure = May 10, 2000 Washington Park
- Fall: Earliest arrival = September 8, 1974 CP & 1998 Oak Ridge Cemetery Average arrival (37 years) w/range September 8- October 10 = September 25 Average departure (35 years) w/range November 8 – December 22 = December 3 Latest departure = December 22, 1998 UIS (arbitrary due to WR)

This small dark wren had a double chip note and a long beautiful song. The Winter Wren was basically a woodland species which was found at tree falls, brush piles, and at log jams in creeks. When its call notes were imitated, it would jump up on a log, bounce with its tail cocked, and scold the intruder. In **spring** it arrived in March most years except there were three early April arrivals (1971, 1978, 1992). High counts for spring were: 12, April 11, 1999 & 2000 and 15, April 9, 2002. I had noted some head molt in mid-March on two occasions. Singing not only occurred in spring, but all the time it was present, even in the dead of winter. Food items noted were an inch long Lepidoptera April 6, 1992; a brown caterpillar April 29, 1996; and a big orange grub April 10, 2003. On April 16, 1998 I saw a Song Sparrow attack one of these wrens, maybe because the wren was too close to the sparrow's nest, but also the call note of the wren was similar to the sparrow's call. This wren became scarce by May and occurred in that month in12 years, with another late bird May 6, 1978 at Riverside Park. Winter Wrens breed in the coniferous belt in the northern US and southern Canada. Most falls this wren returned in September, but in nine years it arrived in October. Other fairly early fall arrivals were September 15, 1984 at Riverside Park and September 14, 1985 at Carpenter Park. It usually foraged near the ground, but one was 30 feet up searching a tree that had fallen against another tree at Carpenter Park on November 26, 2001. High counts for fall were: 11, October 23, 1983 and 19, October 8, 1998. Departure was obscured by winter residents, but numbers almost always dropped in the winter season. Winter numbers were variable with extremes 2 - 39, and no wrens were present in 1989-90. Some winters they were frozen out and there were usually fewer wrens in late winter. High counts for winter were: 6, December 7, 1974; 5, January 10, 1982; and 7, December 7, 1991. The Winter Wren migrates as far south as the Gulf Coast; and the subspecies is the eastern T. t. hiemalis.

Documentation: Specimens = 14) IL. Sangamon Co., Spring = 1 \Diamond , Spfld, April 5, 1971 (killed by a house cat), testes = 1.5mm; Fall = 12, adult $\Diamond \Diamond = 3$, tv tower & Spfld & CP, September 26 - October 14, wts. = 8.6 - 10.2 gms; immature $\Diamond \Diamond = 5$, tv tower (3) & LSpfld & CP, October 14 - November 7, wts. = 7.3 - 9.6 gms; immature $\bigcirc \bigcirc = 4$, tv tower, September 29 - October 24, wts. = 7.0 - 9.0 gms; Winter = 1 \Diamond , north Spfld, December 23, 1989, wt. = 5.4 gms.

Highest # Days/Season

Spring35 (1995)Fall45 (2002)Winter22 (2002)

Highest # Birds/Season

Spring	114 (1995)
Fall	111 (2002)
Winter	39 (1982)

Sedge Wren

Cistothorus platensis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	100/73 (27)	215/99(27)	653/385 (36)	2/2 (1)	970/559
Average/day	1.37	2.17	1.70	1.0	1.74
Average/season	3.70	7.96	18.14	2.0	

Status: Occasional Spring Migrant, Uncommon Summer Resident and Fall Migrant and Very Rare Winter Resident

Dates:

Spring: Earliest arrival = April 14, 1999 ♂ Sangchris Average arrival (28 years) w/range April 14 – May 20 = May 2

Mid-Summer: Average arrival (36 years) w/range June 2 – August 22 = July 13 (see Table 31)

Fall: Average departure (35years) w/range September 23 – November 18 = **October 17** Latest departure = **November 18**, 1992 Sangchris (see winter record)

This small wren had a peculiar arrival pattern (see above) in which a few arrived in spring (it was missed in 10 springs) but apparently mostly passed through and went on north. I had no nesting records for these early wrens. Then another Sedge Wren population arrived and bred in wet grassy areas in mid- to late summer (see Table 31). The big question was where did these midsummer birds come from at that season? This was a small bird living in dense vegetation, but it also had a distinctive incessant song (though the song and even the call notes were similar to the Dickcissel but weaker) that should have signaled its presence. Note that it was not recorded on the BBS, which was usually taken in June. Most high counts for spring were 2-3 birds, but there were 4, May 16, 2004 and 6, May 20, 2006. In mid- to late summer the highest numbers of wrens were present and singing on territory. On August 1, 2006 at Marsh Road these wrens were singing in 95° F. heat, plus they also sang at night. Nesting areas could be grass waterways (not mowed) in agriculture fields, but the best places were set aside fields, prairies, and the scant marsh that occurred in Sangamon County. Areas included Sangchris, Marsh Road, Nipper Prairie, Pleasant Plains, Buffalo Pasture, and Sediment Retention. The last three areas were destroyed, and Sangchris was not as good as it was earlier in the study for this species. High counts for the breeding population were: 6, July 27, 1975; 6, August 15, 1981; 7, June 27, 2004; 8, July 25, 2005; 10, June 14, 2006; and 9, August 17, 2006. On July 17, 2007 one was nest building north of Sangchris. Occasionally, fledged young were seen, but they were difficult to find in dense grass. One was at the Buffalo sewer pond September 18, 1986, and one was at Marsh Road September 21, 2003. The latest singing male was September 15, 1979, but males usually quit in late August with partial songs later. Some Sedge Wrens were noted with molt in mid- to late September, which was about the time **fall** migration started. High fall counts were: 7, September 22, 1979; 7, October 1, 1983; and 10, September 27, 1994. This bird stayed late some years, and other dates were November 10, 2006 at the Cinder Flats and November 1, 2008 at Carpenter Park. The only winter record was one at the dam at Lake Springfield from

November 14 - December 4 & 19, 1976. This wren winters from Tennessee south to the Gulf Coast. The subspecies in North America is *C. p. stellaris*.

Documentation: Specimens = 8) IL. Sangamon Co., all Fall & all tv tower kills, $\Im \Im = 3$, October 14 – 24, wts. = 8.9 – 9.7 gms; $\Im \Im = 5$, September 27 – October 11, wts. = 8.2 – 9.3 gms.

Highest # Days/Season

Spring6 (1995)Summer14 (1998)Fall35 (1998)Winter2 (1976)

Highest # Birds/Season

Spring9 (2004)Summer30 (2006)Fall54 (1993)Winter2 (1976)

1971	August 22	ightarrow at Sangchris
1972	July 30	five ♂♂ at Sangchris
1973	August 1	four 33 at Sangchris
1974	July 28	∂ at Sangchris
1975	July 2	four 33 at Spaulding Orchard road & northwest of Springfield
1976	June 28	∂ at Sangchris
1977	July 27	two 🖧 at Sangchris
1978	June 13	south of Curran
1979	August 6	♂ at Lick Creek
1980	August 9	${\mathbb d}$ south end of Lake Springfield
1981	July 25	two ♂♂ east of Springfield
1982	July 10	eal at Buffalo Pasture
1983	July 10	\eth near Buffalo sewer pond
1984	August 3	two ♂♂ at Sangchris
1985	July 12	$eigenpoint rac{1}{2}$ west of Springfield
1986	July 20	ightarrow near Buffalo
1987	July 5	eal at Buffalo Pasture
1988	July 20	eearrow at Sediment Retention
1989	August 12	eearrow at Sediment Retention
1990	August 8	♂ at Sediment Retention
1991	August 20	eearrow at Sangchris
1992	June 17	eearrow at Sangchris
1993	July 11	rightarrow south of Mechanicsburg
1994	June 20	four ♂♂ south of Salisbury
1995	June 6	two ♂♂ at Jefferies Orchard & near Beamington
1996	July 13	two 🖧 east of Pleasant Plains
1997	June 23	\eth east of Pleasant Plains
1998	June 7	two 🖧 east of Pleasant Plains
1999	July 11	two ♂♂ near Buffalo
2000	July 1	\eth near Island Grove
2001	August 14	eearrow at Sangchris
2002	June 13	east of Pleasant Plains
2003	June 14	east of Pleasant Plains
2004	June 2	four ♂♂ at Marsh road (some in May)
2005	July 7	two ♂♂ at Marsh road
2006	July 28	${\mathbb d}$ at Lake Springfield (some in May)

Table 31. Sedge Wren Mid-Summer Arrivals in Sangamon County 1971–2009

Addendum:

2007	June 9	♂ at Marsh road
2008	July 13	♂ southwest of Springfield
2009	July 26	five ♂♂ at Marsh road

Marsh Wren

Cistothorus palustris

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	314/192 (36)	20/16 (6)	559/341 (37)	41/29 (11)	934/578
Average/day	1.64	1.25	1.64	1.41	1.62
Average/season	8.72	3.33	15.11	3.73	

Status: Uncommon Migrant and Rare Summer and Winter Resident

Dates:

Spring: Earliest arrival = March 27, 1994 ♂ Sangchris Average arrival (34 years) w/range March 27 – May 8 = April 24 Average departure (35 years) w/range May 2 – 30 = May 16 Latest departure = May 30, 1973 Sangchris

Fall: Earliest arrival = August 9, 1990 Sangchris Average arrival (35 years) w/range August 9 – October 9 = September 14 Average departure (36 years) w/range September 23–December 20 = November 4 Latest departure = December 20, 1990 two Cinder Flats

The Marsh Wren was usually associated with cattails and other wet areas with grasses and weeds. It was rather variable in its spring arrival time, and lack of marsh in the county made it a difficult species to find. However, I only missed this wren in the spring of 1988. Some March records I suspected of being over-wintering birds, such as March 26, 1983 and March 27, 1994 both at Sangchris and March 16, 1983 at the Cinder Flats. High counts were: 12, May 17, 1973; 10, May 8, 1976; and 9, May 12, 1996. Rare summer records made late spring departures arbitrary. Though no nests were found, breeding probably occurred at Sangchris in 1971, 1972, 1976, and 1993; at the south end of Lake Springfield 1982 and 1985; at the Cinder Flats 1986; at Lick Creek 1982; and at Williamsville 1985. Most of these records involved singing males, some seen multiple times, from early June to late August, but no young were knowingly seen. After 1993 no further summer occurrences were recorded. The high summer count was 3 males, June 3, 1982 at the south end of Lake Springfield. These wrens were usually secretive and were best detected by their song or call note. They would sometimes spish up or respond to imitations of the call note. Birds in molt were noted from August 9 to September 9, indicating these were summer residents. This wren sang as late as September 18, 1981, but they occasionally sang even in winter (December, 1984 and 1988). High counts for fall were: 6, October 9, 1972; 8, September 18, 1988; and 12, September 23, 1991. On November 9, 2009 a very gravish brown Marsh Wren was seen at Sangchris, which could have been a different subspecies, but I was unable to photograph it. There were birds observed into winter in eleven years, but some could have been late fall migrants. Examples of the later records were: January 14, 1983 at Sangchris; December 29, 1984 at Cinder Flats; February 21, 1987 at Cinder Flats; January 4 – 28, 1993 at Sangchris. The highest winter count was 3, December 1 & 8, 1984 and there were several counts of 2 in winter. The last winter record was in 2000 (two on December 10) and numbers in general have been low since then. It seemed that at least two possible subspecies occurred here (from specimens), C. p. dissaeptus and C. p. iliacus. Most of the specimens are dissaeptus, but a few

smaller females are *iliacus* being paler and more washed with rusty. Specimens of males appeared larger than females. The Marsh Wren winters in the coastal US south to Mexico.

Documentation: Specimens = 14) IL. Sangamon, Co., Spring = 1 \bigcirc , 1 mi west Sangchris, May 21, 2007, wt. = 9.7 gms, ovary = 5 mm; Fall = 13, all from tv tower, immature $\bigcirc \bigcirc = 3$, September 28 – October 14, wts. = 11.0 – 13.6 gms; adult $\bigcirc \bigcirc = 2$, September 25 – 28, wts. = 9.5 – 10.5 gms; immature $\bigcirc \bigcirc = 8$, September 27 – October 14, wts. = 9.7 – 12.3 gms.

Highest # Days/Season

 Spring
 15 (1992)

 Summer
 9 (1982)

 Fall
 23 (1991 & 1993)

 Winter
 6 (1984)

Highest # Birds/Season

Spring	31 (1996)
Summer	11 (1982)
Fall	53 (1991)
Winter	13 (1984)

Golden-crowned Kinglet

Regulus satrapa

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	4428/892 (37)	0/0	7042/1560 (37)	1457/581 (37)	12927/3033
Average/day	4.96		4.51	2.51	4.26
Average/season	119.68		190.32	39.38	

Status: Common Migrant and Uncommon Winter Resident

Dates:

- Spring: Earliest arrival = March 2, 1990 ♂ Lincoln Gardens (arbitrary due to WR) Average arrival (36 years) w/range March 2 – 30 = March 20 Average departure (37 years) w/range April 9 – May 18 = April 21 Latest departure = May 18, 1972 ♀ Washington Park
- Fall: Earliest arrival = September 21, 1982 three areas
 Average arrival (37 years) w/range September 21 October 5 = September 28
 Average departure (36 years) w/range November 2 January 16 = November 29
 Latest departure = January 16, 1973 (arbitrary due to WR)

This was one of the smallest birds in the county, usually found in forest, but with a preference for conifer trees. I caught one in an open field at daylight April 6, 1976, completely out of its usual habitat. The male had an orange-red and the female a yellow crown patch. Severe winters caused noticeable drops in numbers in 1977 – 1979, 1983, 1988, 1989, 1996, 2001, 2003, and 2004. Each time the numbers bounced back, presumedly because of favorable nesting. It was difficult to distinguish winter residents from early **spring** arrivals, but usually there was a noticeable increase in March. I watched one fly (migrating) across Lake Springfield on March 19, 1985. When new leaf growth started, these kinglets fed high in the trees in the new leaves as at Carpenter Park on March 25, 2000 or if snow and ice prevailed they fed low over water as at Riverside Park on April 3, 1975. High spring counts were: 32, April 2, 1980; 38, April 10, 1987; and 45, April 11, 2000. These birds moved on north fairly early and there were only four May records: one above; May 9, 1974 at Washington Park; May 3, 1984 at Lincoln Gardens, and May 9, 1996 at Lincoln Gardens. This kinglet breeds in conifers from the northern US, including southeastern Alaska, the mountains of western and eastern US and boreal Canada. Fall numbers were higher than spring (1.6 to 1), but overall it seemed numbers had declined. Fall arrival was 24 times in September and 16 in October; with other early arrivals on September 22, 1976, 1979, and 1987. High fall counts were: 50, October 17, 1971; 75, October 20, 1983; and 42, October 19, 1989. Usually past mid-November or even earlier, numbers diminished, and usually the wintering population was fairly thin. Severe winters took their toll on this small species, usually December had more birds than February, and some years there were not any left by the end of winter. One was found dead under a pine tree east of Springfield on February 24, 1980. At Carpenter Park two were hopping around on the ice feeding on January 15, 2004, and in contrast, one was taking a dew bath at Carpenter Park on January 31, 1998 when it was sunny and 50 degrees. High counts for winter were: 12, December 3, 1972; 6, February 20, 1982; 17, December 9, 1998; 17, December 11, 2002; and 9, January 5, 2003. On March 6, 1997 at Lake

Springfield in conifers I found a different looking male kinglet that had no black crown stripes, the body was grayish olive and much lighter than a nearby male, the face was plain grayish olive, most of the crown was yellow, and it had orange tarsi (drawing on file ISM). This bird was aberrant and was probably missing certain pigments in its plumage. The subspecies of kinglet in eastern North America and Sangamon County is the nominate form, and it winters south to the Gulf Coast.

Documentation: Specimens = 18) IL. Sangamon Co., Spring = 2, \Diamond , tv tower, April 3, 1974, wt. = 5.0 gms; testes = 1 mm; \heartsuit , LSpfld, March 31, 1982, wt. = 5.4 gms, ovary = 3 mm; Fall = 16, adult $\Diamond \Diamond = 2$, tv tower, October 8 – 22, wts. = 6.6 gms; immature $\Diamond \Diamond = 7$, tv tower (5) & east side Spfld (2), October 14 – November 2, wts. = 5.5 – 7.6 gms; adult $\heartsuit = 1$, tv tower, October 24, 1971, wt. = 6.8 gms; immature $\heartsuit \heartsuit = 6$, tv tower (4), Spfld & 2mi north Spfld, October 5 – November 6, wts. = 5.4 – 6.2 gms.

Highest # Days/Season

Spring40 (1983 & 1989)Fall62 (1982)Winter41 (2002)

Highest # Birds/Season

Spring	295 (2000)
Fall	480 (1983)
Winter	215 (2002)

Ruby-crowned Kinglet

Regulus calendula

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	11137/1392 (37)	3/3 (3) all sp mig	11445/141 (37)	177/141 (32)	22762/3251
Average/day	8.0	1.0	6.67	1.26	7.0
Average/season	301.0	1.0	309.32	5.53	

Status: Common Migrant and Occasional Winter Resident

Dates:

- Spring: Earliest arrival = March 17, 1995 ♂ Washington Park Average arrival (36 years) w/range March 17 – April 7 = March 28 Average departure (37 years) w/range May 4 – June 4 = May 18 Latest departure = June 4, 1976 & 1983 Washington Park
- Fall: Earliest arrival = September 6, 1986 two Carpenter Park
 Average arrival (37 years) w/range September 6 23 = September 16
 Average departure (37 years) w/range November 1- 30 = November 19
 Latest departure = November 30, 1973 Springfield (but see WR)

A very small greenish bird, the male Ruby-crowned Kinglet had concealed red feathers in the crown which could be raised especially if the bird was agitated. They frequently chased other males and sang their chattering song during migration and even in winter. When feeding they fluttered near the ends of branches and flowers usually at mid-height in the vegetation. During cold, windy weather they sometimes fed near the ground in bushes. They could be at times, one of the most numerous woodland birds in early spring. There where 12 were in one tree on April 28, 1974. High counts were: 52, April 20, 1990; 56, April 29, 1992; 80, April 21, 1994; 44, May 6, 1994; and 57, April 20, 1999. By the year 2000, the counts were lower. Past mid-May, this species was difficult to find and they were then usually found in more open woodland like cemeteries and city parks. Besides the two June records above, there was one June 1, 1993 at Oak Ridge Cemetery. In summer, these kinglets nest in the extreme northern US including Alaska and the mountains of the western US, and most of Canada. Returning fall birds were all in September, I always looked for it in late August, but never found it. Another early arrival was September 9, 1998 at Sangchris. High fall counts were: 70, October 20, 1976; 80, October 14, 1978; 63, October 15, 1982; and 60, October 20 & 23, 1983. Though October was the month in fall for this bird, some years November had fairly good numbers such as 41 seen in November 1991. Like spring numbers, this kinglet in fall had declined late in the study. Although the numbers were variable, I recorded this kinglet in all winters except five 1981, 1984, 1987, 1988, and 1989. They usually stayed in sheltered areas with brush and vines or conifers, but occasionally in deciduous woodland. They ate poison ivy and honeysuckle berries, and visited feeders. A male was fluttering around the eaves of a house at Marine Pt. December 26, 2002, getting small insects. The high winter counts were: 4, December 19, 1976; 4, December 1, 2003; and 5, December 11, 2002. Most were seen in early winter and may have been very late fall migrants, but later dates were: 2, January 1, 1971 at Washington Park; 1, January 23, 1974 at Washington Park; 1, January 18, 1976 at Carpenter Park; 1, February 8, 1976 at Lake

Springfield; 2, January 15, 1983 at Buckhart; 1, February 25, 1987 at Washington Park; 2, February 6, 1993 at Sangchris and Lake Springfield; 2, February 27, 1998 at Adams Sanctuary; 1, January 29, 2003 at Adams Sanctuary; 1, January 13, 2004 near Lake Springfield; 1, January 28, 2007 at Lincoln Greens and others. The subspecies is the nominate form, and it winters regularly from southern Illinois south to Guatemala.

Highest # Days/Season

Spring47 (1997)Summer1 (1976, 1983, 1993)Fall63 (2006)Winter19 (1976)

Highest # Birds/Season

Spring536 (1999)Summer1 (1976, 1983, 1993)Fall523 (1976)Winter29 (1976)

Blue-gray Gnatcatcher

Polioptila caerulea

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	2766/953 (37)	561/292 (35)	789/336 (35)	0/0	4116/1581
Average/day	2.90	1.92	2.35		2.60
Average/season	74.76	16.03	22.54		

Status: Common Spring Migrant and Uncommon Summer Resident and Fall Migrant

Dates:

Spring: Earliest arrival = March 30, 2004 ♂ North PT. Average arrival (37 years) w/range March 30 – April 20 = April 10

Fall:Average departure (35 years) w/range August 19 – October 2 = September 13
Latest departure = October 14, 2007 Lincoln Gardens

This little sprite with the long tail and high buzzy notes was much more numerous in spring than in fall (3.5 to 1). There appeared to be a numerical decline of the gnatcatcher in 1983, 1986 and 1988 – 1990 perhaps due to severe winters. For spring the only other March arrival date was March 31, 2005 at North Pt. Most spring high counts were around ten, with some exceptions: 13, May 6, 1978; 15, April 11, 1981; 14, May 3, 1997; 15, April 23, 1999; 14, April 26, 2003; 18, April 22, 2004; and 15, April 25, 2005. By mid-May, the spring migrants had usually departed, leaving the summer breeding birds in woodland. The Sangamon River Census tallied 15 gnatcatchers in 1976 and 39 in 1991. These birds started nesting fairly early. One nest was under construction by April 14, 2001 and completed by April 25 in bottomland at Carpenter Park. Another nest was completed at Carpenter Park by April 21, 2001. Also a nest under way by April 16, 2006 at Carpenter Park was completed by April 21, and an adult was sitting by May 6. Another adult was sitting on a nest at Carpenter Park by April 22, 1989. Some nestings were later (second brood?): like May 15, 1985 when an adult was gathering spider web; a nest was completed at Hunter Lake area May 7, 2000; and there was nest building at Carpenter Park May 18, 2004. Most nests were high in oaks, and the contents could not be observed. Gnatcatchers were very aggressive in chasing cowbirds and were noted doing this at Gurgens Park May 1, 1982; at Horse Creek May 17, 1991; at Riverside Park July 14, 1992; at Carpenter Park May 12, 1993 and April 26, 2006. However, I (and KB) watched a female cowbird fly in and lay an egg in a gnatcatchers nest, while the gnatcatchers also watched, at Carpenter Park on May 4, 2009. Young gnatcatchers were seen between May 25 and August 6. Gnatcatchers were aggressive, frequently had interactions with hummingbirds, and helped mob predators. This species appeared to be adapting to nesting in modified woodland at Center Park in the late 1990s and early 2000s, but most of this area was destroyed in 2007 – 2008 by CWLP and developers. I had noted molt between July 15 and September 8, plus birds in basic plumage from July 22 to September 24. Fall migration appeared to begin in late July and August. High counts for fall came late in the study: 13, August 5, 2003; 18, August 15, 2004; and 14, August 16, 2006. This species seemed to leave inordinately early, considering that most were gone by mid-September. Besides the October date above, the only other one was October 2, 1996 at Oak Ridge Cemetery. The

subspecies in the county is the nominate form, and they winter from the southern US south to Honduras.

Documentation: Photographic: IL. Sangamon Co., HDB on file ISM.

Highest # Days/Season

Spring47 (2006)Summer24 (2006)Fall35 (2005 & 2006)

Highest # Birds/Season

Spring159 (2005)Summer55 (2006)Fall125 (2006)

Eastern Bluebird

Sialia sialis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	4003/1446 (37)	3703/825 (36)	10258/1687 (37)	1858/483 (34)	19822/4441
Average/day	2.77	4.49	6.08	3.85	4.46
Average/season	108.19	102.86	277.24	54.65	

Status: Common Migrant and Summer Resident and Uncommon Winter Resident

Dates:

- Spring: Earliest arrival = January 24, 1998 three ♂ LSpfld (arbitrary due to WR) Average arrival (35 years) w/range January 24 – March 14 = February 17
- Fall:Average departure (32 years) w/range October 28 December 15 = November 21Latest departure = December 15, 1976 two Carpenter Park (arbitrary due to WR)

This small thrush was a delightful bird to watch, the males had sky blue upperparts and rustyorange breasts. Female Eastern Bluebirds were duller colored than males, and juveniles were bluish-gray and speckled. They were found in open woods, wood edge, open areas with small trees, and along agriculture fields. Bluebirds were scarce when the study began (1970), perhaps due to harsh winters or insecticides, but were increasing in the last half of the study in all seasons. Most arrivals in spring were in February and March, but they sometimes came back as early as January depending on temperature and snow level. Most daily counts were 10 or less probably because the flocks broke up into pairs early in spring. High counts for spring were: 11, May 9, 1987; 28, May 29, 2000; 13, May 19, 2001; and 17, May 6 2006. The bluebird was recorded on only 16 of the 31 BBS and had very low numbers in the early half of the survey. Numbers on the BBS increased in 1993, at the same time as in the main part of the study (see Figure 25). High summer counts were: 25, June 21, 1986; 33, June 25, 2000; and 27, July 9, 2003. Increases were helped by warmer winters and bird boxes put out by humans. I noted birds paired as early as February 2, and singing began from January 30 to March 24. Pairs were seen at the nest sites as early as February 16. Copulation on a power line was seen May 25. Adults were seen attending young in the nests from April 25 to July 13, and fledged young were found May 2 to August 29, with most fledglings in May and June. Adults were attending cowbirds on June 3, 2001 and July 6, 2006. There were at least two broods per season, and nest building was noted as late as August 6. Singing cessation occurred July 25, 1999 and July 23, 2000. A female west of Springfield on June 30, 2002 had no feathers below the breast ventrally, and must have been showing an extreme brood patch or a weird molt (photograph). Molt was seen from August 16 to September 8. In fall bluebirds formed feeding flocks in which they used the pounce method as well as other ways to get insect prey, especially grasshoppers. Other birds joined them such as Chipping Sparrows, Vesper Sparrows, Eastern Phoebes, Yellow-rumped Warblers, Palm Warblers, and House Finches and were seen along the roadsides feeding. The bluebirds also took fruit like blueberries, hackberries, poison ivy berries, honeysuckle, and sumac. On December 4, 2005, a large flock of starlings usurped a hackberry tree at Center Park that bluebirds were feeding on. Fall numbers were 2.6 times those of spring, and might have been due to young of the year increases. Flocks detected by call notes were usually seen migrating in fall especially

over Lake Springfield. High counts for fall were: 20, October 9, 1972; 38, September 30, 1990; 83, October 29, 1995; 51, October18, 1998; 39, October 22, 2001; 26, August 17, 2004; and 26, November 12, 2006. **Winter** numbers fluctuated greatly due to harsh weather, and bluebirds were missed in three winter seasons (1978-79, 1984-85, 1985-86). Also, it should be noted that numbers in general were very low, especially in eight winters prior to 1988 for unknown reasons. Numbers in winter picked up 1993 (as they did in summer) and though the numbers varied, they did not get really low (the lowest was 1996-97) as in the first half of the study (see Figure 25). High counts for winter were: 14, January 5, 1990; 19, December 25, 2001; 18, January 5, 2002; and 18, February 21, 2004. When it was cold, bluebirds sometimes sat snuggled close together as were six at Horse Creek on December 30, 2001 (photograph). An aberrant male with white superciliaries was found (photograph) at Adams Sanctuary on January 22, 2008. The subspecies in the county is the eastern nominate form.

Documentation: Specimens = 2) IL. Sangamon Co., ISM# 661448 \Diamond , east Springfield, June 20, 2005, coll. by HDB, wt. = 27.2 gms, testes = 10.5 mm, gizzard with Coleoptera and Hymenoptera (ants); ISM# 605647 \Diamond , east Spfld, May 14, 1973, coll. by HDB, wt. = 39.8 gms, ovary enlarged.

Highest # Days/Season

Spring80 (2000)Summer56 (2000)Fall116 (2006)Winter62 (2005)

Highest # Birds/Season

Spring338 (2000)Summer385 (2000)Fall1033 (2006)Winter382 (2005)

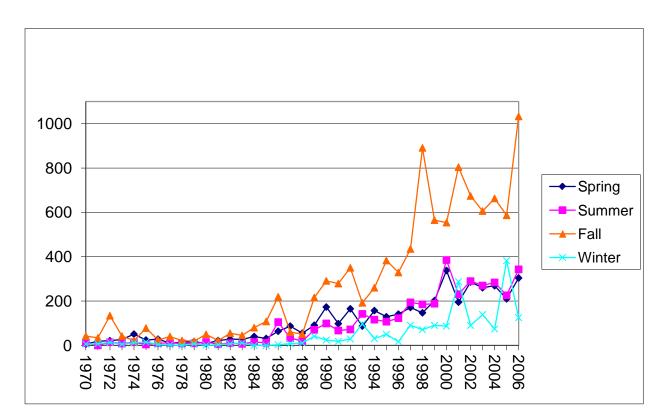


Figure 25. Eastern Bluebird Numbers by Season

Mountain Bluebird

Sialia currucoides

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	3/3 (1)	0/0	1/1 (1)	0/0	4/4
Average/day	1.0		1.0		1.0
Average/season					

Status: Very Rare Migrant

Dates: Two Records: ♀, Sangchris, April 9 – 11, 1982; ♀, northeast of Berry, November 4, 1998.

The April bird came in with a late snow storm and northwest winds. This storm downed huge numbers of birds, some obviously from much further west. The Mountain Bluebird stayed near the dam at Sangchris and would perch on the dam, the rocks below, and in the tops of nearby small trees. In both sightings, the birds were mostly gray with bright powder blue wings and tails and were found in open areas. They used the pounce method of feeding, with the November bird using a power wire for a perch. This bluebird is a western species that occurs on the Great Plains, breeds as far east as Manitoba, and rarely migrates further east.

Documentation: Photographic: Il. Sangamon Co., 1982 bird by J. Armstrong, plus drawings and notes on both sightings by HDB – on file ISM.

Townsend's Solitaire

Myadestes townsendi

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	0/0	0/0	0/0	5/5 (1)	5/5
Average/day				1.0	1/0
Average/season					

Status: Very Rare Winter Resident

Dates: One Record: adult ♂, Oak Ridge Cemetery, January 15 – February 21, 1978.

This gray thrush was feeding mostly on the berries of Red Cedar (*Juniperus virginiana*) and could be seen fluttering on branch tips. Sometimes it would hide in the cedars making in difficult to find and other times it perched in the very top of a tree. Townsend's Solitaire is a western species, which has been widely reported in the Northeast and Midwest with several records from Illinois. This is the only Sangamon County record and only the second specimen from Illinois. The subspecies is the nominate form.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 606698 adult \Diamond , Oak Ridge Cemetery, February 21, 1978, coll. by HDB, wt. = 34.7 gms, testes = 2 mm.

Veery

Catharus fuscescens

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	972/449 (37)	2/2 (2)	591/285 (37)	0/0	1565/736
Average/day	2.16	1.0	2.07		2.13
Average/season	26.27	1.0	15.97		

Status: Uncommon Migrant

Dates:

- Spring: Earliest arrival = April 20, 1976 Carpenter Park Average arrival (37 years) w/range April 20 – May 8 = May 1 Average departure (36 years) w/range May 11 – June 5 = May 23 Latest departure = June 5, 1993 ♂ Carpenter Park
- Fall: Earliest arrival = August 19, 1977 Lincoln Gardens Average arrival (37 years) w/range August 19 – September 6 = August 28 Average departure (34 years) w/range September 6 – October 2 = September 19 Latest departure = October 2, 1970 Springfield

The Veery was the least numerous of the brown-backed thrushes recorded during the study, probably because it was so shy. The best way to monitor this species would be by mist netting. It was also the latest to arrive in **spring**, with 18 years in late April and 19 years in early May. Other early arrivals were April 25, 1990 and April 22, 2002 both at Carpenter Park. Veeries stayed low in woodland and infrequently sang their flute-like song during migration. Once in a while, with a good look, I could distinguish the darker subspecies in spring, for example on May 23, 1994 and May 15, 2009 both at Washington Park. High counts in spring were low: 10, May 8 & 11, 1974; 10, May 18, 1978; 15, May 12, 1980; 14, May 14, 1981; and 10, May 15, 1995. They left early some springs (1970, 1977, 1985, 1986, 1987, 1998, and 2005), but this may be due to the heavy vegetation making it difficult to find them. The usual departure date in spring was probably the end of May. This thrush was found into June twice, the other record was at Washington Park on June 2, 1992. Also, in 1992 on May 29 there were two males singing on territory at Lick Creek, but they did not stay. Other than these records, evidence of breeding was lacking in the county. The Veery breeds as near as northern Illinois and north to central Canada. This thrush was even less obvious in **fall** (1.7 times less than spring), but it was seen every year, albeit in single digits in eleven years. It usually arrived in fall in late August, but I could not find it until September in nine years. Other early fall arrivals were August 21, 1978 at Lincoln Gardens, August 22, 1991 & 1993 at Carpenter Park, and August 20, 2006 at Riverside Park. High counts for fall were 17, September 3, 1981 and 10, September 8, 1995. One was singing a whisper song at Carpenter Park on September 14, 2003. Two of the dark subspecies were caught in mist nets at Carpenter Park September 7, 1979, which can be difficult to separate from the Gray-cheeked Thrush. Also, one dark backed bird was at Carpenter Park on August 27, 1985. Almost all departures were in September and this species did not show the propensity to straggle. Other late departures were September 30, 1975 & 2008 both at Carpenter Park. It was apparent that numbers had declined during the study. There were two subspecies in the county and I

divided the specimens into the eastern *C*. *f. fuscescens* (= 28) and western *C*. *f. salicicola* (= 14). The eastern were brighter reddish brown on the upperparts and the spots on the throat were indistinct, while the western were darker brown with a reddish tinge on the upperparts and had more well defined spots on the throat. The differences in subspecies were in all sex and age groups in fall, but both spring specimens were the eastern subspecies. The Veery winters in South America south to Bolivia.

Documentation: Specimens = 42) IL. Sangamon Co., Spring = 2, $\mathcal{J} = 1$, Spfld, May 8, 1975, wt. = 30.9 gms, testes = 6 mm; $\mathcal{Q} = 1$, east Spfld, May 9, 1994, wt. = 30.6 gms, ovary = 9 mm (2nd year bird); Fall = 40, adult $\mathcal{J}\mathcal{J} = 13$, all tv tower, August 31 – September 16, wts. = 30.8 – 43.0 gms; immature $\mathcal{J}\mathcal{J} = 8$, all tv tower, September 3 – 20, wts. = 29.3 – 38.3 gms; adult $\mathcal{Q}\mathcal{Q} = 10$, all tv tower, August 28 – September 16, wts. = 29.1 – 34.3 gms; immature $\mathcal{Q}\mathcal{Q} = 6$, all tv tower, September 2 – 21, wts. = 29.3 – 37.0 gms; sex? = 3, all tv tower, all September 3, wts. = 33.7 – 35.7 gms.

Highest # Days/Season

Spring20 (1976, 1984, 2006)Summer1 (1992 & 1993)Fall15 (2001)

Highest # Birds/Season

 Spring
 56 (1974)

 Summer
 1 (1992 & 1993)

 Fall
 72 (1972)

Gray-cheeked Thrush

Catharus minimus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1942/581 (37)	5/4 (4) sp mig	451/285 (37)	0/0	2398/870
Average/day	3.34	1.25	1.58		2.76
Average/season	52.49	1.25	12.19		

Status: Fairly Common Spring Migrant and Uncommon Fall Migrant

Dates:

- Spring: Earliest arrival = April 11, 2008 Washington Park Average arrival (37 years) w/range April 18 – May 9 = April 29 Average departure (36 years) w/range May 16 – June 4 = May 25 Latest departure = June 4, 1982 Washington Park
- Fall:Earliest arrival = August 22, 1977 Carpenter Park & 2005 WP
Average arrival (37 years) w/range August 22 September 18 = September 4
Average departure (37 years) w/range September 13 October 18 = October 2
Latest departure = October 18, 1983 immature ♂ Springfield (window kill)

This grayish-brown thrush was a long-winged bird indicating it migrated long distances. Like most thrushes it was found in woodland near the ground. They could be difficult to separate from other thrushes unless the observer had a good view of the face and back. Gray-cheeked Thrushes infrequently sang in spring and rarely in fall. They could occasionally be lured in view by imitating their burred call note. Numbers seemed to be declining through the study, but there was a lot of variation in numbers from year to year. It usually arrived in spring in April (25 times), but arrived in May in 12 years. The only other early arrival was April 18, 1985 at Carpenter Park. High spring counts were: 25, May 19, 1974; 38, May 8, 1976; and 29, May 9, 2005. This thrush departed in May, except for four years in early June: see above; June 3, 1971; (2) June 2, 1975; June 1, 2003. They breed in the stunted coniferous forests and scrub in tundra in northern Canada and Alaska. Fall numbers were much less than spring (1 to 4.3), because this thrush deflected east to the East Coast and then flew south in fall. Most fall arrivals were in September (28) with only nine arrivals in August. High counts for fall were: 8, September 20, 1971; 14(tv kills), September 17, 1980; and 8, September 22, 1985. Besides the late departure above, there were two October 17 dates (1984 & 1999). The subspecies migrating through the county was apparently the northern C. m. aliciae (see Phillips, 1991). A few of the wing measurements of the specimens barely fell within the range of Bicknell's Thrush (Catharus bicknelli) but these were in the overlap zone with Gray-cheeked Thrush. One specimen (not listed below) had a slightly more reddish cast to the upperparts and was determined to be a Veery (C. f. salicicola). Identification of the thrushes was not always easy! The Gray-cheeked Thrush winters in northern South America.

September 5 – October 14, wts. = 31.8 - 35.1 gms; immature $\bigcirc \bigcirc \bigcirc = 7$, tv tower (6) & Spfld, September 3 – October 18, wts. = 29.7 - 35.6 gms; adult $\bigcirc \bigcirc = 7$, all tv tower, August 31 -October 4, wts. = 27.4 - 33.9 gms; immature $\bigcirc \bigcirc = 2$, both tv tower, September 8 – 16, wts. = 36.3 - 37.3 gms.

Highest # Days/Season

Spring25 (1984)Summer1 (4 years)Fall15 (1975)

Highest # Birds/Season

Spring176 (1976)Summer2 (1975)Fall37 (1975)

Swainson's Thrush

Catharus ustulatus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	7209/1091 (37)	53/35 (19) sp mig	2492/746 (37)	0/0	9754/1872
Average/day	6.61	1.51	3.34		5.21
Average/season	194.84	2.79	67.35		

Status: Common Spring Migrant and Fairly Common Fall Migrant

Dates:

- Spring: Earliest arrival = April 12, 2005 Washington Park Average arrival (37 years) w/range April 12 – May 5 = April 21 Average departure (35 years) w/range May 24 – June 9 = June 1 Latest departure = June 9, 1998 Washington Park
- Fall: Earliest arrival = August 12, 1976 Washington Park
 Average arrival (37 years) w/range August 12 September 10 = August 28
 Average departure (37 years) w/range September 26 October 26 = October 7
 Latest departure = October 26, 1980 Carpenter Park

This was the most numerous of the brown-backed thrushes in this study, and it almost always showed a buffy evering. The Swainson's Thrush was found in woodland, parks, cemeteries, and residential areas. Like most thrushes, they stayed low in the vegetation, but they also came out to the cinder road at Carpenter Park and were easy to see there. Spring numbers were 2.9 times fall numbers, but singing made it easier to find these birds in spring. Chronologically, this thrush arrived after the Hermit Thrush, but a little before the Wood, Gray-cheeked or Veery thrushes on average. Two other early spring arrival dates were April 14, 1974 & 1992. High spring counts were: 38, May 14, 1981; 46, May 15, 1992; 38, May 15, 1995; and 60, May 15, 2005. Half the years of the study this thrush stayed into June. The most birds into June were nine in 1997. The high summer daily counts were, 5, June 1, 1983 & 1997. Other late spring records were June 6, 1976 and June 5, 1992 & 2003. This thrush breeds in the Northeast, the mountains of the US, and in most of the woodland of Alaska and Canada. August 12, 2005 stands alone as an early fall arrival date, with the next earliest dates being August 21, 1975 & 1993. Some falls were dry, and I think a lot of thrushes over flew this area under dry conditions. This thrush was a frequent victim of tall tv transmitting towers with a total of 365 killed in Sangamon County, with 107 in one night on September 17, 1958 (Parmalee and Parmalee, 1959). One of the best ways to locate thrushes in fall was to search for fruiting trees and vines. This thrush was the most likely brownbacked thrush to be found feeding with American Robins at fruiting trees. Besides feeding on wild black cherry early, they also were seen feeding on grape and honeysuckle later. Rarely, they sang partial songs in fall, such as September 11, 1979 and September 10, 2000. Plus, they gave their call note "bot" fairly often. High counts for fall were: 35, September 19, 1970; 32, September 20, 1971; 26, September 10, 1989; 23, September 12, 1997; and 23, September 17, 1998. Other late departure dates were: October 21, 1975 & 1979 at Carpenter Park and October 25, 1982 at Washington Park. The majority of specimens in the ISM collection are C. u. swainsoni from the north, but some of these are less bright dorsally (more gray?). There are also

some (17 percent) that are darker olive dorsally and have grayer flanks. I believe these are C. u. *incanus* from the northwest. The Swainson's Thrush winters from central Mexico south to northern Argentina.

Documentation: Specimens = 52) IL. Sangamon Co., Spring = 8, $\Diamond \Diamond = 3$, Spfld (2) & Rochester, April 26 – May 16, wts. = 29.2 – 43.7 gms, testes = 2 – 4 mm; $\bigcirc \bigcirc = 5$, Spfld (3) & LSpfld (2), April 26 – May 23, wts. = 26.9 – 32.8 gms, ovaries = 3 – 8 mm; Fall = 44, adult $\Diamond \Diamond = 9$, tv tower (8) & LSpfld, September 7 – October 4, wts. = 26.9 – 35.7 gms; immature $\Diamond \Diamond = 11$, tv tower (9) & Spfld (2), September 8 – October 4, wts. = 25.6 – 35.6 gms (9 showing buff spots on wing); adult $\bigcirc \bigcirc = 17$, all tv tower, August 31 – October 1, wts. = 26.6 – 37.3 gms; immature $\bigcirc \bigcirc = 7$, all tv tower, September 3 – October 4, wts. = 25.0 – 34.5 gms (5 showing buff spots on wing).

Highest # Days/Season

Spring40 (1992)Summer4 (1976 & 1997)Fall35 (1998)

Highest # Birds/Season

Spring396 (2005)Summer9 (1997)Fall146 (1998)

Hermit Thrush

Catharus guttatus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	3991/996 (37)	1/1 (1)	2559/839 (37)	265/145 (24)	6816/1981
Average/day	4.01	1.0	3.05	1.83	3.44
Average/season	107.86	1.0	69.16	11.04	

Status: Common Migrant and Uncommon Winter Resident

Dates:

- Spring: Earliest arrival = March 3, 1974 Carpenter Park (arbitrary due to WR) Average arrival (36 years) w/range March 3 – April 13 = March 29 Average departure (36 years) w/range April 29 – June 1 = May 8 Latest departure = June 1, 2003 Lincoln Gardens
- Fall: Earliest arrival = September 24, 1972 Washington Park
 Average arrival (37 years) w/range September 24 October 7 = October 1
 Average departure (37 years) w/range October 24 December 16 = November 18
 Latest departure = December 16, 2003 four near LSpfld (arbitrary due to WR)

This was the earliest arriving in spring and latest departing in fall of the *Catharus* thrushes, plus it was increasing in winter. Almost all **spring** arrivals were in late March (22 years) or early April (13 years). High daily counts for spring were usually 5 to 12, but were somewhat higher from 1992 – 1997. High spring counts were: 15, April 12, 1980; 21, April 19, 1993; 34, April 21, 1994; 25, April 10, 1995; 39, April 16, 1997; 7, May 3, 1973; and 23, April 6, 2006. Occasionally, I heard this thrush sing in spring: April 14, 1976; April 15, 1980 (in the snow); April 9, 1989 (plus gave towhee-like introductory notes); April 22, 2001 (at Round Inlet); March 29, 1998 (at Lincoln Gardens); April 4, 2003 (Washington Park – giving whisper song) and March 15 to April 1, 2006 (Lincoln Gardens – usually in the evening). They sounded like a hoarse Wood Thrush. On April 7, 2004, I saw two of these thrushes, which usually fed on the ground or in low vegetation, flycatching in the tops of tall trees at North Pt. Although June 1, 2003 was the latest departure there were several other late dates: May 14, 1973 & 1999; May 15, 1974; and May 18, 2006. This thrush breeds in the northern US and boreal Canada. Fall migration started in late September (15 years) or early October (22 years). These thrushes occasionally occurred in loose flocks, e. g: six were at Carpenter Park on October 17, 1982. Overall, fall numbers were 1.6 times less than spring numbers, and all brown-thrush numbers in fall were less than spring numbers. Mid-October, as shown by high counts, evidenced from banding, and tv tower kills was the peak time for this species. Most counts in fall were 10 or less birds, but other high counts were: 12, October 14, 1978; 18, October 12, 1991; 13, October 8, 1998; and 16, October 13, 2004. One tv tower kill that occurred October 14, 1985 included 40 Hermit Thrushes (only 11 others were found in all other tv tower kills). In fall, like winter, this species was usually detected by its "chuck " note, but it also gave a towhee squeal and another harsher note which I heard at Lincoln Gardens November 8, 2003. Rarely, they sang in fall, I heard them at Lincoln Gardens November 11, 2003 and at the Woods by Lake Springfield November 27, 2003. On October 22, 1998 a Sharp-shinned Hawk chased a Hermit Thrush at

Lincoln Gardens. The thrush flew a short distance, landed, and "froze" until the hawk left. The last migrants of fall can easily be confused with winter residents. In 1997 these winter thrushes increased and they had continued to do so most winters. This was especially true in 2003-04 with 85 and 2005-06 with 83. High daily counts for winter were 9, December 14, 2003 and 7, January 1, 2006. The increase may be due to climate change, but the spread of honey-suckle provided shelter and berries. They also eat other berries such as poison ivy, cedar, and grapes. In winter, these thrushes were fairly easy to spish up or attract by screech-owl calls. Also when it was cold, they had the propensity to come to the edge of the woods in early morning to warm in the sun. Most wintering birds were found in sheltered areas such as the Warm-water Ditch or Washington Park, but recently they had occurred in most wooded places, even in hedge rows like one at Buckhart January 8, 2006. There were two singing records for winter at Lake Springfield on December 2 and 9, 1997. Whether most survived the winter was unknown, but I had seen birds in the same areas all winter and into March. I caught two oddities of this thrush at Carpenter Park: on May 9, 1974 a thrush with very cinnamon under-tail coverts, and on May 4, 1975 a pale thrush with reduced spotting on the breast. The subspecies usually found in Sangamon County is C. g. faxoni the Eastern Hermit Thrush. There were two duller (with less tawny) specimens (\mathcal{Q} April 13, 2008 & A October 15, 1985) which could be a western subspecies, but I did not have comparative specimens. I occasionally saw duller grayer birds, but identifying single birds to subspecies was very difficult, plus Hermit Thrushes showed gray and brown phases. One particularly gray thrush was at Oak Ridge Cemetery March 30, 2006, only the tail was reddish.

Documentation: Specimens = 43) IL. Sangamon Co., Spring = 6, $\Im \Im = 3$, LSpfld, April 13 – 18, wts. = 25.1 – 32.3 gms, testes = 2 – 4 mm; $\Im \Im = 3$, Spfld, April 13 – 29, wts. = 28.9 – 30.8 gms, ovaries = 6 – 8 mm; Fall = 37, adult $\Im \Im = 9$, all tv tower, October 9 – 14, wts. = 29.0 – 32.5 gms; immature $\Im \Im = 6$, tv tower(5) & Spfld, October 14 – 24, wts. = 25.7 – 33.3 gms; adult $\Im \Im = 8$, tv tower (7) & LSpfld, October 9 – 24, wts. = 28.2 – 35.9 gms; immature $\Im \Im = 14$, tv tower (8) & LSpfld (3) & Spfld (2) & New City, September 30 – October 27, wts. = 24.0 – 32.8 gms.

Highest # Days/Season

Spring40 (1974 & 2006)Summer1 (2003)Fall41 (2000 & 2003)Winter41 (2005)

Highest # Birds/Season

Spring285 (1997)Summer1 (2003)Fall135 (1991)Winter85 (2003)

Wood Thrush

Hylocichla mustelina

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1841/781 (37)	1003/577 (37)	753/546 (37)	1/1 (1)	3598/1905
Average/day	2.48	1.74	1.38	1.0	1.89
Average/season	49.76	27.11	20.35	1.0	

Status: Fairly Common Spring Migrant and Uncommon Summer Resident and Fall Migrant

Dates:

Spring: Earliest arrival = **April 16**, 1994 Washington Park Average arrival (37 years) w/range April 16 – May 2 = **April 25**

Fall: Average departure (37 years) w/range September 5 – December 2 = **October 6** Latest departure = **December 2**, 2006 Marine Pt.

The flute-like singing of the Wood Thrush was one of the most beautiful bird songs to hear in this area, and it was also the best way to detect the species. It also had a distinctive series of shudder call notes. All **spring** arrival dates were in April except 1978 – 1980 which were in early May. The severe winters of this period could possibly be the cause of the delay. Other early dates were April 19, 1976 & 2008 and April 18, 1981 & 2007. High counts for spring were mostly in the single digits, but there were 19, May 8, 1976 and 11, May 7, 1994. Numbers had declined in spring later in the study. The BBS also showed declining numbers in summer both before this study (by an earlier observer) and after 1993, and it was recorded only 18 of the 31 years of the survey. The Sangamon River Census also showed declining numbers. The high count in summer was 9, July 4, 1980. This thrush nested in woodland, but apparently did not do well in the county because of cowbirds and predation. In the summer of 2002 I found 17 singing males in 14 areas (see Table 32). Nest building was seen May 3 – 19 at Carpenter Park. Copulation occurred four times in quick succession at Washington Park on May 28, 2007, while another adult looked on (helper at nest?). One nest at Washington Park contained two thrush and five cowbird eggs on May 25, 2004. Three thrush young had just hatched in the same area on May 26, 2005. Plus, there was one well-feathered young in a nest at Washington Park July 23, 2003. There were four eggs at Lincoln Gardens on May 21, 2004, but brush clearing disrupted the nesting. Fledged young were seen July 4,1980 northwest of Springfield; an adult was feeding a cowbird at Lick Creek June 26, 1984; an adult was feeding young at Clear Lake August 14, 1998; and an adult with bob-tail young August 19, 2004 was at Sangchris. Though particularly vocal in early morning and late evening, one was heard singing in the heat of the day at Washington Park on July 15, 2006. Singing continued until August, with the last dates being August 11, 1999, August 7, 2000 and August 18, 2003. My notes showed molt in adults from July 13 -September 15 and in immatures (mostly head and body) from August 21 – September 25. Two tower kills had some pinfeathers especially around the nape on September 26, 2007. Fall migrants were difficult to detect since they were not vocalizing and early birds could be confused with summer residents. High daily counts in fall were only 2 - 6, with 6, August 16, 1986. Most years these thrushes stayed into October (26 years), but left in September in 13 years. Stragglers occurred on

November 4-12, 1991 at Washington Park; November 12, 2004 at the Lake Nursery. One photographed during the **winter** period in the snow at Marine Pt. December 2, 2006. The Wood Thrush winters from Mexico through Central America.

Documentation: Specimens = 19) IL. Sangamon Co., Spring = 4, \bigcirc = 1, Spfld, May 7, wt. = 49.7 gms, testes = 10 mm; $\bigcirc \bigcirc \bigcirc = 2$, Spfld & east Spfld, May 6 – 8, wts. = 47.7 – 49.4 gms, ovaries = 9 mm; unsexed = 1, Spfld, May 19; Fall = 15, adult $\bigcirc \bigcirc \bigcirc = 2$, both tv tower, September 21 – October 5, wts. = 48.1 – 50.7 gms; immature $\bigcirc \bigcirc \bigcirc = 7$, tv tower (6) & Spfld, September 2 – October 14, wts. = 51.6 – 64.7 gms; adult $\bigcirc \bigcirc = 1$, tv tower, September 20; immature $\bigcirc \bigcirc \bigcirc = 5$, all tv tower, September 4 – October 24, wts. = 47.9 – 60.0 gms.

# Days/Season	Highest	# Birds/Season
31 (1985, 1994, 2004)	Spring	100 (1982)
35 (2006)	Summer	67 (1982)
31 (1980)	Fall	52 (1986)
1 (2006)	Winter	1 (2006)
	# Days/Season 31 (1985, 1994, 2004) 35 (2006) 31 (1980) 1 (2006)	31 (1985, 1994, 2004) Spring 35 (2006) Summer 31 (1980) Fall

Table 32. Wood Thrush Pairs and/or Singing Males in Sangamon County, Summer 2002

June 9	East of Pawnee			
June 11	Sangchris, by pond			
June 18	South Fork east of Lake Springfield			
June 19	3 ♂♂ Lick Creek Marsh			
June 21	Carpenter Park			
June 26	Wahl Road, north end			
June 27	Sangchris, along main road			
June 30	northeast of Pleasant Plains			
July 3	Horse Creek, south			
July 5	2 ♂♂ Horse Creek, north			
July 6	Jefferies Orchard, west end			
July 6	John Wayne Road			
July 13	Jefferies Orchard, saw mill road			
July 28	Buckhart Bridge			

American Robin

Turdus migratorius

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	94431/3145 (37)	32793/1800 (37)	124883/3900 (37)	26451/1639 (37)	278558/10484
Average/day	30.03	18.22	32.02	16.14	26.57
Average/season	2552.19	886.30	3375.22	714.89	

Status: Very Common Migrant and Summer Resident and Common, but Variable Winter Resident.

Dates:

Spring: Earliest arrival = January 8, 2006 (arbitrary due to WR) Average arrival (31 years) w/range January 8 – March 2 = February 9

Fall:Average departure (29 years) w/range November 4–December 17 = November 22
Latest departure = December 17, 1978 (arbitrary due to WR)

When my friend Beckie used to work in her garden, a robin followed her and she would toss it earthworms she had uncovered. This illustrates that the American Robin, a thrush, had adapted to humans, but I often wondered what its population and distribution were like before humans were on the scene. They bred in almost all habitats from forest to open pastures, and placed their nests nearly anywhere. Robins were abundant in the study, and were 7th on the total days list and 12th on the total numbers list. Though there were usually some robins in winter, a noticeable influx occurred in spring. Cold, wet weather caused them to feed up by roads and it was a common sight to see road killed robins in spring. This was noted especially March 15, 1997 and April 10, 1982. High counts for spring were: 300, March 21, 1975; 250, March 17, 1984; 275, March 6, 1999; and 330, March 26, 2002. Though an early migrant, flocks could still be seen in mid- to late April, particularly in places such as Washington Park. The dawn chorus of robins began about March 10 to 20 and was a little earlier in the city than the rural areas. In summer on the BBS the robin ranked fifth and the numbers were somewhat higher from 1997-2003. Copulation was seen April 16 to 26 and nest building was observed April 6 to June 24, but mostly in April. Females were seen on the nest (with eggs?) April 4 to June 27. Of 25 nests with eggs, the dates were from April 12 to June 25 and numbers of eggs were: one (2 nests) April 22 - 24; two (4 nests) April 12 – June 21; three (9 nests) April 18 – June 5; four (10 nests) April 25 – June 25. Young were seen in the nest from April 25 to July 12. Fledged young were seen May 10 to September 10 (bob-tailed young), but most were in May and June. The robin nested at least twice a season. I had noted birds still with spots in September and October and one on November 24. Though partial or whispered songs could be heard any time, cessation of song occurred August 26, 1980, August 21, 1999 and August 14, 2000. By July and August this thrush had gathered in flocks and returned to the woods and fields; my earliest date for this phenomenon was July 6, 1994. They could be seen in the evenings flying to roost in standing cornfields at this season. High counts for fall were: 300, October 14, 1974; 330, November 25, 1977; 250, September 20, 1983; 450, October 7, 1985; 1170, October 30, 1991; and 585, October 28, 2000. Earlier in the study most robins usually left some winters (1972-1974, 1976, 1978, 1981), but starting in the winter of 1982-83, they stayed in fair to good numbers. I had found them roosting in several

places around Lake Springfield and most recently with the blackbirds at the Cinder Flats. They were especially prevalent in early winter when they flocked with Cedar Waxwings and fed in honeysuckle. Other foods they consumed were red cedar berries, multiflora rose hips, crabapples, hackberries, hawthorn berries, wild grapes, and persimmons. On February 4, 2002 a flock was on a south facing hillside at Oak Ridge Cemetery flipping over leaves. High counts for winter were: 1150, December 1, 1979; 250, January 7, 1994; 172, February 24, 2001; 216, January 1, 2004; and 355 February 7, 2006. Plumage differences were great in this species and the leucistic birds were too many to mention. I saw one bird at Lincoln Gardens on April 4, 1982 that did not have any orange in the breast, it was grayish-tan, and the back, wings and tail were grayish, with the overall appearance similar to the San Lucas Robin (*T. confines*). However, this appearance was more likely due to pigment malfunction. The subspecies most prominent and the breeding population is the nominate form, but in winter I had seen and photographed much darker birds with little white on the throat and black in the back, these I think, are *T. m. nigrideus* from the Northeast.

Documentation: Specimens = 44) IL. Sangamon Co., juveniles = 9, June 4 - August 31, $\bigcirc \bigcirc$ wts. = 61.5 - 76.4 gms, \bigcirc wt = 77.6 gms, one albino - no sex or wt. - August 31, 1967; adults = 35, $\bigcirc \bigcirc \bigcirc = 24$, Sangamon Co., March 9 - November 14, wts. = 48.0 - 88.6 gms, testes = 1.5 - 15 mm; $\bigcirc \bigcirc = 11$, Sangamon Co., January 17 - November 4, wts. = 48.5 - 96.0 gms, ovaries = 3.5 - 15 mm, gizzards with rose hips and honeysuckle berries.

Highest # Days/Season

 Spring
 92 (10 years) maxed

 Summer
 61 (6 years) maxed

 Fall
 122 (2001 & 2004) maxed

 Winter
 88 (2003)

Highest # Birds/Season

Spring	5168 (1982)
Summer	2065 (2000)
Fall	5917 (1998)
Winter	3853 (2005)

Varied Thrush

Ixoreus naevius

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	2/2 (2)	0/0	5/5 (1)	16/16 (6)	23/23
Average/day	1.0		1.0	1.0	1.0
Average/season	1.0		5.0	2.67	

Status: Very Rare Migrant and Winter Resident

Dates:

- Fall:Earliest arrival = November 16, 1976 ♂ Washington ParkAverage arrival (6 years) w/range November 16 January 14 = December 25
- Spring: Average departure (5 years) w/range January 22 April 6 = February 19 Latest departure = April 6, 1992 ♀ Adams Sanctuary

I had six records (some with photographs) during the study for this rare thrush from Western North America. These were: male, Lake Springfield (B.Scheibling), January 7 – February 12, 1975; male, Washington Park, November 16 – December 4, 1976; immature male, Washington Park, January 14 – March 2, 1987; male, north of Washington Park (J.Hayes), December 24, 1990 – January 27, 1991; female in worn plumage, Adams Sanctuary, December 27, 1991 – April 6, 1992; female, north of Andrew (KB) December 27, 2003 – January 22, 2004. This thrush was a forest species, usually wary and secretive and stayed near the ground. Fortunately, they also attended feeders, where they were easier to view. Many times these thrushes were alone, but occasionally it could be found with flocks of robins feeding on berries or turning over leaves. The subspecies of the east-wandering birds is *I. n. meruloides*. They breed in forest of northwestern North America and usually winter along the West Coast.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 660180 adult \Diamond , north of Washington Park, January 27, 1991 coll. by S. Harbison, wt. = 83.0 gms, testes = 3 mm. First Illinois specimen (see Bohlen, 1991).

Gray Catbird

Dumetella carolinensis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	6917/1141 (37)	7461/1595 (37)	12313/2246 (37)	17/16 (6)	26708/4998
Average/day	6.06	4.68	5.48	1.06	5.34
Average/season	186.95	201.65	332.78	2.83	

Status: Common Migrant and Summer Resident and Very Rare Winter Resident

Dates:

- Spring: Earliest arrival = April 19, 1998, 2002, & 2004 Sangamon Co. Average arrival (37 years) w/range April 19 – May 8 = April 25
- Fall: Average departure (37 years) w/range October 7 26 = October 17 Latest departure = October 26, 2002 Cinder Flats & 2003 Muni (including stragglers into Nov. & Dec. average departure = November 6 and latest departure = December 23, 1977 CP – also see WR)

Catbirds were one of the most common neotropical migrants in Sangamon County and they were skulkers in brushy and second growth habitats. They usually arrived in **spring** in late April, but in three years (1971, 1978, and 1980) they were not found until May. This suggested they were occasionally delayed, probably by weather. High counts for spring were usually in early May: 15, May 8, 1973; 25, May 8, 1976; 24, May 2, 1983; 25, May 6, 1989; 37, May 7, 1994; 34, May 8, 1995; and 21, May 6, 2002 & 2006. However, some flights were later in May and some of these records probably reflected singing summer residents as well as migrants: 25, May 14, 1983; 19, May 25, 1998; 26, May13, 2002; and 17, May 13, 2005. Numbers in summer were nearly as high as during migration. High counts for summer were: 20, July 20, 1971; 22, July 2, 1974; 26, June 11, 1979; and 22, June 4, 1991. The Breeding Bird Survey (BBS) showed the catbird ranked 25th and was recorded 30 years with the high count of 13 in 1980. It also showed the numbers dropped and that the catbird was most numerous between 1976 – 1983. However, the numbers doubled on the Sangamon River Census from 1976 to 1991. Catbirds were fairly vocal, and one was singing as early as April 22, 2002. They sang in May, June, July and August, until August 31, 1999 and August 7, 2000. Later singing might have been shorter in duration. One was singing at night southwest of Springfield on May 23, 2001. I noted a catbird mimicking the song of a Scarlet Tanager at Washington Park on May 21, 1996. Nest building was observed from May 8 – July 6, 1993 suggesting a second nesting. A catbird and a Brown Thrasher nests were in the same rose bush south of Springfield on June 21, 1977. I found seven catbird nests, five with 3 - 5 eggs from May 17 - July 27; one nest with 5 eggs (3 catbird, plus one on ground) and one cowbird egg May 29, 1993; and two well feathered young in a nest June 21, 1977. Fledged young were seen as early as June 7, but most were seen in mid-June and July and as late as August 14, 1983 when bob-tailed young were seen. On August 18, 1980, I caught five young catbirds at Lincoln Gardens which could be distinguished from adults by shorter wings and tail, and some by shorter bill measurement, pinkish or yellowish inside the upper mandible (dark in adults), grayish brown iris (red brown in adults), and brownish wing coverts. Molt was observed from August 18 to September 16. Fall birds out numbered spring birds by 1.8 to one probably

due to production of young, but note that both spring and fall had summer residents mixed in with migrant numbers. According to tv tower kills catbirds began **fall** migration at least by September 3. Due to summer residents, it was not possible to determine if certain sex or age groups migrated first using banding data, but tv tower data showed there was no differential migration in fall. My fall data suggested that numbers were lower (had decreased) in the 1990s and 2000s because more hours were spent in the field and fewer catbirds were seen than in the late 1970s and early 1980s. High counts for fall showed either summer residents in August and /or migrants later in September and October. High counts were: 40, October 3, 1971; 25, August 5, 1978; 26, October 1, 1986; and 66, September 21, 2001. One catbird at Sangchris October 23, 1992 was in a "dove hunting area" and had the upper mandible shot off. Catbirds showed a propensity to straggle into late fall and winter. Therefore, after October 26, I considered them stragglers, my records showed 35 birds in November, 10 birds in December, and 5 birds (all in 2004) in January. It was interesting to note that a dead catbird found October 22, 1976 had a cancerous ovary. How many other late birds were sick or had hit windows etc. that prevented them from migrating? The high count for winter was 2, January 1, 2004. The first winter record was not until 1993 and they seemed to be increasing in winter, and using the same areas and some could be the same individuals returning (see Table 33). One on November 8, 1978 was eating multiflora hips and dogwood berries and on October 2, 1992 a catbird was eating a walking stick. Many times, I had noted catbirds eating pokeberries, and the plumage was stained with purple. The breeding population and most migrants in the county are the nominate form, but six males and five females in the ISM collection are lighter colored and indicate that the western subspecies D. c. ruficrissa also occurred in migration. The catbird usually winters from the Gulf States south to Panama.

Documentation: Specimens = 62) IL. Sangamon Co., [most specimens from tv kills] Spring & Summer = 22, $\Im \Im = 13$, May 7 – July 12, wts. = 31.2 - 36.7 gms, testes = 5.5 – 10 mm, gizzards contained one with caterpillars & one with mulberries; $\Im \Im = 9$, Sangamon Co., May 7 – late July, wts. = 31.8 – 34.4 gms, ovaries = 7 – 12 mm, (late July bird = juvenile); Fall = 40, adult $\Im \Im = 12$, Sangamon Co., August 2 – October 4, wts. = 32.6 – 42.6 gms; immature $\Im \Im = 9$, Sangamon Co., August 27 – October 14, wts. = 35.6 – 39.9 gms (August 27 bird = juvenile); adult $\Im \Im = 6$, Sangamon Co., September 16 – October 7, wts. = 36.6 – 44.0 gms; immature $\Im \Im = 13$, Sangamon Co., August 25 – October 22, wts. = 31.1 – 43.4 gms.

Highest # Days/Season

 Spring
 41 (2004)

 Summer
 61 (4 years) maxed

 Fall
 79 (1982)

 Winter
 10 (2003)

Highest # Birds/Season

Spring346 (2003)Summer419 (2000)Fall655 (1979)Winter11 (2003)

1993	December 17	Carpenter Park
1994	December 11	Oak Ridge Cemetery
1997	December 23	Carpenter Park
2003-04	December 3 – January 16 December 6 – January 10 December 22 – January 1	south of Springfield Cinder Flats girl scout area
2004	December 5 – 19	Cinder Flats
2005	December 6	Cinder Flats

Addendum:

2009	January 19 February 6	Cinder Flats Hazel Dell
2009	December 15 December 17 December 24	Hazel Dell Hunter Lake Washington Park

Northern Mockingbird

Mimus polyglottos

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	2441/1225 (37)	2918/873 (37)	2375/1224 (37)	1445/885 (37)	9179/4207
Average/day	1.99	3.34	1.94	1.63	2.18
Average/season	65.97	78.86	64.19	39.05	

Status: Fairly Common Migrant and/or Permanent Resident and Summer Resident, and Uncommon Winter Resident

Dates:

[Arrivals and departures of this species obscured by SR & WR – see text]

This gray bird with a long tail and white wing patches was both a migrant and permanent resident in the county. The mockingbird was recorded on all 148 seasons of the study, although some numbers in some seasons were very low. Winter kill, or the option to migrate, was very evident in the numbers in the late 1970s and early 1980s when most of the population seemingly became migrants at that time because they presumedly survived and / or most of the wintering birds died. This was provable since the summer population had remained somewhat stable, while the winter population was very low (see Figure 26). The "normal" population numbers did not come back until 1989. In the first ten years of the study the densest population was in the northwest part of the county but later they were more evenly distributed. Spring migration, as much as I could determine, took place from February 27 to May 4, with most migration in April. High counts for spring were: 12, May 22, 1995; 15, May 25, 1998; 12, May 29, 2000; and 12, May 2, 2006. Some of these counts may have included birds on territory. Singing in spring began in late March, the dates were March 19 - 27. The highest numbers of this species were in summer, with high counts: 16, June 11, 1977; 18, July 4, 2000; and 18, June 20, 2003. The mockingbird was 27th on the BBS and was seen every year (31 years) with fluctuating numbers that were highest before the severe winters of the late 1970s. Most nesting was in open brushy areas, farm yards, and cemeteries. Four young were in the nest at Mechanicsburg Cemetery on June 24, 1996. Fledged young were noted between June 4 and August 17. One juvenile still had spots on the breast September 10, 2006. Singing stopped for a while, with cessation dates July 20, 1999 and August 3, 2000. However, they began singing again presumedly to protect food resources and continued from late September to at least late October. Migrants in fall were seen from August 19 to October 16, and one was observed migrating diurnally with Blue Jays on September 28, 1985. High counts for fall were: 13, September 30, 1992; 11, August 10, 1996; and 16, August 3, 2000. Mockingbirds that over-wintered usually defended a berry tree(s), some attended feeders, and there was some moving about when the food ran out. Winter numbers were very low from 1978-79 to 1988-89. High counts for winter were usually five or less, but there were 6, January 7, 1990; 6, January 6, 2001; 6, December 26, 2004; and 6, February 2 & 18, 2006. One leucistic bird which was mostly white with a few gray feathers was seen September 10, 2004 at Jefferies Orchard. This species mimics a wide variety of other birds and sounds. One mockingbird on April 1, 1990 mimicked a kingfisher, titmouse, and killdeer. The subspecies is the eastern North American nominate form.

Documentation: Specimens = 4) IL. Sangamon Co., ISM# 660361 juvenile 3, 7 mi southeast Spfld, July 16, 1993, coll. by HDB, wt. = 57.0 gms, testes = 2 mm; ISM# 660607 juvenile 3, 1 mi south Berry, July 18, 2002, coll. by HDB, wt. = 50.3 gms, testes = 2 mm; ISM# 605773 3, 8 mi east Spfld, September 30, 1973, coll. by HDB, wt. = 55.9 gms, testes = 2.5 mm; ISM# 608497 3, 2 mi north Spaulding, March 29, 1986, coll. by HDB, wt. = 62.1 gms, testes = 4.5 mm.

Highest # Days/Season

Spring72 (2005)Summer51 (2005)Fall74 (2006)Winter52 (1993 & 2003)

Highest # Birds/SeasonSpring180 (2005)Summer240 (2004)Fall165 (2002)

Winter 96 (2003)

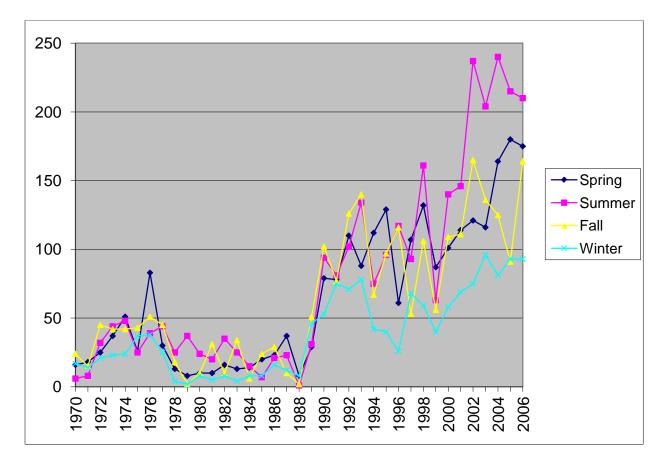


Figure 26. Northern Mockingbird Numbers by Season 1970–2006.

Brown Thrasher

Toxostoma rufum

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	11929/2126 (37)	5287/1469 (37)	5584/1847 (37)	94/87 (29)	22894/5529
Average/day	5.61	3.60	3.02	1.08	4.14
Average/season	322.41	142.89	150.92	3.24	

Status: Common Spring Migrant, Fairly Common Summer Resident and Fall Migrant and Occasional Winter Resident.

Dates:

Fall:Average departure (37 years) w/ range October 6 – November 30 = November 14Latest departure = November 30, 2002 LSpfld (arbitrary due to WR)

The return of this thrasher and the hearing of its song, which carried a considerable distance, was one of the highlights of early **spring**. Singing usually started shortly after arrival, but I noted (in eleven years) it commenced between March 12 and April 14, with later dates due to cooler weather. Brown Thrashers were found along woodland edge, brushy areas, residential property and sometimes out in open fields as were two on April 16, 1983. Nearly all spring arrivals were in March except April 4, 1971 and April 2, 1980. Spring numbers were higher than fall numbers (2.1 to 1), which may have to do with the thicker vegetation and less vocalizations in fall. High counts in spring were: 40, May 5, 1973; 25, April 22, 1974; 25, May 6, 1976; and 26, May 5, 1979. Thrasher numbers had dropped the last few years of the study. It ranked 29th on the BBS and was seen every year with a dip in numbers from 1994 – 1996. High summer counts occurred early in the study with: 23, July 2, 1974; 25, June 13, 1978; and 20, June 11, 1979. Nest building was seen from May 4 to June 25. From eleven nests, with 1-5 eggs, the egg dates were April 21 to June 13, but most were in May. On April 25, 1990 at Carpenter Park, one nest had a Blue Racer in it, indicating predation. Adults were on the nest as early as April 7 to June 18, and young were seen in the nest from only June 18 - 20. Fledged young were observed between May 14 to July 16, mostly in June. Cessation of singing was fairly early in this species, being July 18, 2000, but whisper songs were heard on September 2 and 12. Also, partial or whisper songs were heard September 23, 2003 and August 10, 2006. I noted the thrasher also mimics other birds, as it did a Whip-poor-will on May 18, 1995, June 24, 1997 and July 6, 2000. Molt was observed from July 15 to September 2. This thrasher ate dogwood berries at Sangchris on September 10, 1999. There was some build up of migrants in September and early October, but fall arrivals were obscured by summer residents. High counts for fall were: 30, September 18, 1971; 20, September 29, 1979; 18, August 3, 1981; 20, September 7, 1982; and 20, September 14, 1989. Past mid-October and into November most birds seen were stragglers and numbers varied from year to year. There were 3, November 24, 1976. This species was seen in small numbers in winter in all but eight years. However, they did not always survive the winter, e. g. one was up by the road because of snow on January 1, 1974; one tried to seek refuge in a garage but died January 16, 1977; one was found dead in a yard north of Andrew January 9, 1990. Some went to

Spring: Earliest arrival = March 3, 1981 two LSpfld (arbitrary due to WR) Average arrival (37 years) w/range March 3 – April 4 = March 23

feeding stations in severe weather as did one at the Research & Collection Center in February 2008. A few birds did make it through the winter as I observed them in February and March. There were several winter high counts of two, but there were 3, December 7, 1975. On April 27, 1982 there was a leucistic bird at Washington Park, which was creamy-colored with some brown in the back, plus I could see the faint wingbars and breast streaking. The subspecies in this county is the nominate form. Three spring and summer ISM specimens are paler dorsally, but this could be due to wear.

Documentation: Specimens = 17) IL. Sangamon Co., Spring = 9, $\bigcirc \bigcirc \bigcirc = 3$, April 28 – May 22, wts. = 69.8 – 80.1 gms, testes = 11 – 13 mm (May 14 - very worn); $\bigcirc \bigcirc = 5$, Sangamon Co., April 5 – May 28, wts. = 69.0 – 77.1 gms, ovaries = 7 – 15 mm (April 19 – moderately worn); sex? = 1, Sangamon Co., April 22, wt. = 58.1 gms; Summer = 2, $\bigcirc \bigcirc = 2$, Sangamon Co., juvenile June 3 & adult June 4, wts. = juvenile 57.6 gms & adult 56.3 gms, ovary of adult = 11 mm (& bird worn especially tail, from sitting on nest?); Fall = 5, $\bigcirc \bigcirc = 2$, tv tower, both October 5, wts. = 73.1 – 80.7 gms; $\bigcirc \bigcirc \cong 3$, LSpfld (2) & tv tower, August 10 – October 5, wts. = 67.7 – 75.3 gms, (2, August 10 birds in molt); Winter = 1 \bigcirc , south Spfld, January 16, wt. = 54.4 gms.

Highest # Days/Season

Spring69 (1995 & 2000)Summer56 (1982 & 2000)Fall79 (1982)Winter14 (1970)

Highest # Birds/Season

Spring506 (1979)Summer258 (2000)Fall263 (1977 & 1982)Winter16 (1970)

European Starling

Sturnus vulgaris

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	Х	Х	Х	Х	thousands
Average/day					
Average/season					

Status: Very Common Permanent Resident

Although this introduced bird was black, it was not in the blackbird family and starlings had their own family (Sturnidae) which included many interesting and beautiful species. I did not keep daily numbers on the starling, but it must have been in the top ten in numbers and days of observation of all species. The first record of starlings in Sangamon County was unknown, but they probably arrived in the county between 1922-1929 after being introduced in Central Park, New York in 1890 and 1891. On the Christmas Bird Count of December 26, 1934 in Springfield, 144 starlings were tallied. Starlings were very adaptable, could survive near humans, and could out compete some of the native species. These birds were seen in large flocks in winter, with a roost near Buffalo on January 2, 1983 which had several thousand birds; a roost at the IDOT building on February 9, 1976 with 80,000 birds; a roost at the Cinder Flats on February 27, 1996 with 25,000 birds and 10,000 birds on December 13, 2001. They also roosted at the State Capitol and Downtown Springfield. By spring these roosts had broken up, suggesting migration, but large numbers also nest in the county. They were ranked 3rd on the BBS in summer and were recorded every year with a few more numbers in the recent half of that survey. The numbers increased on the Sangamon River Census from 1976 to 1991. They nest in tree cavities competing with woodpeckers and other cavity nesting species and they nest in buildings, and other structures such as Wood Duck boxes. They were looking for nest sites as early as February 28, and were seen with nest material April 20. Fledged young were seen by May 28. Hatching year birds were gathering in flocks and communal roosting by the first week in June to mid-June (up to 500 birds). Most of these young of the year birds were gray-brown in color, but by late July and August they showed a vested appearance as they molted into winter (basic) plumage. Starlings could mimic other birds. On March 3, 2005 one imitated a titmouse, bluebird, and meadowlark several times in a row, then did a cardinal song. They were practically famous among birders for their skill in killdeer and pewee calls. Starlings also imitated methods of feeding, such as taking the niche of the swift in late fall after the swifts left; one had to look closely to see the difference. They watched berry (hackberry, crab apple, grapes) feeding birds like waxwings and robins and joined the feast, usually taking over. On July 4, 1983 a flock of young starlings was using a horse to flush insects in a pasture and some of them were riding on the back of the horse. I had seen some odd looking starlings, usually involving leucism, but two were bizarre. On September 11, 1979 at Lake Springfield, one had a whitish body with a black head and neck with a long white slash behind the eye and a whitish tail with elongated spikes coming off the middle tail feathers (drawing – on file ISM). The second bird occurred on March 8, 2001 at the Rochester sewer pond in a flock of starlings, it was an odd mustard-colored starling with white wings and tail (drawing – on file ISM). The subspecies in North America is the nominate form.

Documentation: Specimens = 16), IL. Sangamon Co., $\bigcirc \bigcirc = 14$, adult $\bigcirc \bigcirc = 10$ January 30 – November 13, wts. = 66.4 – 94.1 gms, testes = 2 – 15 mm; juvenile $\bigcirc \bigcirc = 4$, Sangamon Co., June 17 – August 17, (immature showing vested appearance), wts. = 52.0 – 80.4 gms; unsexed adult = 1, Sangamon Co. August 21, (abnormal bill = 51.5 mm); unsexed juvenile = 1, Sangamon Co., July 20.

American Pipit

Anthus rubescens

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1921/289 (35)	0/0	1722/215 (34)	47/27 (6)	3690/531
Average/day	6.65		8.01	1.74	6.95
Average/season	54.89		50.65	7.83	

Status: Uncommon and somewhat Irregular Migrant and Very Rare Winter Resident

Dates:

Spring: Earliest arrival = February 29, 2000 six Sangchris Average arrival (32 years) w/range February 29 – April 4 = March 16 Average departure (32 years) w/range April 15 – May 24 = May 5 Latest departure = May 24, 1988 Sediment Retention

Fall: Earliest arrival = September 17, 1994 Cinder Flats
Average arrival (32 years) w/range September 17 – October 29 = October 8
Average departure (34 years) w/range November 2 – December 4 = November 16
Latest departure = December 4, 2001 ten Sangchris

A small brown, slender bird with white outer tail feathers, the American Pipit bobbed its tail when it walked on the ground. This species was found mainly in wide open places. Many open areas were being eliminated in Sangamon County during the study. However, this bird could still be found in grain stubble fields, but preferred short grassy fields and clover fields especially ones with puddles of water. Pipits foraged in loose flocks at drying pools or wrack lines at lakes and blended into the habitat when not moving. Other early spring arrivals were: March 3, 1983 at Sangchris; March 5, 1991 at Sangchris; and March 4, 2002 & 2003 east of Springfield. On April 15, 1988 one sang a twittering song at the Sediment Retention. Some birds in spring were pinkish-ochre colored ventrally (had completed prealternate molt) usually in April, and some were buff as in fall (basic plumage). I detected pipits at Marine Pt. when they were flying over calling and rarely they landed. In spring, this pipit may show a divided migration suggesting there were different populations passing through the county. In 1972, 1976, and 1986 I must have missed the earlier population since my arrival dates were in late April and early May, which was the time that the later migration normally occurred. Pipits were missed in spring in 1970 and 1974. A late snow storm on April 9, 1982 caused many of these birds to feed up by the roads, and a few were killed by traffic. High counts for spring were: 40, April 9, 1982; 50, March 23, 1985; 60, March 18, 1995; 120, March 20, 2000; 45, April 1, 2005; and 100, March 22, 2009. There were 20 departures in May, with other late dates of May 19, 1976 and May 17, 1978. American Pipits nest in the Arctic or the mountains of western North America. Returning pipits in fall occurred nine times in September, but most were first seen in October. Another early arrival date was September 18, 2004 at the Cinder Flats. Pipits could be more difficult to find in fall until the crops were harvested, and they were missed in three years 1972 – 1974. A lone pipit west of Springfield took an insect on the wing, swallow-like, over a clover field on November 11, 1980. Occasionally, I saw them sitting on power lines such as November 2, 1976 and October 19, 1985. Once they were sitting on a building on November 6, 1976. High counts for

fall were: 150, November 4, 1979; 100, October 25 & 28, 1980; 100, November 8, 1994; and 88, October 31, 1998. Recently, this pipit had attempted to **winter** below the dam at Lake Springfield on January 2, 1999, December 16, 2000 – January 4, 2001, and December 19 & 20, 2009; and at the dam at Sangchris on January 24-29, 2000 (also see latest departure date). Other late migrants were two, December 10, 1998 at Sangchris and one with larks on December 1, 2005 east of Rochester. This species seemed much more difficult to find late in the study. The subspecies is the eastern *A. r. rubescens* and they winter from southern Illinois south to Guatemala.

Documentation: Specimens = 2) IL. Sangamon Co., ISM# 606254 immature 3, 7 mi east Springfield, November 4, 1975, coll. by HDB, wt. = 23.1gms, testes = 1 mm, gizzard with insects including aphids and leaf hoppers; ISM# 660606 adult 3, $\frac{1}{2}$ mi south Buckhart, March 4, 2002, coll. by HDB, wt. = 21.0 gms, testes = 1.5 mm, gizzard with corn and insects including Coleoptera and Hymenoptera.

Highest # Days/Season

Spring35 (1990)Fall17 (1985)Winter17 (2000)

Highest # Birds/Season

Spring330 (2005)Fall286 (1980)Winter17 (2000)

Sprague's Pipit

Anthus spragueii

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	2/2 (2)	0/0	10/5 (3)	0/0	12/7
Average/day	1.0		2.0		1.71
Average/season	1.0		3.33		

Status: Very Rare Migrant

Dates:

Spring: Earliest arrival = **April 16**, 2002 Sangchris Latest departure = **April 26**, 1976 Rail golf course

Fall:Earliest arrival = October 1, 1976 Rail golf courseLatest departure = October 30, 1982 west Springfield

A species of the Great Plains, the Sprague's Pipit preferred extensive, short, grassy areas with some bare spots. The Rail golf course (before development) was an excellent place to find these pipits considering four of my seven records came from there. They were usually in the "rough area" of the golf course, which had somewhat taller, less frequently mowed grass, but this area no longer exists. Other places to search were clover and alfalfa fields, but these fields too have become very difficult to find. Most pipits observed displayed the distinctive habit when startled of flying high a rather long distance and then dropping like a stone from that height straight to the ground. Many of the pipits were also seen on the ground and they resembled a very small Upland Sandpiper with considerable white in the outer tail feathers. They were loners, even the five that occurred at the Rail on October 22, 1975 (high count) were spread out, each by itself. On October 1, 1976 one pipit dropped out of the sky early in the morning, and I found it on the ground with a grasshopper that it ate by bringing it up to the bill with one foot while standing one-legged. Caution in identification should be taken as juvenile plumaged Horned Larks looked similar, but note the bill shape, the overall shape, and other plumage differences. Records other than the above were one west of Springfield, October 19, 1975 and two at the Rail golf course on October 23, 1975. The Sprague's Pipit breeds in the northern Great Plains in the northern US and Canada, and winters in Texas and Mexico.

Documentation: Written descriptions: IL. Sangamon Co., HDB – on file ISM.

Bohemian Waxwing

Bombycilla garrulus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	0/0	0/0	0/0	5/5 (3)	5/5
Average/day				1.0	1.0
Average/season					

Status: Very Rare Winter Resident

Dates: Three Records: ♂, northwest Springfield, December 22, 1972; adult, Lake Springfield, February 21, 1991; adult, Rochester Park, January 22 – 25, 2000.

Constant checking of Cedar Waxwings was the best way to find this larger and grayer Bohemian Waxwing. A good view showed chestnut under-tail coverts, more white and yellow in the wing, and more black on the throat. Both species of waxwings had the red waxy tips on the secondaries and yellow tips to the tail feathers. The two later Bohemian Waxwings were feeding on hawthorn. The range of dates for this county in this study was December 22 to February 21. These waxwings breed mainly to the northwest in Alaska and Canada and the Northwest US. The North American subspecies is *B. g. pallidiceps*.

Documentation: Specimen =1) IL. Sangamon Co., ISM# 605448 $\stackrel{<}{\bigcirc}$, northwest Springfield, December 22, 1972, coll. by F. Jurincie, wt. = 70.5 gms, testes = 2 mm, gizzard & crop with *Rosa multiflora* berries. Also photographs of the Rochester bird a by DO and notes and descriptions HDB - on file ISM.

Cedar Waxwing

Bombycilla cedrorum

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	12902/1015 (37)	2952/775 (36)	56647/2700 (37)	15988/701 (37)	88489/5191
Average/day	12.71	3.81	20.98	22.81	17.05
Average/season	348.70	82.0	1531.0	432.11	

Status: Common Spring Migrant and Winter Resident, Very Common Fall Migrant and Uncommon Summer Resident

Dates:

Spring:

First Migration: *

Earliest arrival = **January 3**, 2006 ten Springfield Average arrival (29 years) w/range January 3 – March 3 = **January 31** Average departure (31 years) w/range February 8 – May 2 = **March 28** Latest departure = **May 2**, 1982 two Springfield

Second Migration: *

Earliest arrival = **March 24**, 1977 twelve Springfield Average arrival (35 years) w/range March 24 – May 19 = **May 6** Average departure (35 years) w/range May 10 – June 15 = **June 1** Latest departure = **June 15**, 1994 ten & 2005 nineteen Springfield

Fall: Earliest arrival = July 26, 1999 thirteen Springfield (arbitrary due to SR) Average arrival (37 years) w/range July 26 – September 17 = August 22 Average departure (27 years) w/range November 10 – January 31 = December 12 Latest departure = January 31, 1990 twelve Springfield (arbitrary due to WR)
* (The Cedar Waxwing had a bimodal migration in spring – see text and table)

This sleek brown, crested bird with a waxy yellow tip on the tail sometimes had red wax tabs on the wings. Cedar Waxwings fed on fruit and insects, and I liked to think of them as a northern cotinga. The waxwing was a numerous bird and was 29th of all species, and was 40th in number of days observed. They exhibited a bimodal migration, at least in **spring**, which may be due to different populations (see Table 34). There was an early contingent, then a hiatus and a second later contingent that seemed to coincide with the blooming of the tulip tree. The whole bimodal migration varied in timing from year to year, and the hiatus could be long or short. There was no early migration in the spring of 1999, 2004, and 2005 probably due to lack of berries. High counts were: 100, May 19, 1973; 110, May 19, 1975; 100, May 21, 1982; 150, May 23, 1992; 140, May 23, 1995; and 114, March 4, 2000. Many years, the second migration went well into June (see Table 34). The breeding birds arrived with the second influx. In summer on the BBS they were more numerous and frequent toward the present, and they went from 0 (1976) to 8 (1991) on the Sangamon River Census. One adult was feeding another at Carpenter Park May 1, 1981, which was part of a nuptial display. Waxwings nested rather late in the season. Nesting had increased during the study, and the BBS additionally showed more numbers recently. Nest building was accomplished by both sexes and was seen from May 20 to July 27. Adults were

seen on the nest or young were in the nest from June 18 to July 25, and fledged young were seen July 1 (when a cat killed an adult and two young) to September 6. Juveniles still having streaks in their plumage were seen at least as late as October 30. Fall migration, as far as I can determine, did not show the bimodal nature of spring. Most years migrants arrived in August, and fall had 4.3 times the numbers of spring, but to confuse matters the winter and summer numbers contained migrants also. High counts for fall were: 100, September 26, 1975; 180, October 21, 1981; 200, November 14, 1991; 485, November 8, 1992; 310, November 5, 1993; and 225, November 24, 2005. Fall departures were difficult to determine since many were found in winter. Winter numbers varied greatly due to availability of berries. There were ten winters with under a hundred birds and five with numbers over a thousand. Some winter season waxwing numbers were actually late fall and early spring migrants. High counts for the winter season were: 250, February 9, 1985; 108, January 9, 1990; 150, December 6, 1997; 212, February 29, 2000; and 205, January 30, 2001. These birds fed on berries and fruits of hawthorn, honeysuckle, mulberries, juniper, hackberry, persimmon, wild grape, and crab apple. They also ate periodical cicadas, and took advantage of the emergence of flying ants (October 24, 1998) and damselflies along the Sangamon River (July 19, 2002). I had seen them in the woods eating spiders and insects that were trapped in spider webs by hovering in front of the webs on July 28, 1999. The subspecies in the east and in the county is the nominate form, but a tower killed female specimen (ISM # 608037) on September 3, 1981 appears to be the lighter (on breast, head and back) western B. c. larifuga. Cedar Waxwings winter south to Panama.

<u>Highest # Days/Season</u>	Highest # Birds/Season
Spring 55 (1981)	Spring 970 (2000)
Summer 49 (2005)	Summer 218 (2003)
Fall 109 (2001)	Fall 3253 (1992)
Winter 55 (1999)	Winter 1967 (1999)

YEAR	EARLY MIGRATION	HIATUS DURATION (# Days)	LATE MIGRATION
1971	February 28 – March 3	27	March 31 – May 10
1972	January 22 – March 17	55	May 12 – June 1
1973	January 13 – March 8	68	May 16 – June 2
1974	February 9 – March 7	72	May 19 – June 5
1975	April 15 – same	21	May 7 – June 2
1976	January 15 – February 8	88	May 8 – June 6
1977	January 17 – February 25	26	March 24 – May 29
1978	January 29 – April 4	25	April 30 – June 1
1979	February 4 – March 29	37	May 6 – May 28
1980	Data incomplete		
1981	February 14 – April 17	6	April 24 – May 28
1982	February 12 – May 2	12	May 15 – May 30
1983	Winter resident – April 26	10	May 7 – June 4
1984	Winter resident – April 12	33	May 16 – June 1
1985	January 31 – March 26	49	May 15 – May 24
1986	January 22 – March 25	31	April 26 – May 28
1987	February 21 – March 29	39	May 8 – May 31
1988	January 4 – March 30	45	May 15 – May 29
1989	February 26 – April 29	11	May 11 – May 31
1990	January 6 – March 28	47	May 15 – May 30
1991	February 20 – April 3	34	May 8 – May 30
1992	February 6 – March 19	42	May 1 – June 7
1993	January 19 – March 27	44	May 11 – June 6
1994	January 22 – April 15	24	May 10 – June 15
1995	February 12 – April 23	18	May 12 – June 1
1996	February 5 – March 30	36	May 6 – June 4
1997	February 16 – March 13	66	May 19 – June 9
1998	March 2 – April 16	18	May 5 – June 1
1999	No birds?	?	May 11 – June 2
2000	January 5 – April 3	34	May 8 – May 29
2001	January 6 – March 12	49	May 1 – May 30
2002	March 3 – March 29	33	May 2 – June 3
2003	January 28 – April 28	12	May 11 – June 4
2004	No birds?	?	April 28 – May 27
2005	No birds?	?	May 6 – June 15
2006	January 3 – February 20	76	May 8 – June 2

Table 34. Cedar Waxwing Bimodal Migration in Spring in Sangamon County.

SPECIES	NUMBERS	%
Yellow-rumped Warbler	64252	29.5
Tennessee Warbler	23715	10.9
Common Yellowthroat	19125	8.8
American Redstart	10545	4.8
Nashville Warbler	10462	4.8
Magnolia Warbler	10362	4.8
Ovenbird	8423	3.9
Chestnut-sided Warbler	8161	3.8
Black-throated Green Warbler	8146	3.7
Palm Warbler	8002	3.7
Bay-breasted Warbler	5538	2.5
Black-and-white Warbler	5227	2.4
Northern Waterthrush	4096	1.9
Blackpoll Warbler	3414	1.6
Orange-crowned Warbler	3229	1.5
Blackburnian Warbler	3036	1.4
Yellow Warbler	2743	1.3
Northern Parula	2653	1.2
Wilson's Warbler	2521	1.2
Canada Warbler	2342	1.1
Golden-winged Warbler	2135	1.0
Cape May Warbler	1395	0.6
Yellow-breasted Chat	1391	0.6
Mourning Warbler	1232	0.6
Kentucky Warbler	1096	0.5
Yellow-throated Warbler	948	0.4
Prothonotary Warbler	946	0.4
Blue-winged Warbler	752	0.3
Cerulean Warbler	289	0.1
Pine Warbler	247	0.1
Hooded Warbler	226	0.1
Louisiana Warbler	220	0.1
Black-throated Blue Warbler	214	0.1
Connecticut Warbler	198	0.1
Worm-eating Warbler	138	0.1
Prairie Warbler	48	0.02
Brewster's & Lawrence's Hybrids	24	0.01
Black-throated Gray Warbler	1	0.0004
Hermit Warbler	1	0.0004

Table 35. WOOD-WARBLERS (Parulidae) ranked by numbershighest to lowest (1970–2006)

TOTALS: SPECIES = 38 + 1 hybrid and INDIVIDUALS = 217,493

Blue-winged Warbler

Vermivora pinus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	382/241 (35)	3/3 (3)	367/250 (33)	0/0	752/494
Average/day	1.59	1.0	1.47		1.52
Average/season	10.91	1.0	11.12		

Status: Uncommon Migrant and Very Rare Summer Resident

Dates:

- Spring: Earliest arrival = April 15, 1994 & 2005 Washington Park Average arrival (35 years) w/range April 15 – May 9 = April 26 Average departure (35 years) w/range April 30 – May 24 = May 11 Latest departure = May 24, 1976 Carpenter Park
- Fall: Earliest arrival = July 15, 1980 Lincoln Gardens Average arrival (31 years) w/range July 15 – September 6 = August 21 Average departure (32 years) w/range August 20 – October 12 = September 17 Latest departure = October 12, 1998 ♂ Sangchris (note: straggler November 13, 1997 ♂ Oak Ridge Cemetery)

This was one of the fairly early arriving warblers in spring, usually announced by its downslurred buzz of a song. Other early spring arrivals were April 18, 1992 at Sangchris and April 16, 2002 at Carpenter Park. May arrival dates (six years) were probably late because of a problem with detection, as the song was difficult to hear. Blue-winged Warblers usually feed low to moderately high in the vegetation. I saw them taking looper caterpillars, inspecting dead leaf clusters, and several times they were eating tree crickets. High spring counts were: 9, April 28, 1989; 9, May 7, 1994; and 6, May 7, 1996. This warbler also departed early in spring, making their stay brief, I presumed because they had arrived at the latitude of the breeding grounds, which was mostly in the eastern US north only to central Wisconsin. They nested in edge or second growth, habitat found here, but even though they nested on all sides of Central Illinois they did not in the county. Perhaps the reason they did not nest here was a result of the prairie peninsula or intensive agriculture might have extirpated potential nesters in earlier times. I had only two records from summer, one singing at the Mechanicsburg Cemetery on June 4, 1979 and one singing at Lincoln Gardens prairie June 7, 2002. The early fall warbler at Lincoln Gardens on July 15, 1980 was still in molt, these warblers usually molt on their breeding areas. Most other arrivals were in August with six in September and it was missed altogether in four fall seasons (1972, 1974, 1976, 1979) indicating it was even less common in the first half of the study. However, it was one warbler species that increased somewhat in numbers during the study. Other early fall arrivals were August 10, 1986 northeast of Springfield; August 2, 1993 at Sangchris and August 2, 1999 at Lick Creek. High counts in fall were low: 5, September 9, 2001; 5, September 16, 2003; and 6, August 30, 2004. Most of these warblers left in September, but there was a tv tower kill October 4, 1983 and the October record above. One straggler occurred at Oak Ridge Cemetery on November 13, 1997 – it spished up, a very brightly colored bird in the brown foliage (drawing on file ISM). Hybrids occurred between this warbler and the closely

related Golden-winged warbler – see under separate page. The Blue-winged Warbler winters in southern Mexico and Central America.

Highest # Days/Season

 Spring
 14 (1994)

 Summer
 1 (1979, 1980, 2002)

 Fall
 22 (2005)

Highest # Birds/Season

 Spring
 30 (1994)

 Summer
 1 (1979, 1980, 2002)

 Fall
 38 (2004)

Brewster's & Lawrence's Hybrids

Vermivora pinus x chrysoptera

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	15/15 (13)	0/0	9/9 (7)	0/0	24/24
Average/day	1.15		1.29		1.0
Average/season	1.0		1.0		

Status: Very Rare Migrant

Dates:

Spring: Earliest arrival = April 30, 1986 & 1989 Oak Ridge & CP Latest departure = May 21, 1993 Washington Park

Fall:Earliest arrival = August 27, 1998 SangchrisLatest departure = September 25, 2009 ten miles east of Spfld

These hybrids were the products of matings between Blue-winged and Golden-winged Warblers. They sang either song or both songs, and their habits were like the parents. A typical hybrid of the Brewster's looked like a Golden-wing, but had the black line through the eye of the Blue-wing and no black or gray on the throat. Some had a yellow wash on the breast and some did not. Brewster's were much more numerous than the Lawrence's (see Tables 36 and 37) of which there was only one seen during the study and another in the addendum. Both of these Lawrence's Warblers were mostly yellow with yellow wingbars and a dark auricular patch. Other hybrids might have been observed, but were so much like the normal parents that they were identified as such.

Documentation: Specimen = 1 Brewster's) IL. Sangamon Co., ISM# 606570 $\stackrel{\diamond}{\bigcirc}$, 2 mi north Spfld, May 5, 1977, coll. by HDB, wt. = 9.7 gm, testes = 5 mm, gizzard with spiders and insects.

1971	May 11	Carpenter Park, typical, <i>S</i> singing Blue-wing song	
1974	September 16	Carpenter Park, ♀like Golden-wing but yellow on breas and under-tail coverts	
1975	May 5	Carpenter Park, typical, but no yellow on breast, ♂ singing like Golden-wing	
1977	May 5	Carpenter Park, typical, <i>3</i> specimen	
1978	September 14 September 17	Carpenter Park, typical Carpenter Park, typical, same bird?	
1979	September 3	Sangchris, typical, but no yellow on breast	
1985	May 2	Carpenter Park, typical, <i>S</i> singing Blue-wing song	
1986	April 30	Oak Ridge Cemetery, typical, <i>3</i> singing Blue-wing song	
1989	April 30	Carpenter Park, typical	
1990	May 14 September 15	Sangchris, typical, yellow crescent on breast Carpenter Park, typical	
1991	May 6	Washington Park, typical	
1993	May 21	Washington Park, 3 singing both songs	
1995	May 11	Lincoln Gardens, typical, but no yellow on breast	
1997	September 22	Sangchris, typical	
1998	August 27 September 17	Sangchris, typical, with a lot of yellow on breast Washington Park, typical, but no yellow on breast	
2002	May 1 May 12	Carpenter Park, typical, ♂ but no yellow on breast Carpenter Park, typical, ♂ same bird?	
2003	May 5 May 8	Lincoln Gardens, typical Sangchris, typical, but no yellow on breast	
2006	May 4	Lincoln Gardens, typical	

Table 36. Brewster's Hybrids Observed in Sangamon County

Addendum:

2008	September 16	Refuge, typical	
2009	September 14	Riverside Park, some yellow below and whitish wingba	
	September 25	ten mile east of Springfield, typical (photographed – HDB)	

Table 37. Lawrence's Hybrids Observed in Sangamon County

1991	September 2	Carpenter Park, like Blue-wing with face of Golden-wing, but no throat patch
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Addendum:

2009	September 17	Lincoln Gardens, like above (photographed - HDB)
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Golden-winged Warbler

Vermivora chrysoptera

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	872/379 (37)	1/1 (1) fall mig	1262/565 (37)	0/0	2135/945
Average/day	2.30	1.0	2.23		2.26
Average/season	23.57	1.0	34.11		

Status: Uncommon Spring Migrant and Fairly Common Fall Migrant

Dates:

Spring: Earliest arrival = **April 22**, 1992 \bigcirc Washington Park Average arrival (37 years) w/range April 22 – May 10 = **May 1** Average departure (37 years) w/range May 7 – 26 = **May 17** Latest departure = **May 26**, 1971 $\bigcirc \bigcirc$ CP & 2000 \bigcirc WP

Fall: Earliest arrival = July 22, 1988 ♀ Horse Creek Average arrival (37 years) w/range July 22 – September 3 = August 21 Average departure (37 years) w/range September 9 – October 3 = September 22 Latest departure = October 3, 1971 ♂ Riverside Park

This warbler with its gray coloration and black throat may mimic a chickadee, but the goldyellow patch on the wings and crown sets it apart. It had a high, three noted buzz for a song. They were seen in woodland at mid-level in the vegetation and many times were seen hanging up-side-down feeding or checking dead leaves for insects. Males and females were easy to distinguish from each other because males had a black face and throat and females had gray. Spring arrivals were nearly equal for April (19 years) and May (18 years). Females average arrival for 23 years was May 7 with extremes of April 22 and May 20. Males in spring, with 559, greatly out numbered females, with 137, in 28 years. There were five springs in which no females were recorded. However, it should be noted that singing by males makes them easier to find. High spring counts were mostly single digit with the exceptions: 12, May 13, 1978; 10, May 14, 1981; 10, May 7, 1994; 11, May 15, 1995; 10, May 7, 2002; and 12, May 8, 2004. This warbler went north fairly early and its stay here was sometimes abbreviated, for example in 1984 it passed through in less than a week. Springs with ten or less birds were 1970, 1988, 1998, 2001, 2004, and 2007. Golden-winged Warblers breed in the northern US and southern Canada. The earliest fall bird was a female in worn alternate plumage on July 22, 1988 (see also Tennessee Warblers for this phenomena). All other arrivals were in August except two very early September dates. Other early fall arrivals were: female, August 12, 1998 at Riverside Park; female, August 12, 2002 at Washington Park; female, August 10, 2007 at Riverside Park. There were more birds in fall than spring (1.5 to 1). The sex ratio in fall was much more even, with spring 4.1 $\bigcirc \bigcirc$: 1 \bigcirc and in fall 1.1 $\bigcirc \bigcirc$: 1 \bigcirc . Males were still seen slightly more often even with no singing. On August 31, 2001 I watched a female, which was foraging, use a slender stick to pry bark off grape vine, apparently to look for insects. High counts for fall were: 13, September 1, 2001; 10, September 6, 2002; and 11, August 22, 2007. This species left early in the fall, and there were only four October departure dates with all the rest being in September. The dates were: above; female October 2, 1983 at Carpenter Park; male, October 1, 1986 east of

Springfield; and male, October 1, 2004 at Riverside Park. Golden-wings hybridized with Bluewinged Warblers – see under hybrids. The Golden-winged Warbler winters in Central America and northern South America.

Documentation: Specimens = 29) IL. Sangamon Co., Spring = 2, $\bigcirc \bigcirc \bigcirc = 2$, tv tower, both May 8, 1972, wts. = 8.9 & 9.5 gms, testes = 6 mm; Fall = 27, adult $\bigcirc \bigcirc \bigcirc = 12$, all tv tower, September 2 – 23, wts. = 8.4 – 11.1 gms; immature $\bigcirc \bigcirc \bigcirc = 7$, tv tower (6) & east Spfld, September 2 – 20, wts. = 9.0 – 10.7 gms (ISM# 660580 is much yellower on breast, back & rump); adult $\bigcirc \bigcirc = 5$, tv tower, August 25 – September 29, wts. = 7.7 – 8.7 gms; immature $\bigcirc \bigcirc = 3$, tv tower, September 2 – 3, wts. = 7.6 – 8.6 gms.

Highest # Days/Season

Spring23 (1989)Summer1 (1988)Fall40 (2006)

 Highest # Birds/Season

 Spring
 58 (2002)

 Summer
 1 (1988)

 Fall
 86 (2001)

Tennessee Warbler

Vermivora peregrina

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	11503/920 (37)	9/9 (9) all mig	12203/1702 (37)	0/0	23715/2631
Average/day	12.50	1.0	7.17		9.01
Average/season	310.89	1.0	329.81		

Status: Very Common Migrant

Dates:

- Spring: Earliest arrival = April 15, 1994 ♂ Washington Park Average arrival (37 years) w/range April 15 – May 5 = April 25 Average departure (36 years) w/range May 16 – June 4 = May 27 Latest departure = June 4, 1976 ♂ WP, 1982 ♀ WP, 1997 ♂ LSpfld
- Fall: Earliest arrival = July 10, 1986 ♂ Horse Creek (worn alternate plumage) Average arrival (37 years) w/range July 10 – August 28 = August 18 Average departure (36 years) w/range October 15 – November 8 = October 26 Latest departure = November 8, 2000 UIS Campus & 2009 LSpfld

This drab greenish warbler was one of the most numerous migrants in the county, but unless the song was known, it went unnoticed in the treetops of leafy trees. The Tennessee Warbler mostly arrived in spring in late April but arrived in May four years (1988, 1997, 1998, 2005) probably due to cold weather. Other early arrivals were April 19, 1987 & 1992 and April 17, 1991. Females averaged May 1 as spring arrival in nine years of data. High spring counts were: 100, May 13, 1979; 200, May 16, 1981; 90, May 14, 1983; 102, May 10, 1986; and 78, May 15, 1994. Later in the study, the numbers were not as high in spring, and the peak years were 1979 - 1983. In 1981 from May 16 - 23, I noted that this warbler was using small sticks to probe flowers presumably for food! Most of these birds went north by late May, but I recorded them seven times into June. In addition to the three records above they were seen: June 2, 1975; June 1, 1983; June 1, 1984; and June 1, 1998, plus June 3, 2008 in the addendum. They breed in the boreal zone in the very northern US and Canada. I have noted in several years that a few very early adult warblers arrived in **fall** that were still in alternate plumage and either were worn or had started molt. This occurred with Tennessee Warblers on July 31, 1981, July 10, 1986, August 5 & 6, 2004, August 15, 2005, and August 12, 2009 (in molt and photographed); and probably went unnoticed other years. The cause for this could be cold snaps on the breeding grounds or it could be a built-in random alternative variation. The Tennessee Warbler was one of the earlier arriving fall migrants. High counts for fall were: 177 (mostly tv tower kills), September 2, 1972; 75, September 3, 1981; 63, October 7, 1992; 59, September 1, 2001; and 71, September 26, 2002. I have noted in fall that this warbler flocked and foraged in the river bottoms in giant ragweed. They also feed on wild black cherry and other fruit. I have seen flocks at aphid out breaks at Washington Park in 1976 and 1992 and at Oak Ridge Cemetery in 2005 and 2006. On October 11, 2001 at Carpenter Park, a flock of warblers mostly Tennessee Warblers were in a Hackberry tree gleaning the leaves for jumping plant lice (Psyllids). Occasionally, this warbler sang in fall as it did on September 4, 1990 at Washington Park. They

were usually present in fairly good numbers into October and 285 were recorded in October 2002. There were several November records: November 5, 1974 at Carpenter Park; November 2, 1978 at Lincoln Gardens; November 3, 1981 at Washington Park; November 5, 1990 at the Refuge; see above, November 5, 2002 at Adams Sanctuary; November 6, 2002 at Lick Creek; and November 1, 2004 at Washington Park. This warbler winters from Mexico to northern South America.

Documentation: Specimens = 58) IL. Sangamon Co., Spring = 14, $\partial \partial = 12$, Spfld (7) & tv tower (4) & LSpfld, May 8 – 16, wts. = 9.3 – 11.3 gms, testes = 4 – 7 mm; Q Q = 2, Spfld & 2mi north Spfld, May 11, wts. = 8.1 – 8.3 gms, ovaries = 5 – 6 mm; Fall = 44, adult $\partial \partial = 12$, all tv tower, September 2 – 29, wts. = 9.2 – 12.5 gms; immature $\partial \partial = 6$, all tv tower, September 16 – October 24, wts. = 9.2 – 13.4 gms; adult Q Q = 11, all tv tower, September 2 – October 13, wts. = 8.2 – 11.3 gms; immature Q Q = 15, tv tower (12) & LSpfld & Spfld & 2mi north Spfld, August 27 – October 3, wts. = 7.9 – 10.3 gms.

Highest # Days/Season

 Spring
 37 (2002)

 Summer
 1 (9 years)

 Fall
 67 (2002)

Highest # Birds/Season

Spring1087 (1981)Summer1 (9 years)Fall929 (2002)

Orange-crowned Warbler

Vermivora celata

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	923/503 (37)	0/0	2296/856 (37)	10/10 (7)	3229/1369
Average/day	1.83		2.68	1.0	2.36
Average/season	24.95		62.05	1.43	

Status: Uncommon Spring Migrant, Fairly Common Fall Migrant and Very Rare Winter Resident

Dates:

- Spring: Earliest arrival = April 1, 1983 Oak Ridge Cemetery Average arrival (36 years) w/range April 1 – 30 = April 19 Average departure (37 years) w/range May 3 –24 = May 15 Latest departure = May 24, 1982 WP & 2008 Lincoln Gds
- Fall: Earliest arrival = September 15, 1976 immature Carpenter Park Average arrival (37 years) w/range September 15 – October 7 = September 27 Average departure (37 years) w/range October 19 – November 30 = November 8 Latest departure = November 30, 2000 immature conifers by Lake Spfld (but see text for several winter records)

This was one of the more confusing warblers to identify until the plumages were studied, preferably in the hand as a specimen or during banding. Adults and immatures (also second year) can be identified in the field with good close views. Some of the very early **spring** arrival dates could be winter residents: see above, April 6, 2001 adult at Washington Park and March 2, 2003 second year at Washington Park (almost surely a wintering bird). Many in spring were associated with flowering trees, where they probed the flowers. This warbler fed from low to mid-heights in the vegetation. High counts in spring were low, the highest was 11, May 4, 1983 and there were 8, May 7, 1977, May 6, 1994 & 1999. I seldom heard their song which was a rollicking chip that was lost in the many voices of spring. Usually this warbler left fairly early, but I had 15 years with departure dates of / or past May 15 (see specimen). It breeds in boreal Canada and Alaska. Although, I occasionally heard about August arrival dates for fall, all of mine occurred in September (27) or early October (10). There were more birds in fall, for every one in spring I saw 2.5 in fall. This warbler fed lower in fall than in spring, many times being found in weed patches, second growth, and along woodland edge. They also checked dead leaves for insects and ate poison ivy and honeysuckle berries. This was the only warbler that was consistently found with White-throated Sparrow flocks in fall. Some of the young of the year retained a noticeable wingbar, and rarely have I seen the orange in the crown on adults in the field. Age ratios for fall were: (1984) 10 adults to 75 immatures; and (1987) 5 adults to 25 immatures. High counts for fall were: 20, October 21, 1981; 17, October 22, 1984; 20, October 14, 1985; and 14, October 17, 1997. Migration in fall in this species normally continued into November (in 28 years); there were 10 birds in November in 1991. A few occurred into winter, these records were: immature, Oak Ridge Cemetery, January 9, 1972; immature, Lincoln Gardens, December 10 & 14, 1992; immature, west side Lake Springfield, December 15, 1994; immature, Cotton

Hill Park, December 31, 1996 – January 1, 1997; immature, Warm Water Ditch, December 21, 1997; immature, Cinder Flats, December 1, 2002; immatures, Muni, December 6, 2004 and Cotton Hill Park, December 9, 2004; immature, Adams Sanctuary (R. Jack), January 16, 2008, and immature, Warm Water Ditch, December 4 &15, 2009 and February 1& 17, 2010. The last bird later attended a suet feeder in February (K.Watt). The subspecies in this county is the northern nominate form. However, two specimens in the collection looked more yellow ventrally and somewhat greener dorsally and one of them (ISM# 605335 adult \mathcal{Q} , October 18, 1972) was smaller with short wings (56mm) and tail (43mm) suggesting *V. c. lutescens* from the Northwest. This warbler winters south to Central America.

Documentation: Specimens = 37) IL. Sangamon Co., Spring = 3, 3 = 1, 2 mi north Spfld, May 6, 1980, wt. = 10.5 gms, testes = 3.5 mm; 9 = 2, south Spfld, May 8 – 15, wts. = 10.0 – 10.2 gms, ovaries = 3 – 4.5 mm; Fall = 34, adult 33 = 8, all tv tower, September 29 – October 14, wts. = 9.2 – 11.5 gms; immature 33 = 4, all tv tower, September 27 – October 24, wts. = 8.8 – 12.0gms; adult 99 = 11, all tv tower, September 27 – October 28, wts. = 8.2 – 10.3 gms; immature 99 = 11, tv tower (10) & Loami, September 26 – October 18, wts. = 9.0 – 10.9 gms.

Highest # Days/Season

Spring23 (1983)Fall40 (1991)Winter2 (1992, 1996 & 2004)

Highest # Birds/Season

Spring55 (1983)Fall128 (1981)Winter2 (1992, 1996 & 2004)

Nashville Warbler

Vermivora ruficapilla

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	6080/797 (37)	3/3 (3) all mig	4379/1313 (37)	0/0	10462/2113
Average/day	7.63	1.0	3.34		4.95
Average/season	164.32	1.0	118.35		

Status: Common Spring Migrant and Fairly Common Fall Migrant

Dates:

- Spring: Earliest arrival = April 12, 2001 ♂ North Pt.Average arrival (37 years) w/range April 12 May 3 = April 22Average departure (37 years) w/range May14 June 10 = May 22Latest departure = June 10, 1980 ♂ Refuge
- Fall: Earliest arrival = August 6, 2002 adult ♂ Washington Park Average arrival (37 years) w/range August 6 – September 10 = August 26 Average departure (37 years) w/range October 12 – November 19 = October 27 Latest departure = November 19, 1974 Washington Park

In spring the Nashville Warbler foraged fairly high in the trees, and its two-part song helped to locate it. In both spring and fall this warbler spanned the whole warbler migration periods. Nashville Warblers were one of the earlier arriving warblers in spring with males usually first. All arrival dates were in April except once on May 3, 1971. Two other early spring arrivals were April 16, 1977 & 1991. This species was more numerous in spring from 1974 to 1984 than the rest of the study. Spring numbers were 1.4 times higher than fall numbers, which might be due to different migration routes in the different seasons. High counts for spring were: 60, May 4, 1974; 60, May 6, 1976; 80, May 10, 1980; 50, May 2, 1981; 50, May 8, 1982; and 47, May 6, 1994. This species was found three years into June (1980, 1993, 1997). The June 10, 1980 bird was probably a second year male which was singing well south of the normal range, which is in the northern US, north to central Canada. The other two June records were both June 2 at Washington Park, one in 1993 and the other in 1997. The August 6, 2002 fall arrival was exceptionally early, especially since this warbler did not arrive until September in nine years and usually females and immatures arrived first in fall. Other early arrivals were August 17, 1986 & 2000 and August 15, 2006. These warblers foraged lower in fall and were seen with Tennessee Warblers in weed patches. Occasionally, I saw an immature that still had faint wingbars and one (with KB) September 24, 2008 also had a leucistic head (photograph). High counts for fall were: 30, September 26, 1976; 21, October 3, 1982; and 66, October 14, 1985. Fall migration extended well into October in this warbler, and there were eleven November records: record above; November 5, 1975 at Washington Park; November 3, 1976 at Oak Ridge; November 7, 1979 at Lake Springfield; November 16, 1979 east of Springfield; November 6, 1982 at Sangchris; November 2, 1993 at Washington Park; November 18, 1993 at Adams Sanctuary; November 1, 1995 at Riverside Park; November 3, 2004 at Washington Park; and November 3, 2006 at Lincoln Gardens. As with spring numbers, fall numbers dropped after 1986, though there were a couple of later years where numbers were high; I was in the field many more hours then. The

eastern nominate form is the subspecies seen in the county. The Nashville Warbler winters from southern Texas south to Guatemala and Belize.

Documentation: Specimens = 40) IL. Sangamon Co., Spring = 11, $\Im \Im = 4$, Spfld (2) & LSpfld & tv tower, May 2 – 13, wts. = 9.3 – 9.7 gms, testes = 4 – 7 mm (all w/much rufous in crown); $\Im \Im = 7$, tv tower (5) & Spfld & west Spfld, April 27 – May 8, wts. = 7.6 – 9.4 gms, ovaries = 4 – 6 mm (4 w/some rufous, 1 w/little rufous & 2 w/none in crown); Fall = 29, $\Im \Im = 12$, tv tower (11) & north Spfld, September 15 – October 18, wts. = 7.7 – 9.6 gms (all w/much rufous in crown); immature $\Im \Im = 8$, tv tower (6) & Spfld & north Spfld, September 20 – October 13, wts. = 7.6 – 9.8 gms (all w/ moderate rufous in crown); adult $\Im \Im = 3$, tv tower (2) & north Spfld, September 12 – October 9, wt. = 9.6 gms (all w/little rufous in crown); immature $\Im \Im = 6$, all tv tower, September 25 – October 29, wts. = 8.5 – 10.0 gms (all w/ no rufous in crown).

Highest # Days/Season

Spring29 (2002 & 2006)Summer1 (1980, 1993, 1997)Fall55 (2006)

Highest # Birds/Season

Spring382 (1981)Summer1 (1980, 1993, 1997)Fall222 (1982)

Northern Parula

Parula americana

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1416/688 (37)	249/180 (34)	988/597 (37)	0/0	2653/1465
Average/day	2.06	1.38	1.65		1.81
Average/season	38.27	7.32	26.70		

Status: Fairly Common Spring Migrant and Uncommon Summer Resident and Fall Migrant

Dates:

- Spring: Earliest arrival = March 28, 1991 ♂ Washington Park Average arrival (37 years) w/range March 28 – April 28 = April 16 Average departure (19 years) w/range May 8 – June 5 = May 18 Latest departure = June 5, 1975 Washington Park
- Fall: Earliest arrival = July 12, 1988 ♂ Lick Creek Average arrival (27 years) w/range July 12 – September 4 = August 13 Average departure (36 years) w/range September 25 – November 7 = October 8 Latest departure = November 7, 1985 Cotton Hill Park South

This was a small bird, even for a warbler, which stayed high in sycamore trees in bottomland forest. During migration the Northern Parula could be seen in any woodland. This was one of the earliest warblers to return north in **spring**. I had only one March arrival date, all the others were in April. Other early spring arrivals were: April 6, 1977 & 1988 and April 7, 1997 & 2006. Males always arrived first with the female average arrival April 28 for 10 years, with extremes April 19 to May 15. I noted a migration of females at Washington Park on May 9, 2000. High spring counts were: 7, May 6, 1980; 10, May 7, 1994; 7, April 28, 2000; 10, May 12, 2002; 8, May 1 & 11, 2003; and 7, April 22, 2004. Spring departure dates could be confused with the remaining breeding birds, but usually the numbers dropped from May 14 - 20, indicating the migrants were gone. Most nesting in this county was along the Sangamon River and to a lesser extent at Sangchris, Lick Creek, and Horse Creek. The highest count for summer was 7, June 15, 1976. The nests were high and difficult to find, and I mostly relied on singing males to determine summer populations. A female was carrying food northwest along the Sangamon on June 27, 1992; fledged young were seen at Horse Creek, August 11, 1995 and at Riverside Park, July 6, 2001; and a female was feeding a cowbird at Riverside Park on August 15, 2004. The song of the Parula was a long buzz, and its secondary song was a series of buzzes. Singing began in April and continued until about mid-July. They occasionally sang in fall migration with the latest being October 4, 1998. Some singing in fall was only of partial songs. Molt was noted between July 21 and September 9. By July and August, Parulas could be found in forest flocks and individuals (migrants?) were found away from breeding areas. In the fall, some of the birds inhabited more open habitat and foraged lower. Fewer birds were recorded in fall than spring (1 to 1.4). High counts for fall were 8, September 24, 1999 and 8, September 23, 2006. On September 21, 1994 a flock of six was along the railroad tracks at Lake Springfield. Some years, a definite surge late in the season was noted, and these birds were probably from further north,

while the breeding birds were already gone. Besides the late record above, there was one at Oak Ridge on October 24, 1986. There was a lot of variation in the plumages of Parulas, especially in the amount of chestnut and black. On April 14, 1982 a male had chestnut not only across the breast, but down the sides; and on May 2, 1991 a male had a lot of black on the face and neckband and chestnut on the sides. A possible "Sutton's Warbler" (favoring the Parula) was found at Riverside Park on July 27, 2000 (drawing on file ISM). The breeding subspecies in Sangamon County, as I understand it, is the western *P. a. ludoviciana*, if so, the total range of this population had a gap that included northern Illinois and southern Wisconsin. Most or all of the specimens in the ISM collection were migrants from the north, and not the breeding birds. These males measured larger (wing = 58 - 62 mm.) than summer residents of southern Illinois and Missouri (wing = 55 - 56 mm.). I think some of these northern specimens could be *P. a. pusilla*. Looking at the distributional maps, it would seem to make more sense (because of the apparent gap) if those in the north and south were different populations. The Northern Parula winters in extreme southern US south to Costa Rica and the West Indies.

Documentation: Specimens = 12) IL. Sangamon Co., all Fall & all from tv tower, adult $\bigcirc \bigcirc = 3$, September 17 – October 13, wts. = 8.3 – 9.4 gms; immature $\bigcirc \bigcirc = 2$, September 2, wts. = 7.7 – 7.9 gms; adult $\bigcirc \bigcirc = 3$, October 5 – 14, wts. = 8.4 – 8.8 gms; immature $\bigcirc \bigcirc = 4$, September 16 – October 14, wts. = 7.6 – 8.4 gms.

Highest # Days/Season

Spring40 (2006)Summer28 (2006)Fall40 (2006)

Highest # Birds/Season

Spring109 (2002)Summer37 (2006)Fall94 (2006)

Yellow Warbler

Dendroica petechia

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1821/733 (37)	540/360 (37)	382/259 (36)	0/0	2743/1352
Average/day	2.48	1.50	1.47		2.03
Average/season	49.22	14.59	10.61		

Status: Fairly Common Spring Migrant and Uncommon Summer Resident and Fall Migrant

Dates:

- Spring: Earliest arrival = April 18, 1991 ♂ south of Spfld Average arrival (37 years) w/range April 18 – May 3 = April 26 Average departure (6 years) w/range May 25 – June 4 = May 28 Latest departure = June 4, 1998 N. Pt (most years confused w/SR)
- Fall: Earliest arrival = July 30, 2007 juvenile Washington Park Average arrival (20 years) w/range July 31 – August 20 = August 9 Average departure (36 years) w/range August 21 – November 7 = September 16 Latest departure = November 7, 1979 Lake Springfield

I thought this warbler was not as numerous in Sangamon County as in other areas such as the Illinois Valley. The Yellow Warbler was found in more open habitats like willows around lake edges and along streams and second growth, but seldom in more mature forest. Most arrival dates in **spring** were in April, but there were six years (five in the early half of the study) in which this warbler arrived in early May. Other early dates were April 19, 2002 & 2003. Females arrived later than males with an average of May 3 for 14 years. High counts for spring were: 19, May 13, 1996; 13, May 15, 1997; 13, May 21, 2002; and 18, May 13, 2003. I could distinguish late spring departures only by locations of birds in non-breeding areas. The BBS in summer had small numbers in 24 of the 31 years with more numbers recently. Most high counts in summer were five but there were 6, June 13, 1978 and 7, June 10, 2002. Nest building was observed May 8 to June 5. Adults were seen carrying food to young in the nest June 5 – 27, and fledged young were seen July 2 - 20. Also, adults were seen feeding cowbirds June 22 and July 2. Song in this warbler could drop off by the end of June, but usually continued into July with July 22 the latest in 1999 and August 3 in 2000. Molt was noted from July 16 to August 4. Fall arrivals were based on birds that appeared in new locations (non-breeding areas) and were in basic plumage. Fall numbers were much lower than spring (1 to 4.8) maybe due to early departure in this warbler, in fact, it was missed in fall in 1973. But there seemed to be something else happening in fall. I thought that *aestiva* (the breeding subspecies) left early after peaking in August and early September, whereas amnicola (the northern subspecies) may have deflected east like some other warblers (Blackpoll and Cape May), and thus, Sangamon County got very few migrants in fall. The exception was when strong fronts pushed the northern birds into this area. The Yellow Warbler was another migrant species that seemingly fell out along lake edges from night migration, and could be quite rare in other areas. High counts in fall were low: 9, September 2, 1981; 5 August 2, 1988; 5, September 12, 2000; and 6, August 15, 2005. Other than the

November record above, there was an immature at Lincoln Gardens October 12, 1979 and a dull immature at Jefferies Orchard October 15, 2003. Plus, there were five records from September 26 - 29. The subspecies found in Sangamon County are the breeding *D. p. aestiva* (57%) which are brighter colored and averaged larger bills and wings and the migrant *D. p. amnicola* (43%) which are drabber colored and averaged shorter bills and wings and tended to have later dates in fall. This warbler winters from southern Mexico to northern South America including the West Indies.

Documentation: Specimens = 30) IL. Sangamon Co., all Fall, adult $\bigcirc \bigcirc \bigcirc = 7$, tv tower, August 31 – September 18, wts. = 10.6 – 14.6 gms (all had red streaks on ventral); immature $\bigcirc \bigcirc \bigcirc = 9$, tv tower (8) & east side Spfld, August 12 – September 20, wts. = 9.8 – 15.1 gms (4 with small amount of red streaks); adult $\bigcirc \bigcirc = 2$, tv tower, September 2 – 27, wts. = 9.3 – 11.4 gms; immature $\bigcirc \bigcirc \bigcirc = 12$, tv tower (11) & LSpfld, August 25 – October 12, wts = 10.3 – 14.0 gms (all $\bigcirc \bigcirc \bigcirc \bigcirc$ w/no red streaks).

Highest # Days/Season

 Spring
 38 (2002)

 Summer
 27 (2000)

 Fall
 18 (2005)

Highest # Birds/Season

Spring147 (2002)Summer40 (2000)Fall26 (2005 & 2006)

Chestnut-sided Warbler

Dendroica pensylvanica

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	3237/667 (37)	24/19 (12)	4900/1177 (37)	0/0	8161/1863
Average/day	4.85	1.26	4.16		4.38
Average/season	87.49	2.0	132.43		

Status: Common Migrant and Very Rare Summer Resident

Dates:

- Spring: Earliest arrival = April 26, 1986 ♂ CP & 1993 ♂ WP Average arrival (37 years) w/range April 26 – May 10 = May 3 Average departure (36 years) w/range May 16 – June 9 = May 29 Latest departure = June 9, 1998 ♂Lincoln Gardens
- Fall: Earliest arrival = August 9, 1988 immature Washington Park Average arrival (37 years) w/range August 9 – 29 = August 20 Average departure (37 years) w/range September 25 – October 25 = October 7 Latest departure = October 25, 1977 in city of Springfield

The chestnut sides, yellow cap, and cocked tail made this warbler easy to identify in spring. It fed at medium height in the vegetation, and usually sang its fairly loud song with a "witchyou" at the end. It had other songs which were more difficult to separate from other warblers. This was one of the mid-arrivals in **spring**, and I had 13 arrivals in April and 24 in May. Other early arrivals were April 27, 1984, 1990, & 2009. Males almost always arrived first, with females averaging May 13 as an arrival from 12 years of data. Occasionally, females in spring had little or no chestnut on the underparts. Most high counts were 10 - 20 birds, but higher counts for spring were: 30, May 19, 1974; 35, May 14, 1981; and 38, May 11, 2003. In ten years, spring migration in this species extended in to June. The high counts for this phenomenon were 4, June 2, 1975 and 3, June 2, 1997 both at Washington Park. Other migrants in June were a female June 4, 1976; a male June 4, 1986 and a female June 5, 1992, all at Washington Park. There were three potential summer records, but nesting was not confirmed. These records were: a singing male at Washington Park, June 22 and seen there later in heavy molt August 15, 1990; a singing male along the Sangamon River (north) on June 12, 1991; and an adult male in heavy molt in second growth at Horse Creek on August 14, 2005. This warbler normally breeds in the northeastern US and southeastern Canada. There are a few breeding records from Illinois. When this warbler returned in **fall** in basic plumage, they were essentially green above and gray below with yellowish-white wing-bars, some showed varying amounts of chestnut (see specimens below). One bird at Carpenter Park on September 13, 2009 had fused wingbars (one big patch of yellow on both wings). They seemed to mimic gnatcatchers in plumage and actions, which were plentiful in early fall. Fall Chestnut-sided Warblers were more numerous (1.5 to 1) than spring birds. All arrival dates in fall were in August, with other early dates: August 12, 1977; August 13, 1992; and August 11, 1998 & 2007. Some partial singing and whisper songs occurred in fall, in fact, this warbler was probably the most vocal of the tribe at that season. They fed a lot on small green inch worms, and I watched one take several of them at Washington Park on August

23, 2001. One warbler killed and ate a walking stick (almost as large as the bird) on September 23, 2008. Many times, this was the most numerous warbler in August, such as in 2001 when I recorded 101 in August. High counts for fall were: 34, September 14, 1984; 21, September 21, 1985; 21, September 7, 2002; and 24, September 2, 2003. Most departures were in October; with only four years in late September (1980, 1987, 1988, 1993). Besides the late date above there was one immature, October 18, 1983 at Washington Park and one, October 19, 2004 at Oak Ridge. Chestnut-sided Warblers winter in Central and northern South America.

Highest # Days/Season

Spring30 (1990)Summer3 (1976 & 1992)Fall46 (2002)

Highest # Birds/Season

Spring207 (2002)Summer5 (1975)Fall270 (2001)

Magnolia Warbler

Dendroica magnolia

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	3689/669 (37)	45/26 (14) sp mig	6628/1291 (37)	0/0	10362/1986
Average/day	5.51	1.73	5.13		5.22
Average/season	99.70	3.21	179.14		

Status: Common Migrant

Dates:

- Spring: Earliest arrival = April 28, 1975 & 1990 ♂♂ Carpenter Park Average arrival (37 years) w/range April 28 – May 10 = May 4 Average departure (35 years) w/range May 23 – June 10 = May 30 Latest departure = June 10, 1998 ♀ Lincoln Gardens
- Fall: Earliest arrival = August 12, 1977 immature Carpenter Park Average arrival (37 years) w/range August 12 – September 1 = August 24 Average departure (37 years) w/range October 1 – November 2 = October 13 Latest departure = November 2, 1994 Oak Ridge Cemetery

This was one of the more numerous warblers that arrived in early May, and I had only four April spring arrival dates; see the two records above; plus two males, April 30, 1986 at Oak Ridge Cemetery and a male, April 29, 1993 at Washington Park. Magnolia Warblers were mostly found in woodland and stayed from low to past mid-height in the vegetation. In all plumages, the white bar across the tail and yellow rump were present. The song was usually short, but variable and one song-type was similar to the Hooded Warbler's song. The average spring arrival date for female Magnolia Warblers was May 10 for ten years of data. High counts for spring were: 50, May 19, 1974; 36, May 14, 1983; 38, May 13, 2002; 40, May 11, 2003; and 43, May 16, 2009. Some springs (1987, 1998, 2004) these warblers either over flew this area or numbers were much lower. In 14 years the spring departure date was in June and this accounted for all the summer numbers. Other late departures were: male, June 9, 1983 at Carpenter Park; male, June 4, 1987 at Lick Creek; female, June 4, 2003 at Center Park; and female, June 4, 2009 at Lincoln Gardens. High counts for June were 4, June 3, 1976 and 4, June 1 & 2, 1997. The Magnolia Warbler breeds in coniferous and mixed conifer and deciduous forest in east and central Canada and the northeastern US. All fall arrival dates were in August except one September 1, 1974. Other early fall arrivals in addition to the one above were; August 18, 1999 at Sangchris; August 16, 2001 at Washington Park; and August 17, 2006 at Sangchris. The call note of this warbler was a distinctive squeak, and could be why this was one of the most responsive birds to spishing. Like a lot of warblers, they foraged lower in fall and occurred in weedy areas, especially giant ragweed in places such as Riverside Park. In fall, some females showed few if any streaks, while adult males were boldly marked. There were more birds in fall than spring (1.8 to 1) maybe due to production of young. High counts for fall were: 44, September 29, 1972; 40, September 14, 1984; 49, September 17, 1998; 42, September 25, 2000; and 41, September 1, 2001. All departure dates were in October except one in November above. Other late dates were: October 23, 1974; October 31, 1979; and October 24, 1983. On September 2, 2004 at Riverside Park a

hybrid (?) warbler was seen (with KB) which was probably part Magnolia Warbler, although it did not have the yellow rump or the band in the tail (drawing on file ISM). But for the fact that it was not seen wagging its tail, it could have been a dull female Kirtland's Warbler. Magnolia Warblers winter from central Mexico to Panama and the West Indies.

Documentation: Specimens = 62) IL. Sangamon Co., Spring = 7 all $\Im \Im$, 2 mi north Spfld (4) & Spfld (2) & LSpfld, May 11 – 24, wts. = 7.7 – 9.2 gms, testes = 3 – 5 mm; Fall = 55, adult $\Im \Im = 18$, tv tower (15) & Spfld (2) & LSpfld, September 18 – October 7, wts. = 7.7 – 10.0 gms; immature $\Im \Im = 10$, tv tower (8) & Spfld (2), September 2 – October 3, wts. = 7.8 – 9.8 gms; adult $\Im \Im = 11$, all tv tower, September 17 – October 7, wts. = 7.2 – 9.9 gms; immature $\Im \Im = 16$, tv tower (14) & Spfld & LSpfld, September 2 – October 4, wts. = 5.5 (very small) – 9.5 gms.

Highest # Days/Season

 Spring
 26 (2003)

 Summer
 5 (1998)

 Fall
 48 (1982 & 1998)

Highest # Birds/SeasonSpring203 (2002)Summer10 (1997)Fall409 (1998)

Cape May Warbler

Dendroica tigrina

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	743/295 (37)	1/1 (1) sp mig	647/337 (35)	4/4 (4)	1395/637
Average/day	2.52	1.0	1.92	1.0	2.19
Average/season	20.08	1.0	18.49	1.0	

Status: Uncommon Migrant and Very Rare Winter Resident

Dates:

- Spring: Earliest arrival = April 19, 1977 ♂ Carpenter Park Average arrival (37 years) w/range April 19 – May 14 = May 3 Average departure (37 years) w/range April 30 – June 1 = May 19 Latest departure = June 1, 1997 ♀ Dam Park
- Fall: Earliest arrival = August 17, 2001 immature ♀ North Pt. Average arrival (35 years) w/range August 17 – September 23 = September 3 Average departure (35 years) w/range September 11 – October 21 = October 5 Latest departure = October 21, 2003 ♀ Spruce [with 8 stragglers: latest departure = December 16, 1993 ♀ Washington Park and average departure = October 16 - plus see WR]

In spring I found this warbler high in spruce trees and little associated with mixed bird foraging flocks. They also probed flowers in trees (tulip), and on May 8, 1975 they were feeding in oak trees around oak galls. Their song was a high series of "seet" notes which were difficult to hear and differentiate from some other warbler songs. Depending on the weather, these birds could arrive in April or May, with 14 years in April and 22 years in May. Spring numbers were somewhat higher than fall numbers (1.2 to 1), but this was not always true especially in the 1990s and early 2000s. Adult males were one of the most strikingly colored of the warblers and appeared to be quite variable in plumage. On May 9, 1974 three males in spruce had differing amounts of white in the wing, although this could be manipulated by the position of the wing. Usually males were recorded first in spring, on a few occasions in May males and females were both seen at the same time (1995, 1998, 2000) and once females were first (2005). Females were noted in 28 years to arrive from May 4 - 25 with an average of May 11. The sex ratio recorded for 19 springs showed males dominated the sightings 330 330 in 231 22 or 1.4 to 1. In two years (1981 and 1987) no females were seen, and in two years females slightly out numbered males (1982 and 1983). Spring high counts increased somewhat with time in the field and knowledge of where to look for this species. Up to 1989 high counts were under 10 birds, with later counts: 10, May 7, 1991; 11, May 11, 1995; 13, May 13, 2002; and 26, May 15, 2005. There seemed to be an increase in numbers in 2002 and 2003. All spring departures were in mid- to late May except April 30, 1985 (only two birds were seen that spring) and the June 1st bird in 1997, which was the only record into the summer period. This warbler breeds in coniferous forest, especially spruce, in the northern US and east and central Canada. Usually the Cape May Warbler was not as numerous in fall as spring, and none were recorded in 1970 and 1990. Most fall arrivals were in September with 20 dates, but there were 10 for August. In most cases either immatures or

females were found first including the August 17, 2001 date. Since the Cape May Warbler winters in Florida and the West Indies they should have deflected east as did the Black-throated Blue Warbler, Blackpoll, Gray-cheeked Thrush and others. Earlier data indicated this phenomena, but by 1992 numbers had increased, 0 – 12 from 1970 – 1991; 10 – 75 from 1992 – 2003; then somewhat lower until 2006. This change in migration numbers may be due to an increase on the breeding grounds (due to spruce bud worm outbreaks) or a substantial geographic change in the wintering areas. Also, I have found that this warbler tended to fall out (from night migration) near Lake Springfield, while they could be difficult to find in other areas such as Carpenter Park. High counts in fall were minimal (0 - 4) until 1992, then increased: 8, September 26, 1992; 10, September 19, 1999; 10, September 23, 2001; 10, September 26, 2004; and 10, September 25, 2005. The most often used habitats in fall were parkland, upland forest and conifers. At times it seemed that Cape May Warblers mimicked siskins in plumage, bill shape, and choice of habitat. I found individual males holding feeding territories in fall, one at Washington Park in 1992 in Black Maples infested with aphids, which he would defend against several other species of birds including Tennessee Warblers. This bird held the territory for at least 15 days. Also there was a male holding a territory at Center Park in a pine tree from August 20 – October 15, 2001. I saw a Cape May Warbler feeding on sap from holes drilled by sapsuckers on December 16, 1993. Of interest in this aspect, was the tongue of a Cape May Warbler specimen which was frayed on the end forming a brush-like tip. They also fed on fruits such as wild cherry and grapes. On September 22, 2001 at Sangchris a male was gleaning the bark, like a creeper, of the trunk of a large cottonwood tree. I have seen them in weedy fields some distance from trees like at Knapp Lake September 17, 1984 and along Marsh Road October 1, 2003. Occasionally, I saw them in bald cypress planted around Lake Springfield as this tree serves the same purpose as other conifers. Departures were usually in October (24 years), but were also in September (10 years). There were nine stragglers, four of which made it into winter, but only one that was known to have stayed all winter. The stragglers were: female, Lake Springfield, November 4 – 22, 1976; female, Oak Ridge, December 2, 1983; immature female, Oak Ridge, November 20, 1985; immature female, Adams Sanctuary, November 21, 1991; female, Washington Park, December 16, 1993 (DO); immature female, Lake Springfield, December 5, 2000; male, Lincoln Gardens, November 18, 2002; immature male, Muni, November 29, 2003; adult female, Pleasant Plains (attending a feeder – photograph) January 11, 2004. These birds can survive long periods by eating scale insects and inhabiting conifers for protection.

Documentation: Specimens = 5) IL. Sangamon Co., Spring = 1, ISM# 606211 \Diamond , Spfld, May 13, 1975, coll. by B.Weedman, wt. = 11.6 gms, testes = 3 mm; Fall = 4, ISM# 606065 immature \Diamond , Spfld, September 20, 1974, coll. by W. Henderson, wt. = 12.9 gms; ISM# 607329 adult \heartsuit , tv tower, September 3, 1981, coll. by HDB, wt. = 10.6 gms; ISM# 607328 immature \heartsuit , tv tower, September 3, 1981, coll. by HDB, wt. = 12.4 gms; ISM# 608676 immature \heartsuit , tv tower, September 21, 1985, coll. by HDB & T. Teeter, wt. = 11.6 gms.

Highest # Days/Season

 Spring
 23 (2002)

 Summer
 1 (1997)

 Fall
 28 (2002)

 Winter
 1 (4 years)

Highest # Birds/Season Spring 94 (2002) Summer 1 (1007)

 Summer
 1 (1997)

 Fall
 75 (2002)

 Winter
 1 (4 years)

Black-throated Blue Warbler

Dendroica caerulescens

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	20/18 (14)	0/0	194/158 (36)	0/0	214/176
Average/day	1.11		1.23		1.22
Average/season	1.43		5.39		

Status: Very Rare Spring Migrant and Occasional Fall Migrant

Dates:

- Spring: Earliest arrival = May 3, 1977 ♂ Carpenter Park Average arrival (13 years) w/range May 3 – 21 = May 12 Average departure (8 years) w/range May 15 – 28 = May18 Latest departure = May 28, 2004 ♂ Washington Park
- Fall: Earliest arrival = August 17, 1998 adult ♂ Washington Park Average arrival (35 years) w/range August 17 – October 4 = September 8 Average departure (35 years) w/range September 12 – November 2 = October 7 Latest departure = November 5, 2007 ♀ Muni area

This beautiful warbler, which had the most obvious sexual dimorphism of the tribe, was very difficult to find in spring due to its breeding range being mostly to the northeast. It wintered in the West Indies and most birds passed to the east on spring migration, however, northeast winds occasionally brought a few into the county. I recorded it in 15 out of 40 years in **spring**, all in May. The spring dates were imperfect because with rare birds, which were easily missed, an arrival date could be closer to a departure date. Other early spring arrivals were May 7, 1998 and May 8, 1995 & 2008. The males often sang their buzzy song which helped to locate them, while females nearly went undetected – only recorded once in spring on May 19, 1981 at Washington Park. The song was fairly loud and easy to recognize, and on May 8, 2008, while driving through Riverside Park, I heard and later photographed a male. The highest spring counts were only two at Oak Ridge Cemetery May 11, 1995 and at Carpenter Park May 19, 2001. For every one of these warblers I saw in spring there were ten in fall (actually 9.7). Almost all that were seen in fall, that were aged, were immatures. In fact, adults may have preceded immatures in fall; considering the earliest fall arrival was an adult (see above). The sex ratio in fall for 39 years combined was nearly equal with 106 33 to 103 99. This warbler arrived in fall only six times in August, the rest were in September except twice in October. It was missed in 1970 and there were only one per season in 1986 and 2003. Other early fall arrivals were August 29 in four years (1982, 1987, 1995, 2005). Black-throated Blue Warblers foraged low to medium heights in both upland and bottomland forest, usually in shaded areas. The high counts for fall were three, September 29, 1976 and four, September 1, 2001. Departures were usually in October (25 years), but some times in September (10 years). Rarely these warblers tended to stay late in fall with three November departure dates: see latest departure above; male, Washington Park, November 1,1994; and male, Oak Ridge Cemetery, November 2, 2005. It seemed as though this warbler may mimic a junco in its male plumage and its call note.

Documentation: Specimens = 7) IL. Sangamon Co., all from tv tower, 10 mi east Springfield, immature $\partial \partial = 4$, September 12 – October 4, wts. = 10.2 – 11.2 gms; immature $\bigcirc \bigcirc = 3$, September 21 – 29, wts. = 9.5 – 10.5 gms.

Highest # Days/Season

cason

Spring3 (1995)Fall11 (2005)

Highest # Birds/Season

Spring4 (1995)Fall16 (1998)

Yellow-rumped Warbler

Dendroica coronata

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	24283/1619 (37)	2/2 (2)	39225/1932 (37)	742/256 (34)	64252/3809
Average/day	15.0	1.0	20.30	2.90	16.87
Average/season	656.30	1.0	1060.14	21.82	

Status: Very Common Migrant, Uncommon Winter Resident and Very Rare Summer Resident (non-breeding)

Dates:

- Spring: Earliest arrival = March 10, 1997 Washington Park (arbitrary due to WR) Average arrival (37 years) w/range March 10 – April 9 = March 29 Average departure (37 years) w/range May 13 – June 3 = May 21 Latest departure = June 3, 2003 ♀ Center Park (see summer record)
- Fall: Earliest arrival = August 24, 2006 worn adult in alternate plumage Center Park Average arrival (37 years) w/range August 24 – October 3 = September 16 Average departure (37 years) w/range November 3 –December 20= November 29 Latest departure = December 20, 1981 three LSpfld (arbitrary due to WR)

This warbler was by far the most numerous one of the tribe and was 38th in numbers of all species (see Table 35). Its yellow rump, bluish plumage, and distinctive chip note were familiar to all observers. When present, flocks of this warbler dominated woodland and brushy habitat, and they occurred in pure or mixed species flocks. During a cold spell 20 were feeding in the road with Chipping Sparrows at Center Park on April 20, 2002. Yellow-rumps also were sometimes found in bluebird flocks. Spring arrival varied with the weather, and the Yellowrumped Warbler was one of the earliest warblers to arrive, either in late March or early April. These early birds could migrate from as close as southern Illinois. Many arriving in spring showed prealternate molt (from March 19 to May 25), while others were already in alternate plumage and some males were singing. High counts for spring were: 100, April 28, 1987; 110, April 28, 1989; 112, May 6, 1996; and 115, May 2, 2002. Later in May as their numbers dwindled they could be found more easily around lake edges and in conifers. Although I think of this warbler as being present early in spring, I have 20 years of records past May 20 and the June date above. Also a male (second year?) was at Lake Springfield on June 19, 2004, but it probably was a wandering summer resident. Yellow-rumped Warblers breed in the coniferous zone in the northeastern US, Canada and Alaska. Some of the very early returning birds in fall were still in alternate plumage or showing molt which normally occurred in the breeding areas. This was especially true in 1987, when two - three were at North Pt. September 2, and in 2006, at Center Park on August 24. Maybe these birds were forced out early by cold or forest fires on the breeding grounds. Numbers in fall were 1.6 times higher than spring, maybe due to production of young. High counts in fall were: 150, October 9, 1972; 150, October 15, 1979; 150, October 4, 1980, 480 (303 were tv kills), October 14, 1985; 233, October 10, 1998; 150, October 10, 2000; and 189, October 13, 2002. October was the month most Yellow-rumps moved in fall whereas for most other warblers it was September. These warblers were not only nocturnal, but diurnal

migrants. On days of heavy migration (usually associated with a cold front) it was obvious whether I was at Marine Pt. or standing in the open almost anywhere that they were migrating. Most left in November, but some were still migrating in December, and I saw one migrating December 29, 1995 over Lincoln Gardens because it came over the lake. Winter numbers varied greatly from year to year, and they stayed only if berries like poison ivy, cedar, and honeysuckle were present in numbers. Some winters there were few or none (1970-71, 1972-73, 1973-74, 1985-86, 2004-05, 2006-07). High counts for winter were: 25, February 22, 1980; 17, December 31, 1984; 21, December 7, 2003, and 15, January 15, 2004. I have seen several leucistic Yellowrumps or birds that had a frosted appearance in parts of their plumage, but several others stand out. On May 10, 1982 a male at Carpenter Park was seen that had no yellow pigment, not even the rump; on November 12, 1991 at Adams Sanctuary there was a leucistic bird with other Yellow-rumps which was mostly white and tan with a yellow rump and muted streaking; and on April 29, 2006 at Lincoln Gardens was one male with a black throat and yellow malar stripes – a bizarre, but beautiful bird. The subspecies in eastern Northern America is the nominate form and all ISM specimens appear to be this form. I also have three sight records with written descriptions of the Audubon's Warbler (best left as subspecies ? but the most eastern one is D. c. memorabilis). One was at Riverton December 31, 1982; and two were from Lake Springfield, November 11, 1985 and December 15, 1998. The Yellow-rumped Warbler winters south to Central America.

Documentation: Specimens = 48) IL. Sangamon Co., Spring = 5, $\partial \partial = 4$, LSpfld (2) & 2 mi north Spfld & Rochester, April 6 – May 8, wts. = 12.8 – 16.9 gms, testes = 1.5 – 4.5 mm; Q = 1, LSpfld, May 6, wt. = 11.2 gms, ovary = 5 mm; Fall = 43, adult $\partial \partial = 15$, tv tower (14) & 2 mi north Spfld, September 29 – October 28, wts. = 10.0 – 15.2 gms; immature $\partial \partial = 10$, tv tower (8) & Spfld & 3 mi south Spfld, September 29 – October 28, wts. = 11.2 – 14.8 gms; adult QQ =8, tv tower (6) & 2 mi north Spfld (2), September 29 – October 29, wts. = 11.1 – 13.3 gms (ISM # 660592 leucistic on neck, lower back and left wing); immature QQ = 10, tv tower (7) & 2 mi north Spfld & 9.5 mi south Spfld & Chatham road, September 27 – November 6, wts. = 10.3 – 14.1 gms.

Highest # Days/Season

 Spring
 57 (1997)

 Summer
 1 (2003 & 2004)

 Fall
 66 (1992)

 Winter
 27 (1992 & 2003)

Highest # Birds/Season

Spring1501 (2002)Summer1 (2003 & 2004)Fall2160 (1998)Winter110 (1979)

Black-throated Gray Warbler

Dendroica nigrescens

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1/1 (1)	0/0	0/0	0/0	1/1
Average/day	1.0				1.0
Average/season					

Status: Very Rare Spring Migrant

Dates: One Record: ♂, Carpenter Park, May 3, 1975.

This western warbler was feeding at mid-height in deciduous woods with an influx of other spring warblers. After seeing the yellow lore spot, the face pattern, and the gray back the identification became apparent as I had seen them in the west. The bird was so busy feeding it stayed in the same area for several minutes. Occasionally, the warbler would wag its tail and it caught some insects on the wing. Since (and maybe before?) this sighting, several have been recorded in Illinois. It breeds in the western US and adjacent Canada and winters in southern California and Mexico. The subspecies of the Black-throated Gray Warbler that wanders east could be the nominate form, but various authorities give different ranges for the two recognized subspecies and the longer winged and more eastern (?) subspecies is *D. n. halseii*.

Documentation: Written description: IL. Sangamon Co., HDB - on file ISM (see Bohlen, 1976).

Black-throated Green Warbler

Dendroica virens

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	2669/782 (37)	13/11 (9)	5464/1424 (37)	0/0	8146/2217
Average/day	3.41	1.18	3.84		3.67
Average/season	72.14	1.44	147.68		

Status: Fairly Common Spring Migrant, Common Fall Migrant and Very Rare Summer Resident

Dates:

- Spring: Earliest arrival = April 5, 1981 ♂ Oak Ridge Cemetery Average arrival (36 years) w/range April 5 – 30 = April 21 Average departure (36 years) w/range May 17 – June 4 = May 27 Latest departure = June 4, 1992 ♂ Lincoln Gardens
- Fall: Earliest arrival = August 4, 1982 & 1987 Washington Park
 Average arrival (37 years) w/range August 4 September 3 = August 21
 Average departure (37 years) w/range October 7 November 14 = October 24
 Latest departure = November 14, 1974 Washington Park

The Black-throated Green Warbler arrived fairly early in **spring** and was usually seen from midto high in the trees in woodland. Numbers in spring were half those in fall, even though the easy to learn buzzy song helped to locate many in spring. Early spring arrivals were: April 5, 1981Oak Ridge Cemetery (M.Harris); April 12, 1992 Carpenter Park; April 10, 1995 Washington Park; April 6, 2001 Washington Park; and April 7, 2003 Adams Sanctuary. Males usually arrived first with the average arrival of females for 12 years being May 5, with extremes April 18 and May 21. High counts in spring were 17, May 10, 1975; 20, May 10, 1979 & May 6, 1980; 29, May 6 & 7, 1994; and 16, May 6, 1999. Numbers were lower in spring toward the end of the study. Most went north by the end of May, but there were eight years when migration extended into June, six of these were June first or second. High count for the summer period was 3, June 2, 1997. A male was at Carpenter Park June 3, 1976, plus see above, and a singing male was at Gurgens Park on June 9, 1995, but these still could have been late spring migrants. However, a female/ immature at Riverton in an extensive willow area from July 26 – August 2, 1980 was either a **summer** resident or very early fall migrant. In the addendum, an adult male showing some molt was at Washington Park on July 20, 2009 after an early cold snap, but was probably a very early fall migrant. These warblers breed in the northeast US and central and eastern Canada. Most fall arrivals were in August, but there were eight arrivals in early September. Other early fall birds were: August 8, 1992 at Carpenter Park; August 8, 1995 at Washington Park; and August 6, 2004 at Washington Park. High counts in fall were: 22, October 10, 1970; 21, September 23, 1978; and 22, September 23, 2006. This warbler may feed lower in fall, but one foraging on the ground September 6, 1980 at Carpenter Park was unusual. Several of these warblers and other woodland bird species mobbed a black snake at Sangchris; the warblers were on the ground and very close to the snake and seemed fearless. They usually leave in October, but I had the following late dates besides the one above: November 8, 1972 & 1973;

November 10, 1978 & 1992; and November 2, 2007. Some of the later birds as well as others were found in pine and spruce. Occasionally, I saw birds of this species that were yellowish ventrally and a few specimens show this also. The subspecies is the widespread nominate form and it winters from southern Texas to central Panama including the Greater Antilles.

Documentation: Specimens = 53) IL. Sangamon Co., all Fall, adult $\Im \Im = 17$, all from tv tower, September 8 – October 13, wts. = 8.6 – 10.7 gms; immature $\Im \Im = 8$, tv tower (7) & Spfld, September 12 – October 19, wts. = 8.7 – 10.8 gms; adult $\Im \Im = 15$, all tv tower, September 2 – October 14, wts. = 8.2 – 10.0 gms (# 607860 w/date Oct 4 had ovary of 4 mm); immature $\Im \Im = 13$, tv tower (12) & LSpfld, September 21 – October 23, wts. = 8.0 – 10.4 gms.

Highest # Days/Season

Spring30 (1979 & 1992)Summer2 (1976 & 1992)Fall60 (1986)

Highest # Birds/Season Spring 133 (1979) Summer 3 (1997)

 Fall
 286 (1982)

[Hermit Warbler]

Dendroica occidentalis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	0/0	0/0	1/1	0/0	1/1
Average/day			1.0		1.0
Average/season					

Status: Hypothetical: Very Rare Fall Migrant

Dates: One Potential Record: adult ♂, Lake Springfield, November 25, 1998.

This was a western species which had been recorded several times in the east. I used the following field marks to identify this species: practically all lemon yellow head with no postocular stripe and a blackish throat (not solid), underparts whitish with no streaking down the sides and no yellow in the vent area, a dendroica tail (showing white) from a ventral view, and a small warbler bill. However, the upperparts to me looked grayish as did the nape, but my view of these was brief (they were supposed to be olive). The only other possible species would be the Black-throated Green Warbler and it was eliminated by my description. The bird was rather high in a sycamore tree. I watched it for a while, seeing mostly the ventral as it continued to forage high, and then it flew to the west. I made a two hour search, but never found it again. That was a weird day with a small cell of rainy weather at the lake and a very late adult male American Redstart less than a quarter of a mile away a few minutes before this warbler. The Hermit Warbler winters in southern Mexico south to Nicaragua.

Documentation: Drawing and written description: IL. Sangamon Co., HDB - on file ISM.

Blackburnian Warbler

Dendroica fusca

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1215/496 (37)	20/17 (10) all mig	1801/802 (37)	0/0	3036/1315
Average/day	2.45	1.18	2.25		2.31
Average/season	32.84	2.0	48.68		

Status: Fairly Common Migrant

Dates:

- Spring: Earliest arrival = April 18, 1978 ♂ Carpenter Park Average arrival (37 years) w/range April 18 – May 12 = April 28 Average departure (35 years) w/range May 17- June 5 = May 27 Latest departure = June 5, 1981 ♀ Lin.Gd. & 1993 ♂ CP
- Fall: Earliest arrival = July 22, 1998 second year ♂ Riverside Park Average arrival (37 years) w/range July 22 – August 25 = August 18 Average departure (37 years) w/range September 23 – October 20 = October 4 Latest departure = October 20, 2002 Riverside Park

This was one of the warblers that stayed in the treetops, usually arrived late in **spring** when leaves were fairly thick on the trees, plus, it had a weak buzzy song, making it a pain in the neck to find. However, if seen, it was like a gorgeous jewel flitting through the leaves. Spring arrivals were divided between late April (19 years) and May (20 years). Other early spring arrivals were April 25, 1975 at Carpenter Park and males April 25, 1990 at Carpenter Park and Washington Park. In spring, males arrived first, with females average arrival for 17 years being May 15, with extremes May 7 to May 25. High counts were usually in the single digits, but there were 30, May 10, 1979 and 20, May 12, 1980. Spring migration usually ended in late May, but went into June ten years. Other late spring records were a male, June 4, 1976 and a female, June 4, 1982, both at Washington Park. Multiple counts in June were two: June 2, 1975 & 1997 and June 1, 1998. This warbler breeds in south-central Canada and the eastern coniferous forests in Canada and the US and in conifer-deciduous forests in the Appalachian Mountains. It was one of the earlier migrant warblers to return in the fall, and many early ones were immatures. All fall arrivals were in August except the one July record above. Two other early fall arrivals were August 7, 1972 and August 10, 1977. Some of the immature females had very light yellow throats such as one at Carpenter Park August 12, 1977 and another at Horse Creek August 17, 2001. These lightthroated birds could be confused with other warblers, but note the pale stripes on the back. Numbers were higher in fall than spring (1.5 to 1). High counts in fall were difficult because of the heavy foliage and lack of singing; however they did sometimes feed lower in fall. High counts were: 21, September 2, 1972 (tv kills), 14, August 17, 1977, 15, September 2, 1981, and 9, September 23, 2006. Fall migration usually went into October with only 8 years ending in September. Besides the late record above, one was seen October 17, 1987 at Washington Park and one was at Lincoln Gardens October 17, 2007. Numbers in this warbler appeared to decline in spring by 1998, but were variable in fall, maybe indicating somewhat different migrational

routes. The Blackburnian Warbler winters from southern Central America south to the Andes as far as northern Bolivia in South America.

Documentation: Specimens = 52) IL. Sangamon Co., all from tv tower east of Springfield except one west of Springfield; Spring = 1 \bigcirc , May 19, 1974, wt. = 8.9 gms, testes = 4 mm; Fall = 51, adult $\bigcirc \bigcirc = 18$, August 31 – October 4, wts. = 9.0 – 14.9 gms; immature $\bigcirc \bigcirc = 15$, August 31 – October 4, wts. = 9.1 – 15.4 gms; adult $\bigcirc \bigcirc = 14$, August 28 – September 23, wts. = 8.9 – 11.4 gms; immature $\bigcirc \bigcirc = 4$, September 10 – September 29, wts. = 9.0 – 9.7 gms.

Highest # Days/Season

 Spring
 25 (1997)

 Summer
 3 (1976 & 1998)

 Fall
 38 (2006)

Highest # Birds/Season

Spring122 (1979)Summer4 (1998)Fall116 (2006)

Yellow-throated Warbler

Dendroica dominica

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	559/373 (36)	258/168 (35)	131/114 (28)	0/0	948/655
Average/day	1.50	1.54	1.15		1.45
Average/season	15.53	7.37	4.68		

Status: Uncommon Spring Migrant and Summer Resident and Occasional Fall Migrant

Dates:

Spring: Earliest arrival = April 2, 2007 ♂ Carpenter Park Average arrival (36 years) w/range April 6 – 29 = April 15

Fall:Average departure (28 years) w/range August 2 – November 11 = September 16Latest departure = November 11, 1975 conifers by Lake Springfield

This hardy warbler was one of the earliest to arrive in **spring** and sometimes had to endure low temperatures and even snow. I have seen them feeding on the ground in cold weather, as on April 17, 1997 at Riverside Park. Other early arrivals were April 7, 1991, 2001 & 2004 and April 6, 2005. In this region, it was mainly associated with sycamore trees in bottomland forest where it stayed high and was usually located by its clear, loud song. Later in the season this song could be confused, at a distance, with the Indigo Bunting's song. These warblers occasionally were found in other habitats, one male was in willows at Sangchris April 12, 2006. High counts for spring were low usually 2 – 5, but there were 8, May 6, 1978 and 7, May 1, 1982. In summer the Sangamon River Census showed a slight increase from 1976 to 1991. Weather permitting, they began singing and establishing territories, two males were chasing above and through the sycamores at Gurgens Park April 14, 1982 for several minutes. The nesting in bottomland forest was almost entirely dependent on sycamore trees. After establishing a territory, there seemed to be a hiatus of song usually in May. High counts in summer were: 6, July 4, 1976; 7, June 16, 1979; and 7, June 13, 1991. This warbler usually feeds by crawling along the larger branches. I noted an adult on July 31, 1983 at Riverside Park picking bugs off a cottonwood tree, and with several in its bill at once it flew across the river. Again at Riverside Park on July 15, 1987 there were two worn adults with two fledged young which were being fed in a walnut tree. The young would have been a difficult identification had they not been with the adults. A pair of adults was feeding a young cowbird on June 12, 1988 at Riverside Park. Also, adult and juvenile warblers were at Riverside Park August 23, 2009. One bird along the Sangamon River on August 31, 1986 was showing head and body molt and one at Riverside Park on August 28, 2006 was apparently showing postjuvenile molt. Birds in basic plumage were seen as early as July 31, 2003 and August 3, 1986. Most males had quit singing by the end of July, but some gave partial songs, as did one at Carpenter Park on August 1, 1992. A whisper song was heard at Center Park September 25, 2003. Fall migration consisted of summer residents leaving since few nest north of the county. Fall numbers were 4.3 times less than spring numbers. After nesting these warblers could be seen, usually in bottomland, in feeding flocks with other warblers and woodland species high in the canopy. There were exceptions like the immature at Carpenter Park August 27, 1977 which was in an upland flock of eleven species of warblers feeding low in the

vegetation. On August 1, 1982 near Dawson and completely out of habitat along a railroad track, one of these warblers was feeding on insects high on a metal structure. It eventually flew SSW out of sight – obviously migrating at mid-day. I have since seen these warblers feeding on metal structures such as bridges in other areas. One was taking insects out of a spider web at a lamp pole at Center Park on September 30, 2006. On September 29, 2006 at Riverside Park there was a Yellow-throated Warbler with an orange throat (not yellow), it was seen at all angles and in good light at close range (with KB). High counts in fall were only 2 –3 birds, with 3, September 6 & 13, 2005. Although these warblers usually left in September, I had five October dates: October 12, 2001, October 4, 2003, October 1 & 6, 2004, October 9, 2006, plus, October 8, 2008 and October 7, 2009 in the addendum. The latest was November 11, 1975, which could have been the eastern subspecies *D. d. dominica* since it had yellow lores and a large bill and it was in a pine area near Lake Springfield. The subspecies in the Mid-west and in Sangamon County is *D. d. albilora*. This warbler winters along the Gulf Coast south to northern Central America and the Greater Antilles.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 606456 immature \mathcal{Q} , Lake Springfield, September 26, 1976, coll. by HDB, wt.10.3 gms, ovary = 1 mm, gizzard with Homoptera, Hemiptera, Hymenoptera.

Highest # Days/Season

Spring22 (1976 & 2005)Summer11 (2002)Fall21 (2005)

Highest # Birds/Season

Spring39 (1976)Summer23 (1991)Fall29 (2005)

Pine Warbler

Dendroica pinus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	190/152 (36)	0/0	53/51 (25)	4/4 (1)	247/207
Average/day	1.25		1.04	1.0	1.19
Average/season	5.28		2.12		

Status: Occasional Spring Migrant, Rare Fall Migrant and Very Rare Winter Resident

Dates:

- Spring: Earliest arrival = March 12, 2005 ♀ Oak Ridge Cemetery Average arrival (35 years) w/range March 12 – May 1 = April 11 Average departure (36 years) w/range April 21- May 13 = April 30 Latest departure = May 13, 1988 ♂ west of Springfield
- Fall:Earliest arrival = August 16, 1992 Oak Ridge Cemetery
Average arrival (20 years) w/range August 16 October 7 = September 15
Average departure (21 years) w/range September 13– November 25 = October 13
Latest departure = November 25, 1975 ♂ Washington Park

Though I recorded the Pine Warbler every spring but one (1971), it was difficult to find with its slower foraging and Chipping Sparrow-like song. Counting the arrivals including the addendum, 30 were in April and seven were in March (1983 was in May). Males usually arrived first, but some of my earliest arrivals were females on March 13, 1986 and March 14, 1995. Since this warbler does not breed here, most of the migrants were probably the ones breeding around the upper Great Lakes, or possibly a few could be over-migrants from the south (including southern Illinois). Presumedly breeders skipped Central Illinois because it was historically the prairie peninsula without pine habitat. One would think that two populations would have evolved from this isolation. These warblers were found usually in conifers and oaks and foraged on the larger limbs. Two males were feeding on the ground and over water at a slough because of cold temperatures at Riverside Park April 17, 1997. High counts for spring were: 4, April 21, 2003; 4, April 19, 2008; and 5, April 26, 2008. Most left in April (20 years) and the others departed in early May. Other late departures were May 11, 1970 at Sangchris & 1987 at Carpenter Park and May 8, 2003 at the Refuge & 2007 at Lincoln Gardens. There was a broad range of fall arrivals, with September the most usual with 16 years (using addendum data), but there were five arrivals in August and five in October. In 1993 and 2000 it was not seen until November but these were not classified as fall arrival dates. It was missed twelve years in fall. This warbler was much less numerous in fall with only one for every 3.5 in spring. Two August (August 28, 1987 and August 16, 1992) arrivals still appeared to be in some molt, and these records could indicate breeding. A few immature females could be very dull plumaged, being mostly brown and gray, maybe to resemble a sparrow. The Pine Warbler foraged with bluebird and Chipping Sparrow flocks especially in fall, and they occasionally fed on the ground. One male was feeding on sweet gum balls November 10, 2003. The only records of more than one bird in fall were two, September 25, 2005, October 8, 2006, and September 27, 2009. One warbler at Oak Ridge on November 14, 1975 fed by running its bill among bunches of pine needles. Other late records were: female,

November 23, 1993; male, November 17, 2000; and male, November 10, 2003. There was one record of a **wintering** bird in pines at Washington Park from December 17, 2002 to January 1, 2003 (found by T.Ward & P.Ward). The subspecies in this area is the nominate mainland form that winters in the southeastern US.

Documentation: Specimens = 2) IL. Sangamon Co., ISM# 605287 immature 3° , tv tower, September 29, 1972, coll. by HDB, wt. = 14.3 gms; ISM# 661894 immature 3° , west Sangchris, September 24, 2007, coll. by HDB, wt. = 12.5 gms, gizzard with Diptera – midge, Lepidoptera – moth, & Hemiptera.

Highest # Days/Season

Spring10 (1979 & 2001)Fall5 (1992 & 1999)Winter4 (2002)

Highest # Birds/Season

Spring13 (2001)Fall5 (1992 & 1999)Winter4 (2002)

Prairie Warbler

Dendroica discolor

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	44/42 (20)	3/3 (2)	1/1 (1)	0/0	48/46
Average/day	1.05	1.0	1.0		1.04
Average/season	2.20	1.50	1.0		

Status: Rare Spring Migrant and Very Rare Summer Resident and Fall Migrant

Dates:

Spring:	Earliest arrival = April 14, 2001 ♂ Sangchris
	Average arrival (19 years) w/range April 14 – May 10 = April 26
	Average departure (14 years) w/range April 29 – May 31 = May 10
	Latest departure = May 31, 1994 ♂ south of Springfield

Fall: Earliest arrival = **July 23**, 1991 immature Washington Park Latest departure = **August 16**, 2002 Jefferies Orchard (note: no averages, only two dates for fall)

This nicely marked warbler had a buzzy ascending song and wagged its tail, but was one of the more difficult to find in this area. Other early spring arrivals were a male, April 16, 1994 northwest of Springfield and a male, April 19, 2009 at Adams Sanctuary. I recorded the Prairie Warbler in 20 of 37 years in spring, plus all three springs of the addendum. Actually, the best year for numbers of this warbler was in the addendum in 2008 (not counted in totals) when I saw 8 birds in 6 days with a high count of three on April 26. The longest hiatus in not finding this warbler was six years (1984 - 1989). The only other records of more than one per day were two females on April 26, 1994 and two males on May 17, 2003. Most of the birds seen were in flowering trees, but in some cases the Prairie Warbler was feeding close to the ground with Palm Warblers. Also, they occasionally feed at medium height in oaks and other large trees. However, these warblers should be looked for in more open areas with smaller trees. The Prairie Warbler disappeared fairly early in spring, two years in April, with most of the rest before mid-May. Another late departure record was a male at Carpenter Park on May 21, 1976. The only summer evidence of potential breeders consisted of singing males. One male singing at Sangchris June 12 -20, 1992 was probably trying to attract a mate. Another male singing near Salisbury May 19, 1992 was on private property and could not be pursued but was probably a late spring migrant. Even though this warbler breeds in Illinois close to Sangamon County, there were no nesting attempts found in the county. Fall migration was very difficult to detect and a look at the distributional map shows very little breeding range north of Southern Illinois because this warbler was mainly a southeastern species. There were only two fall records of fairly early birds, both in open scrubby places (see above - the latter with KB). The nominate subspecies occurs here and it winters from Florida to the West Indies and Central America.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 606750 $\stackrel{>}{\circ}$, 2 mi north Springfield, April 28, 1978, coll. by HDB, wt. = 8.4 gms, testes = 4.5 mm.

Highest # Days/Season Spring 5 (1994)

 Spring
 5 (1994)

 Summer
 2 (1992)

 Fall
 1 (2002)

Highest # Birds/Season

Spring6 (1994)Summer2 (1992)Fall1 (2002)

Palm Warbler

Dendroica palmarum

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	6518/795 (37)	0/0	1484/502 (37)	0/0	8002/1297
Average/day	8.20		2.96		6.17
Average/season	176.16		40.11		

Status: Common Spring Migrant and Uncommon Fall Migrant

Dates:

- Spring: Earliest arrival = April 8, 1988 Washington Park Average arrival (37 years) w/range April 8 – 27 = April 19 Average departure (37 years) w/range May 10 – 26 = May 17 Latest departure = May 26, 1976 Carpenter Park
- Fall: Earliest arrival = September 2, 1999 Carpenter Park
 Average arrival (37 years) w/range September 2 October 13 = September 18
 Average departure (37 years) w/range October 1 November 18 = October 23
 Latest departure = November 18, 1973 Sangchris

This was a tail bobber that fed more out in the open and on the ground than most warblers of its genus; an almost pipit-like warbler. In spring, the Palm Warbler was usually in the woods or along the wood edge. They had a tendency to flock with others of their own species in spring. The Palm Warbler was more numerous in spring (4.4 to 1 in fall), an indication that a good portion of the birds must deflect east in fall. It was usually one of the earlier warblers that arrived in spring, and other early arrivals were April 10, 1978 at Washington Park and April 11, 2003 at Lick Creek. High counts for spring were: 50, May 8, 1976 & 1978; 47, April 30, 1986; 61, May 5, 1990; and 82, May 6, 1996. This warbler left in spring fairly early and none were seen into the summer period. Other late spring departures were May 25, 1971 & 2006. The Palm Warbler breeds in central and eastern Canada and the very northern US. In fall it arrived rather late, all in September except two October dates. Some years it was difficult to find at all, with 14 years having the fall numbers under twenty. Also, it was found in more open habitat such as weedy fields, brushy areas and even corn fields. Palm Warblers could be associated with bluebird feeding flocks along the roadside, sometimes perching on telephone wires and fences. Other early fall arrival dates were September 8, 1986 at Knapp Lake and September 4, 1991 at Oak Ridge Cemetery. Eight were in one small tree September 28, 1978. High counts were: 25, September 20, 1982; 33, September 29, 1999; and 28, October 2, 2004. This was one of the more responsive warblers to spishing, and on October 1, 2001 along Marsh Road while I was calling birds one Palm Warbler landed on the mirror of my truck, and then proceeded to walk across the hood. Though most departure dates were in October, there were six November dates: one above; November 4, 1983 at Washington Park; November 1, 1987 at Carpenter Park; November 12, 1991 at Lake Springfield dam (feeding on the steps with Yellow-rumped Warblers); November 2, 1993 at Bunn Park; November 6, 2003 at Muni. I had five records (0.06%) that were "Yellow Palms" (D. p. hypochrysea), spring: May 10 & 11, 1992 (same bird) at the Sediment Retention; May 4, 2001 at Sangchris; fall: October 16, 1983 Rochester; September 20, 1997 at South Fork;

and October 29, 2001 at Sangchris. Yellow Palms, with a clear, close look were fairly obvious, and had more yellow and chestnut in the plumage, and in fall, a yellow eyeline. The Western Palm, the nominate subspecies, accounts for all other Palm Warblers (including specimens) in the study. They winter from the Gulf Coast, Florida, and southern east Coast to the West Indies.

Documentation: Specimens = 32) IL. Sangamon Co., Spring = 7, $\bigcirc \bigcirc = 6, 2$ mi north Spfld (2), Sangchris, Chatham, east Spfld, Spfld, April 28 – May 11, wts. = 9.0 – 12.1 gms, testes = 3 – 5 mm, gizzard (May 3) with mostly Diptera Otitidae; $\bigcirc = 1$, 2mi north Spfld, May 9, 1978, wt. = 10.1 gms, ovary = 4 mm; Fall = 25, adult $\bigcirc \bigcirc = 5$, tv tower (4) & LSpfld, September 29 – October 10, wts. = 9.8 – 11.0 gms; immature $\bigcirc \bigcirc = 7$, tv tower (6) & Chatham, September 25 – October 14, wts. = 10.2 – 11.5 gms; adult $\bigcirc \bigcirc \cong 3$, tv tower, September 20 – October 4, wts. = 10.4 – 10.6 gms; immature $\bigcirc \bigcirc \cong 10$, tv tower, September 17 – October 14, wts. = 9.7 – 11.2 gms.

Highest #	Days/Season

Spring32 (2002)Fall26 (1999)

Highest # Birds/Season

Spring370 (1996)Fall129 (1999)

Bay-breasted Warbler

Dendroica castanea

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1269/436 (37)	5/5 (5)	4263/1066 (37)	1/1 (1)	5538/1508
Average/day	2.91	1.0	4.0	1.0	3.67
Average/season	34.30	1.0	115.22	1.0	

Status: Uncommon Spring Migrant, Common Fall Migrant and Very Rare in Summer and Winter

Dates:

- Spring: Earliest arrival = April 24, 2008 ♂ Washington Park Average arrival (36 years) w/range April 26 – May 12 = May 5 Average departure (36 years) w/range May 15 – June 4 = May 25 Latest departure = June 4, 1976 ♀ Washington Park (note: June 30, 1980 male east of Spfld)
- Fall: Earliest arrival = August 10, 1986 immature Carpenter Park Average arrival (37 years) w/range August 10 – September 3 = August 25 Average departure (37 years) w/range September 25–November 13 = October 14 Latest departure = November 13, 1987 Refuge (note: straggler December 2, 1988 WP)

This very attractive warbler was difficult to find in **spring** because it had a weak song, stayed in the treetops in woodland and was low in numbers. Some springs I saw barely a dozen to 15 birds (1971, 1985, 1996, 1998, 2000, 2008). Bay-breasted Warblers were variable in arriving, some years in late April (7 years), some years May 10th or later (7 years), but mostly they arrived in early May (22 years). Females average spring arrival was May 12 for 22 years of data. Other early spring arrivals were: male, April 26, 1981 at Lincoln Gardens; two males, April 27, 1984 at Carpenter Park; male, April 26, 1994 at Sangchris; and male, April 27, 2001 at Adams Sanctuary. High counts for spring were: 15, May 19, 1974; 22, May 20, 1979; 15, May 11, 2003; and 28, May 15, 2005. Most of these warblers had gone north by the end of May, but in five years they were seen in June: June 2, 1975; see above; and June 1, 1983 & 1997. However, one singing male near Berry was present on June 30, 1980, and must have been a non-breeding summering individual. This warbler breeds in the boreal forest in the northeastern US and south and central Canada. Twice, I had seen early fall arrivals of this species at Carpenter Park on August 12, 1977 and August 10, 1986, and in both cases they were birds in alternate plumage which suggested that they migrated before molting. Also, one at Washington Park August 29, 1997 was a worn adult in alternate plumage with much bay color still present, but the arrival date was more normal. The numbers in fall were 3.4 times that in spring, suggesting a different fall migration route. They seemed to forage somewhat lower in fall and they looked entirely different from spring plumage being almost identical to fall Blackpolls. High counts for fall were: 32, September 29, 1972; 43, September 12, 1982; and 36, October 4, 1983. There were occasionally flocks of this warbler, and I saw 10 in a flock at Lake Springfield September 16, 1993. Several fall stragglers were noted: November 13, 1987 at the Refuge; October 31, 2002 at Adams

Sanctuary; November 1, 2003 at Lincoln Gardens; and November 6, 2008 at Linden Lane. The only **winter** record was one at Washington Park on December 2, 1988 (it was later seen December 18 at a nearby feeder by B. Norton). In both migrational periods, there were equal or more birds in the early half of the study suggesting that this species had declined in numbers, because much less field time occurred in the early part of the study. The Bay-breasted Warbler winters in northern South America

Documentation: Specimens = 70) IL. Sangamon Co., Spring = 2 both $\Im \Im$, Springfield, May 16 – 21, wts. = 13.4 – 14.7 gms, testes = 5 – 5.5 mm, gizzard (May 16) with Coleoptera-Curculionidae & Diptera & (May 21) Hymenoptera & Coleoptera & Diptera; Fall = 68, adult $\Im \Im = 20$, all tv tower, September 17 – October 13, wts. = 10.0 – 15.4 gms (all w/ fair amount of bay on flanks); immature $\Im \Im = 21$, tv tower (18) & Spfld (3), September 2 – October 13, wts. = 10.3 – 15.1 gms (most w/ moderate bay on flank & a few w/no bay); adult $\Im \Im = 14$, all tv tower, September 2 – October 13, wts. = 11.5 – 13.8 gms (only 3 w/slight bay on flank); immature $\Im \Im = 11.4 - 13.3$ gms (all w/ no bay on flank) gizzard (Sept 13) with Coleoptera - spotted cucumber beetle.

Highest # Days/Season

Spring19 (1979 & 1981)Summer1 (5 years)Fall44 (1982)Winter1 (1988)

Highest # Birds/Season Spring 124 (1979)

 Spring
 124 (1979)

 Summer
 1 (5 years)

 Fall
 240 (1981)

 Winter
 1 (1988)

Blackpoll Warbler

Dendroica striata

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	3174/658 (37)	7/6 (5) all sp mig	233/168 (36)	0/0	3414/832
Average/day	4.82	1.17	1.39		4.10
Average/season	85.78	1.40	6.47		

Status: Common Spring Migrant and Occasional Fall Migrant

Dates:

- Spring: Earliest arrival = April 23, 2000 ♂ North Pt. Average arrival (35 years) w/range April 23 – May 7 = May 2 Average departure (35 years) w/range May 19 – June 4 = May27 Latest departure = June 4, 1976 and 1983 ♂♂ Washington Park
- Fall: Earliest arrival = August 25, 1986 immature Lincoln Gds &1993 adult RSP Average arrival (36 years) w/range August 25 – September 27 = September 8 Average departure (34 years) w/range September 3 - November 22 = October 6 Latest departure = November 22, 1976 Washington Park

The Blackpoll Warbler was one of the mid-arrivals in spring, usually foraging fairly high in large trees. It had a tapping-like song which was difficult to hear at any distance. Males almost always arrived first (except on May 4, 2002) while the average arrival of females was May 7 based on 14 years of data. There were many more Blackpolls in spring due to its elliptical migration route which brought them up through the interior US in spring and deflected them to the East Coast in fall. I noted this warbler had a tendency to drop out from night migration at the edges of Lake Springfield, while they were many times difficult to find in other forested areas of the county. They tended to be more numerous late in spring migration with high counts: 20, May 19, 1973; 30, May 12, 1979; 25 May 5, 1982; 25, May 18, 1999; and 22, May 22, 2006. At Lincoln Gardens on May 3, 1985 a melanistic Blackpoll was studied (drawing on file ISM). Also, a possible hybrid female Blackpoll x Bay-breasted Warbler was observed (drawing on file ISM) at Washington Park May 20, 1974. Most years spring migration ended in late May, but in six years they were seen into June: June 3, 1995 & 2003; see above; June 1, 2002 & 2008. The breeding range is in the northern boreal forest of the eastern US, central and northern Canada and Alaska. By the time Blackpolls returned in the fall, the males had a totally different look from spring, more like the females, but with more yellow. They were then difficult to separate from Bay-breasted Warblers which generally arrived earlier in fall. As well as plumage differences. also note the yellow feet or legs on Blackpolls. Other early fall arrivals were: August 29, 1980 at Lincoln Gardens; August 31, 1984 at Lick Creek; August 30, 1999 at Washington Park; and August 29, 2005 at Riverside Park. For every Blackpoll seen in fall, 13–14 were seen in spring (13.7 to 1), in fact, I missed them entirely in the fall of 1987. Also, note that most Blackpolls in the county in fall were immatures (89 % - see specimens). Numbers in fall were variable, and this may have depended on northeastern winds or the speed and power of the cold fronts on which they moved. High counts in fall were usually 2 - 4, with six, September 11, 1983 and seven, September 25, 2000 the highest counts. Most departure dates were in October (23 years), but in 16 years it was in September. Besides the very late date above, there were two October 18

(1999 & 2005) departures and one at Washington Park on October 21, 1979. This warbler winters in South America.

Documentation: Specimens = 30) IL. Sangamon Co., Spring = 5, $\Im \Im = 3$, near Lake Springfield (2) & tv tower, May 11 – 19, wts. = 13.3 – 16.4 gms, testes = 4 mm; $\Im \Im = 2$, LSpfld & tv tower, May 8 & 25, wts. = 12.2 gms, ovaries = 7 mm; Fall = 25, all tv tower kills, except one north Rochester; adult $\Im \Im = 3$, September 17 – 29, wts. = 12.2 – 13.7 gms; immature $\Im \Im = 6$, September 11 – October 1, wts. = 12.0 – 13.9 gms; adult $\Im \Im = 0$; immature $\Im \Im = 16$, September 2 – October 10, wts. = 10.5 – 15.5 gms.

Highest # Days/Season

 Spring
 24 (1996 & 2003)

 Summer
 2 (1983)

 Fall
 11 (2005)

Highest # Birds/Season

Spring172 (2003)Summer3 (1983)Fall18 (1985)

Cerulean Warbler

Dendroica cerulea

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	238/183 (37)	35/27 (18)	16/15 (11)	0/0	289/225
Average/day	1.30	1.30	1.07		1.28
Average/season	6.43	1.94	1.45		

Status: Occasional Spring Migrant and Rare Summer Resident and Fall Migrant

Dates:

Spring: Earliest arrival = April 18, 1975 ♂ Carpenter Park Average arrival (37 years) w/range April 18 – May 17 = April 29

Fall:Average departure (12 years) w/range July 28 – September 17 = August 24Latest departure = September 17, 1998 immature \bigcirc North Pt.

This beautiful blue warbler of extensive forest declined before and during the study and was being considered for endangered status. It could apparently nest in either bottomland or upland forest as long as the forest was extensive. The Cerulean Warbler usually stayed high in the canopy and in spring the males sang frequently. Eifert (1945) said "often nests here". Even though already rare, this study detected declines about 1980 and further declines by 1998. In spring it arrived 25 times in April and 12 times in May, the May dates were probably because it was so difficult to find. Other early arrivals were all males April 20, 1977 at Carpenter Park; April 22, 1979 at Lake Springfield; and April 22, 2008 at Carpenter Park. Females were recorded much less than males, but arrivals for ten years averaged May 7 with extremes April 28 to May 25. High spring counts were very low usually 2 or 3, but there were 4, May 6, 1996. Migrants left about mid-May. Breeding in **summer** was difficult to detect, but birds were present with singing males usually in bottomland forest at Carpenter Park, Riverside Park, Gurgens Park, Riverton, Lick Creek, Horse Creek, and northwest along the Sangamon River. As of 2007 only the last mentioned area had a pair in bottomland forest. In the other places this warbler had disappeared. To protect this species from dying out areas such as Carpenter/ Gurgens/ Riverside parks need to be preserved without undo disturbance. I thought the best method of assessing its population would be to float the Sangamon River, but during the census in 1976 and 1991 only a combined total of three birds were found. High summer counts were 3, June 11, 1972 and 3, June 24, 1978. On June 19, 1993 I noted a pair at Gurgens Park chasing off a cowbird. A young warbler was seen with an adult at Riverton July 26, 1980. Cessation of singing was noted July 28, 1980 and July 6, 2006. Molt was observed July 2 – 26. Fall migrants, if detectable, probably arrived in late July or early August. For every fall bird there were 14.9 spring birds. Some falls no matter how much effort was spent, I could not find them, and they were missed 23 years in fall. The only daily count over one in fall was two August 18, 2005 at Riverside Park. Some immatures showed light yellowish underparts and except for the back, could pass for a dull Blackburnian Warbler at this season. Besides the late date above, other late birds were: September 13, 1981 at Washington Park; September 11, 2004 at Riverside Park; and September 13, 2007 at Washington Park. The Cerulean Warbler winters in South America from Colombia to Bolivia.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 606751 $\stackrel{\frown}{\circ}$, north Buckhart, May 20, 1978, coll. by HDB, wt. = 9.6 gms, testes = 6.5 mm.

Highest # Days/Season

Spring15 (1979)Summer3 (1979, 1982, 1987)Fall2 (4 years)

Highest #Birds/Season

Spring22 (1979)Summer4 (1979)Fall3 (2005)

Black-and-white Warbler

Mniotilta varia

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1573/637 (37)	31/28 (17)	3623/1097 (37)	0/0	5227/1762
Average/day	2.47	1.11	3.30		2.97
Average/season	42.51	1.82	97.92		

Status: Fairly Common Spring Migrant, Common Fall Migrant and Rare Summer Resident

Dates:

- Spring: Earliest arrival = March 29, 1976, 1981, 1991 ♂♂ WP, Refuge, s. end LSpfld Average arrival (36 years) w/range March 29 – May 3 = April 15 Average departure (35 years) w/range May 16 – June 8 = May 25 Latest departure = June 8, 1998 ♀ Lincoln Gardens
- Fall:Earliest arrival = July 25, 2000 two ♂♂ Center Park
Average arrival (37 years) w/range July 25 August 30 = August 16
Average departure (37 years) w/range September 21 October 14 = October 5
Latest departure = October 14, 1984 two Carpenter Park & 1985 4 tv kills

This was a woodland species that had nuthatch-like feeding habits of crawling along branches and peering under limbs. Some of these warblers wintered in the southern US, and could arrive in spring early, note the March dates above. Plus, there were other early dates such as April 1, 2006, April 3, 1973, and April 4, 1982. Spring numbers were about half fall numbers (2.3 times less than fall). Males usually, but not always arrived first; females arrived first in four springs. Based on 12 years of data, the average arrival of females was April 30. I kept sex ratios for 10 about detectability than reality. High counts were fairly low most springs. High counts were: 15, May 13, 1978; 21, May 6, 1994; and 14, May 11, 2003. In 1988 and 1998, very poor spring numbers were tallied, and it was thought that the birds essentially over flew this area. Departure was usually in late May, but see Summer Records below. Most of the population of this warbler went further north, as far as central Canada, to breed. There was a thin summer population in Sangamon County found in woodland, which were recorded from 15 areas. Some of them might have been migrants or wandering birds, but note the juveniles (see Table 38). However, no nests were found and the only other evidence was males singing on territory. Summer residents and early fall migrants were difficult to separate, but most years northern migrants arrived in August. This warbler foraged with other woodland species in fall. High counts for fall were slightly more than spring: 26, September 3, 1981; 21, September 17, 1998; and 22, September 1, 2001. Blackand-white Warblers seldom sang in fall, but the latest was September 10, 1981. Late departures other than the one above were October 13, 1973 & 1994 and October 12, 2008. Numbers seemed to fluctuate from year to year, but were lower near the end of the study given the increased hours of effort. This warbler winters from the southern US to northern South America including the West Indies.

Documentation: Specimens = 68) IL. Sangamon Co., Spring = 1, adult \Diamond , 2 mi north Spfld, May 11, 1978, wt. = 11.4 gms, testes = 4.5 mm; Fall = 67, all from tv tower east Spfld except 3 from Spfld, adult $\Diamond \Diamond = 17$, September 2 – October 7, wts. = 9.3 – 12.4 gms; immature $\Diamond \Diamond = 20$, August 17 – October 14, wts. = 9.4 – 12.4 gms; adult $\Im \Im = 12$, September 11 – October 7, wts. = 7.9 – 12.0 gms; immature $\Im \Im = 18$, August 28 – September 29, wts. = 9.2 – 12.3 gms.

Highest # Days/S	eason	<u>Highest</u>	# Birds/Season
Spring 24 (1981)	Spring	94 (1997)
Summer 6 (2000)		Summer	: 9 (2000)
Fall 48 (1998		Fall	197 (1977)

Table 38. Black-and-white Warbler Summer Records by Area in Sangamon County

Carpenter Park	juvenile July 3,1974; ♂ singing May 28,1977
Gurgens Park	් July 22,1989
Clear Lake	♀ June 28,1982
Riverside Park	් May 29,1994; worn ් July 2,2002
Washington Park	♀ June 2,1975; August 12,1980; ♂ May 31,1982; August 5,1982; ♂ June 2,1985; ♀, May 28 – August 19,1991; adult ♀ July 25,2004; August 4,2004; adult ♀ July 6,2005; ♂ June 18 & 21,2007; ♂ June 14,2009
Lake Springfield	♂ June 17,1982; juvenile ♂ August 16,1985; 2 ♂♂ July 25,2000.
Sangchris	♂ singing August 26,1993; ♂ in molt August 9,1999; ♀ & juvenile July 19,2000; ♀ some molt July 12,2001; adult ♂ July 23,2003; adult ♂ July 29,2004
Irwin Bridge	♀ July 9,1983; ♂ July 15,2000
Oak Ridge Cemetery	♀ with 2 juveniles August 20,1975; ♀ May 27,1990; ♀ May 29,1997; ♀ June 3,2001
Lincoln Gardens	♀ August 16,1976; August 12,1979; ♀ May 30,1986; adult ♀ July 16,1986; adult ♂ June 9,1987; ♀ June 8 – July 27,1998.
Lick Creek	♂♀ June 6,2000
Kunz Road	♀ June 15,2000
Adams Sanctuary	♀ May 27,1992; two August 12,1992
Horse Creek	adult 🖒 July 22,1997; worn 🖒 June 21,2005
Scully Pines	් June 26,2000

Note: Some of these dates could be late spring departures or early fall arrivals.

American Redstart

Setophaga ruticilla

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	3738/725 (37)	111/54 (22)	6695/1254 (37)	1/1 (1)	10545/2034
Average/day	5.16	2.06	5.34	1.0	5.18
Average/season	101.03	5.05	180.95	1.0	

Status: Common Migrant and Occasional Summer Resident

Dates:

- Spring: Earliest arrival = April 25, 2001 & 2008 ♂ Adams Sanctuary &WP Average arrival (37 years) w/range April 25 – May 10 = May 1 Average departure (36 years) w/range May 19 – June 5 = May 30 Latest departure = June 6, 2009 ♀ Washington Park
- Fall: Earliest arrival = July 31, 2007 immature ♂ Riverside Park Average arrival (37 years) w/range August 1- 24 = August 13 Average departure (37 years) w/range September 25 – October 28 = October 9 Latest departure = December 5, 2004 immature ♂ Muni (with stragglers, average departure = October 12)

This active little black and red woodland warbler (females are yellow olive and gray) flits like a butterfly and feeds like a flycatcher. The American Redstart was one of the most numerous warblers, arrived in **spring** in mid-migration, and fed at mid- to high in the vegetation. Actually, there were fewer numbers in spring (1 to 1.8) than in the fall. Some spring numbers were low (1977, 1987, 1988, 1998, 2004) and this might be due to weather or mortality on migration or in the winter quarters. The Redstart was seen 12 times in late April as a first arrival, but usually arrived most years in early May. Other early spring arrivals were April 26, 1983 & 1986. Adult males nearly always arrived first, and I counted 30 males before the first female in the spring of 1999. The female average arrival was May 7 for 20 years with extremes May 1 -10. Immature males also arrived later than adult males. High spring counts were: 31, May 7, 1994; 47, May 12, 2002 and 60, May 11, 2003. Most Redstarts left by late May, but in 12 years (plus twice in the addendum) spring migration extended into June. Other late spring records from Washington Park were: immature and female, June 4, 1976; immature, June 4, 1993; female, June 4, 1997; and female, June 5, 1998. Very few stayed in Sangamon County to breed, though it was observed in 20 summers and some juveniles were noted (see Table 39). Most were seen in small numbers, except during the Sangamon River Census (taken in three to four days) when 22 were counted in 1976 and 12 in 1991. It usually bred in bottomland forest such as Carpenter Park, Riverside Park, Gurgens Park, and Tower Road. It was much more numerous in the Illinois River basin than in Sangamon County. One female in molt at Washington Park June 21-25, 1995 may have summered there and another was showing molt there July 9, 2008. Usually in early August immatures and females were seen out of breeding habitat and signaled the beginning of fall migration. All other fall arrivals were in August, with non-adult males present August 1, 1977 and August 2, 1985 & 1986 the next earliest. The adult males usually arrived later in fall toward the end of August. Lower numbers were recorded in fall in 1975, 1976, and 1988. High counts

for fall were: 59, September 3, 1981; 46, September 1, 2001; and 88, September 2, 2006. Woodland birds typically mob black snakes in trees, and on September 2, 2006 many birds, the majority Redstarts, were mobbing a snake skin that was hanging from a limb. Most fall departure dates were in October, but six were in September. Other late departure dates were: female, November 25, 1973 at Carpenter Park; adult male, November 25, 1998 at Lake Springfield; female, October 28, 2002 at Lincoln Gardens; female, October 28, 2004 at Oak Ridge; adult male, Oak Ridge Cemetery October 23, 2009. The **winter** record was a very late migrant on December 5, 2004 at Muni at Lake Springfield. The Redstart winters from extreme southern US south to Brazil and the West Indies.

Documentation: Specimens = 75) IL. Sangamon Co., Spring = 3, adult \Diamond , tv tower, May 14, 1981, wt. = 10.3 gms, testes = 5 mm; second year \Diamond , 2 mi north Spfld, May 11, 1978, wt. = 7.0 gms, testes = 4 mm (skull ossified); adult \heartsuit , 2 mi north Spfld, May 16, 1974, wt. = 8.1 gms, ovary = 4 mm; Fall = 72, adult $\Diamond \Diamond$ = 26, tv tower (25) & Spfld (1), August 31 – October 7, wts. = 7.1 –9.1 gms (although plumage quite variable ISM# 608774 has much whiter underparts); immature $\Diamond \Diamond$ = 13, tv tower, September 2 – 11, wts. = 7.5 – 9.5gms; adult $\heartsuit \heartsuit$ = 18, tv tower, September 2 – 0ctober 5, wts. = 7.5 – 8.9 gms (apparently older $\heartsuit \heartsuit$ have orange & brown plumage seen in ISM# 608776 and to a lesser degree in ISM# 605484); immature $\heartsuit \heartsuit$ = 15, tv tower (14) & LSpfld (1), September 2 – 28, wts. = 7.1 –9.3 gms (yellow on underparts variable from very little to all light yellow).

Highest # Days/Season

 Spring
 27 (2002)

 Summer
 7 (1976)

 Fall
 47 (2002 & 2004)

 Winter
 1 (2004)

Highest # Birds/Season

Spring280 (2002)Summer27 (1976)Fall477 (2006)Winter1 (2004)

1972	one, June 7 at Riverton and one, June 11 at Carpenter Park
1974	one, July 3 at Carpenter Park and two juveniles, August 4 at Carpenter Park
1975	\Diamond , June 22 at Carpenter Park and \bigcirc , July 23 at Gurgens Park
1976	්, June 14 at Sangamon River; 15, June 15 along Sangamon River; ∂, June 18 Sangamon River northwest; 6, July 4 at Carpenter Park
1978	\Im , June 13 Sangamon Co.; juvenile, June 15 at Clear Lake; four $\Im\Im$, June 24 at Gurgens Park
1979	four $\partial \partial$, June 3 at Buckhart and 6, June 16 at Carpenter & Gurgens Parks
1981	\mathcal{E} , June 4 at Carpenter Park and \mathcal{E} , June 10 at Lake Springfield
1982	7, June 5 at Gurgens Park
1983	one, June 26 northwest of Springfield
1986	්, July 13 Sangamon River east
1989	්, July 22 at Gurgens Park
1991	\Diamond , June 4 Sangamon River east; two $\Diamond \Diamond$, June 6 Sangamon River east; 6, June 11 Sangamon River east; 3 $\Diamond \Diamond$, June 13 Sangamon River north
1992	\mathcal{E} , June 9 at Gurgens Park and juvenile \mathcal{E} ?, June 10 at Lick Creek
1993	\mathcal{J} , June 19 at Gurgens Park
1995	♀, June 21 & 25 at Washington Park
1997	immature ♂ singing, June 17 at Gurgens Park
1999	immature $earrow d$ singing, June 10 at Riverside Park and one, July 21 at Lick Creek
2005	immature ♂, June 20 at Tower Road
2007	two \Im and juvenile \Im , June 17 at Tower Road
2008	\bigcirc showing molt, July 9 at Washington Park

Table 39. American Redstart Summer Records (minus obvious migrants) in Sangamon County

Prothonotary Warbler

Protonotaria citrea

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	370/278 (37)	443/226 (34)	133/94 (29)	0/0	946/598
Average/day	1.33	1.96	1.41		1.58
Average/season	10.0	13.03	4.59		

Status: Uncommon Spring Migrant and Summer Resident and Occasional Fall Migrant.

Dates:

Spring: Earliest arrival = April 13, 2006 ♂ Carpenter Park Average arrival (37 years) w/range April 13 – May 8 = April 24

Fall:Average departure (33 years) w/range July 8 – October 3 = August 23Latest departure = October 3, 2004 adult & juvenile, Riverside Park

This brightly colored warbler seemed like a small tanager with its blue-gray tarsi, white feathers beneath the yellow, and its slower more deliberate movements. These birds were almost always restricted to bottomland forest and the Sangamon River in this county. Occasionally, it occurred around Lake Springfield, especially the Lick Creek area and at Sangchris. Otherwise, it was rarely seen in such places as Washington Park. This warbler arrived in **spring** in April; the five May arrivals were probably due to its rather thin population in the county or flooding at the time of arrival which prevented access to the bottomland. Other early spring arrivals were: April 16, 1977 at Oak Ridge Cemetery; April 16, 1992 at Lick Creek; April 16, 2002 at Carpenter Park; and April 14, 2003 at Carpenter Park. Most high counts for spring were 2-3 birds, but there were 4, April 28, 1976; 4, May 20, 1982; 4, May 3, 1997; and 5, May 29, 1999. On May 1, 1997 at Sangchris a male, on a rather cold day, sat in the sun using its bright plumage to lure in insects (moths?) which it would then snap-up. From the results of the summer BBS in Sangamon County for 31 years, this warbler was recorded only 6 years and was ranked 77th. The Sangamon River census produced 11 in 1976 and 8 in 1991. This species in this county was not only limited by habitat, but by nest sites. On May 24, 2003 there were a pair searching the shoreline for a nest site at Lincoln Gardens, which they failed to find. This was one of only two warblers in North America that nested in cavities. Usually they chose a dead snag or a broken-off stump. These apparently scarce sites, have in the past, been bulldozed out of Riverside Park by the Springfield Park District, the very agency that should be protecting the warbler! Among others, Eurasian Tree Sparrows were noted competing with Prothonotary Warblers for nest sites in 1995 at Gurgens Park and 1996 at Carpenter Park, both times in willow areas. Nest construction took place May 20, 1982 at Lick Creek and June 7, 1987 at Riverside Park. With limited data, nest sites were 6-10 feet from the ground. Most summers, young were seen as follows: adults feeding two young that still had some down at Lick Creek, June 29, 1982; fledge young at Riverton, July 1, 1984; adults feeding young in the nest at Carpenter Park, June 5, 1993; fledged young at Riverside Park, July 12, 1994; a female feeding a cowbird at Sangchris, June 21, 2000; an adult male June 28, 2002 at Carpenter Park feeding a fledged young for over an hour- the male sang frequently, while it constantly gathered food (caterpillars and a Hemiptera) it was sometimes on the ground or floating logs-no female or other young were seen; a female feeding young at

Riverside Park, September 4,2003; and most unusual an adult with a begging immature at Riverside Park, very late on October 3,2004. On June 9, 1995 at Gurgens Park an adult male was catching green inch worms which it obtained underneath willow leaves. It got 5-6 in a couple of minutes, flew to a dead snag, and with its mouth full, it still sang. The Prothonotary Warbler sang as soon as it arrived in spring and probably sang until molt. In 2000 it quit singing July 13, but in1996 at Riverside Park one still sang like it was on territory September 5, which led me to think that occasionally there were exceptionally late nesting attempts. My notes showed this bird in molt from July 11 – September 13, but most completed molt by mid-August. Apparently, they migrated soon after molt, and sometimes they left very early. Maximum count for summer was 9 on July 13, 1999. An early fall migrant occurred at Center Park on July 30, 2006. Fall arrivals were not always obvious, but one flew low through an intersection on the east side of Springfield on August 14, 1992; another was at Lincoln Gardens August 16, 1979; and one on a levy at the Cinder Flats August 13, 2006 launched into migration. Most fall migration consisted of summer residents leaving. The usual high counts for fall were three, but there were 5, August 5, and 6, August 25, 1984. Only three birds were killed at Sangamon County tv towers, which was .04% of the total tower kill. Dates of these tv tower kills were August 31 – September 3. Other late departures were September 11, 1983 at Buckhart and September 17, 2007 at Riverside Park. The October 3, 2004 date above was exceptionally late. The Prothonotary Warbler winters in Central and South America.

Documentation: Specimens = 4) IL. Sangamon Co., Spring = 2, ISM# 606752 \bigcirc , 2 mi north Springfield, May 11, 1978, coll. by HDB, wt. = 10.6 gms, ovary = 5 mm, gizzard with insects; ISM# 660558 \bigcirc , IDOT bldg, May 11, 2000, coll. by G. Rose, wt. = 14.3 gms, ovary = 7 mm; Fall = 2, ISM# 606247 \bigcirc , tv tower, August 31, 1975, coll. by HDB, wt. = 17.2 gms; ISM# 605252 \bigcirc ?, tv tower, September 2, 1972, coll. by HDB, wt. = 19.3 gms.

Highest # Days/Season

Spring16 (2001)Summer17 (2006)Fall13 (2004)

Highest # Birds/Season

 Spring
 22 (2003)

 Summer
 36 (2002)

 Fall
 18 (2004)

Worm-eating Warbler

Helmitheros vermivora

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	118/99 (34)	12/12 (9)	8/8 (6)	0/0	138/119
Average/day	1.19	1.0	1.0		1.16
Average/season	3.47	1.33	1.33		

Status: Occasional Spring Migrant and Very Rare Fall Migrant and Summer Resident

Dates:

Spring: Earliest arrival = April 6, 1977 conifers by Lake Springfield Average arrival (34 years) w/range April 6 – May 9 = April 25 Average departure (30 years) w/range April 25 – June 1 = May 7 Latest departure = June 1, 1978 ♂ Washington Park

Fall: (Fall arrivals obscured due to SR) Average departure (9 years) w/ range July 2 – November 26 = August 20 Latest departure = November 26, 1984 Washington Park

This buffy and olive warbler with dark head stripes was essentially a spring migrant in the county. It was seen much more in spring (14.8 to 1) than fall, and was very sporadic in summer. Spring arrivals were probably always in April, but due to the low probability of finding this warbler and its skulking habits, the arrivals were in May in ten years, and it was missed three years (1970, 1972, 2003). Another early arrival was a male on April 10, 2008 at Oak Ridge Cemetery. Some of the spring birds could be wandering males looking for suitable habitat and others might be overmigrants. Worm-eating Warblers inhabited woodland and nested on wooded hillsides and ravines. It stayed near the ground and had a high Chipping Sparrow-like song. Occasionally when singing, it perched higher as it did August 3, 1981 at Lincoln Gardens. High counts for spring were 3, April 22, 1976 and 3, May 3, 1993. Most of the meager data in summer points to breeding at Carpenter Park from 1972 –1995, though not continuous (see Table 40). Other areas that may have had attempted breeding were Lincoln Gardens (1979), Horse Creek (1986), Irwin Bridge area (1989), Sangamon River and near Lake Springfield (1991), and Sangchris (2001). It was fairly certain that this interesting species did not breed in the county recently (unless on private property). This fact made it much more difficult to observe this bird at all, especially after 1995 and exemplifies the disintegration of neotropical breeding species in this county. I noted molt from July 15 - 22. Fall migration began in July, and since this county was near the apex of the breeding range, few of these birds were seen. Note also, that there were no tv kills of this warbler. The Worm-eating Warbler was rarely seen in woodland foraging flocks in fall, but one was seen at Carpenter Park on August 20, 1977 with chickadees, titmice and others. Besides the very late record above, other late departures were September 6, 1971 at Carpenter Park and September 24, 1995 (the last fall record of this species from the study) at Lincoln Gardens. The November 26, 1984 bird at Washington Park was seen at close range for five minutes. The Worm-eating Warbler winters from Veracruz, Mexico south to Panama and the West Indies.

Documentation: Specimens = 3) IL. Sangamon Co., ISM# 606210 \Diamond , Spfld, April 18, 1975, coll. by V. Hickson, wt. = 13.3 gms, testes = 5 mm; ISM# 609788 \Diamond , Spfld, May 8, 1989, coll. by D. Scott, wt. = 12.7 gms, testes = 5 mm; ISM# 660325 \Diamond , Spfld, May 3, 1993, coll. by D. Hood, wt. = 11.6 gms, testes = 4.5 mm, gizzard with mostly Hymenoptera & Hemiptera.

Highest # Days/Season	Highest # Birds/Season
Spring 7 (1994 & 1999)	Spring 9 (1976, 1993, 1999)
Summer 3 (1991)	Summer 3 (1991)
Fall 3 (1981)	Fall 3 (1981)

Table 40. Summer Records of Worm-eating Warblers in Sangamon County

1972	June 11 one at Carpenter Park
1978	June 1 👌 at Washington Park- late spring migrant
1979	June 9 ♂ singing at Carpenter Park
1981	July 22 one at woods by Lake Springfield
1986	July 7 & 10 one at Horse Creek
1989	July 15 ♂ showing molt at Irwin Bridge
1991	June 6 ♂ singing along Sangamon River July 2 & 7 adult near the south end of Lake Springfield
1995	June 2 one at Carpenter Park
2001	July 2 one at Sangchris

Ovenbird

Seiurus aurocapilla

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	3646/766 (37)	37/32 (18)	4735/1084 (37)	5/5 (2)	8423/1887
Average/day	4.76	1.16	4.37	1.0	4.46
Average/season	98.54	2.06	127.97	2.5	

Status: Common Migrant, Rare Summer Resident and Very Rare in Winter

Dates:

Spring: Earliest arrival = April 11, 2008 Washington Park Average arrival (36 years) w/range April 14 – May 5 = April 24 Average departure (35 years) w/range May 19 – June 9 = May 29 Latest departure = June 9, 1998 Washington Park (arbitrary due to SR)

Fall: Earliest arrival = August 3, 1986 Carpenter Park (arbitrary due to SR) Average arrival (37 years) w/range August 3 – September 3 = August 23 Average departure (37 years) w/range September 28 –November 20 = October 15 Latest departure = November 20, 1984 Washington Park (also see WR)

This warbler looked and behaved like a small thrush, feeding near the ground and inhabiting woodland. Its loud song was heard in April and May in Carpenter Park and other woods and helped locate this skulker. Ovenbirds walked on the ground or logs or horizontal limbs, and its call notes sounded like a chipmunk. All spring arrivals were in April, except May 5, 1980. Other early arrivals were: April 14, 1986 at Washington Park, April 15, 1992 at Adams Sanctuary, and April 16, 1998 at Lick Creek. High counts for spring were: 60, May 9, 1974; 50, May 7, 1976; 38, May 14, 1981; 37, May 6, 1994; and 53, May 9, 2002. Most birds left by late May, but migrants lingered into June in ten years. Other late spring departures were June 5, 1992 at Adams Sanctuary and June 4, 1997 at Washington Park. Though Ovenbirds breed in some Illinois localities, I had not found any young or other evidence (but singing males) that suggested they bred in Sangamon County. However, I had noted them in summer in ten years, especially in the north or northwest in areas like Carpenter Park/Riverside Park on June 2, 1982, June 9, 1983, June 5, 1999, July 24, 2006; Irwin Bridge on June 2, 1979, June 20, 1982, June 6 & 27, 1992; and Jefferies Orchard four apparently singing on territory on June 10, 1991. Plus, other areas had summer birds like Kunz Road on June 14, 1999; Scully Pines on June 26, 2000; Lick Creek on July 7, 2000; Lincoln Gardens on July 23, 2003; and Washington Park on June 18 & 24, 2004. It should be noted that most were singing males, and these were at times seemingly not mated. Some of the July dates could possibly be very early fall migrants. Ovenbirds breed as far north as central Canada. Practically all fall arrivals were in August, and the three September dates were probably due to timing of cold fronts which was important in recording these early warblers. Other early fall arrivals were: August 15, 1980 at Washington Park; August 11, 1985 at Carpenter Park; August 13, 1987 south of Springfield; August 6, 1989 at Lincoln Gardens; August 16, 2000 at Sangchris; and August 14, 2001 at Washington Park. High counts for fall were: 71, September 2, 1972; 61, September 27, 1972; 73, September 17, 1980; 69, September 2, 1981; 72, October 4, 1983; 69, September 14, 1984; 61, September 21, 1985; and 56, October 1

& 5, 1986. Some of the preceding numbers were tv kills. Numbers after 1986 were lower, and some falls the numbers seemed to be fragmented, even though fall numbers were 1.3 times higher than spring numbers. Most Ovenbirds left by October, but there were several November birds. These were: November 8, 1976 in Springfield; November 1, 1978 at Lincoln Gardens; one above, November 11, 1992 at Riverside Park; November 6, 1995 at Washington Park; and November 8, 2002 at Lincoln Gardens. There were two **winter** records: one west of Marine Pt. December 19, 1982 to January 1, 1983 and one at the warm water ditch December 27, 2001. Both of these birds were in woodland near some open water. The Ovenbird regularly winters from the Gulf Coast south to northern South America. Based on the specimens in the ISM collection from the county, almost all were the nominate subspecies, but one \mathcal{P} (September 12) was darker backed and could be *S. a. furvior* from the Northeast, and two (some others borderline), a \mathcal{O} (September 16) and \mathcal{P} (September 23) were grayer backed and could be *S. a. cinereus* from the Northwest.

Documentation: Specimens = 72) IL. Sangamon Co., Spring = 8, $\bigcirc \bigcirc \bigcirc = 3$, tv tower & LSpfld & 2 mi north Spfld, May 7 – 10, wts. = 19.3 – 21.7 gms, testes = 6.5 – 8 mm; $\bigcirc \bigcirc = 5$, Spfld (4) & 2 mi north Spfld, May 10 – 16, wts. = 18.4 – 20.8 gms, ovaries = 4 – 7.5 mm; Fall = 64, adult $\bigcirc \bigcirc = 17$, all tv tower, September 16 – October 1, wts. = 16.7 – 23.9 gms; immature $\bigcirc \bigcirc = 14$, tv tower (9) & Spfld (4) & Chatham, September 3 – October 7, wts. = 18.7 – 22.9 gms; adult $\bigcirc \bigcirc = 12$, tv tower (11) & Spfld, September 12 – 29, wts. = 16.9 – 22.2 gms; immature $\bigcirc \bigcirc = 21$, tv tower (16) & Spfld (2) & 3 mi south Spfld (2) & 2 mi north Spfld, August 23 – September 29, wts. = 16.8 – 22.6 gms.

Highest # Days/Season

Spring27 (1984, 1990, 1996)Summer4 (1992)Fall42 (1977)Winter4 (1992)

Highest # Birds/Season

Spring336 (1974)Summer4 (1979, 1991, 1992)Fall237 (1986)Winter4 (1992)

Northern Waterthrush

Seiurus noveboracensis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	3213/840 (37)	5/5 (5)	878/488 (37)	0/0	4096/1333
Average/day	3.83	1.0	1.80		3.07
Average/season	86.84	1.0	23.73		

Status: Common Spring Migrant and Uncommon Fall Migrant

Dates:

- Spring: Earliest arrival = April 1, 1996 Washington Park Average arrival (36 years) w/range April 1 – 29 = April 19 Average departure (36 years) w/range May 16 – June 3 = May 22 Latest departure = June 9, 2008 singing ♂ Rt.29 Bridge north
- Fall: Earliest arrival = July 29, 1985 south end Lake Springfield Average arrival (37 years) w/range July 29 – September 5 = August 18 Average departure (37 years) w/range September 7 – November 11 = October 2 Latest departure = November 11, 1993 Lake Springfield

The Northern Waterthrush arrived later than the Louisiana Waterthrush in **spring**, but it was still one of the earlier warblers. The earliest bird (above) was seen very well at close range and all the field marks noted. They were usually in bottomland forest at pools of water or along creeks or rivers and almost always near the ground. The song was quite different from the other waterthrush, but its call notes, which usually alerted observers, were more difficult to distinguish. Other early spring arrivals were: April 14, 1971 Sangamon County; April 12, 1983 at Washington Park; and April 14, 2003 at Sangchris. Numbers in spring were 3.6 times higher than fall. I banded an adult at Carpenter Park on May 8, 1974 which was retrapped by L.Johnson near Rockford on May 9, 1975, which showed migration was due north. High counts for spring were: 20, May 5, 1973; 33, May 8, 1976; 35, May 7, 1977; 21, May 6, 1989; and 38, May 4, 1991. Though most left in May there were three (not counting the 2008 record above) in June: June 1, 1989 at Lick Creek; June 3, 1997 at Washington Park; and June 1, 1998 at North Pt. The Northern Waterthrush breeds in the northern US including Alaska and Canada. This was one of the first warblers to return in fall. Other early fall records were: July 31, 1979 south of Springfield; August 1, 1998 at Sherman; August 3, 1999 at Lincoln Gardens; and August 5, 2005 at Washington Park. I had two records of singing in this species in fall, August 27, 1988 and September 7, 1999. High fall counts were: 16, September 17, 1980, 28, September 3, 1981; and 20, September 11, 1983. Not only was this bird less numerous in fall, but the records showed a drop in numbers after 1985. This could be another species that was deflected east at this season, especially if it was a very dry summer and fall. Other late departure dates were October 19, 1983 at Lake Springfield and October 29, 2004 at Riverside Park. It winters from southern Mexico to northern South America and the West Indies. The most recent analysis showed this species to be monotypic. Most birds were yellow ventrally, but occasionally a specimen (ISM# 604904) was whitish below; and I had seen a few in the field that were white below.

Documentation: Specimens = 27) IL. Sangamon Co., Spring = 3, \bigcirc =1, tv tower, May 7, 1971, testes = 3.5 mm; $\bigcirc \bigcirc = 2$, Spfld & tv tower, May 7, wt. = 13.8 gms, ovaries = 5 - 6 mm; Fall = 24, adult $\bigcirc \bigcirc = 3$, tv tower, September 2 - 3, wts. = 20.9 - 22.0 gms; immature $\bigcirc \bigcirc = 6$, tv tower, September 2 - 29, wts. = 17.5 - 22.6 gms; adult $\bigcirc \bigcirc = 5$, tv tower, September 2 - 29, wts. = 15.7 - 20.5 gms; immature $\bigcirc \bigcirc = 5$, tv tower, September 2 - 17, wts. = 17.3 - 22.8 gms; plus 5 not sexed, August 31 - September 20.

Highest # Days/Season

 Spring
 30 (2006)

 Summer
 1 (5 years)

 Fall
 30 (2004)

Highest # Birds/Season

 Spring
 153 (1976)

 Summer
 1 (5 years)

 Fall
 81 (1972)

Louisiana Waterthrush

Seiurus motacilla

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	188/169 (35)	30/15 (13)	2/2 (2)	0/0	220/186
Average/day	1.11	2.00	1.0		1.18
Average/season	5.37	2.31	1.0		

Status: Occasional Spring Migrant, Rare Summer Resident and Very Rare Fall Migrant

Dates:

- Spring: Earliest arrival = March 25, 1986, 1987, 2000 & 2004 –all at Sangchris Average arrival (34 years) w/range March 25 – April 23 = April 4 Average departure (29 years) w/range April 12 – June 1 = May 9 Latest departure = June 1, 1998 Lincoln Gardens
- Fall: Earliest arrival = August 5, 1993 Lincoln Gardens Latest departure = August 17, 2008 Sangchris (photograph) (no averages with only two dates, latest was in addendum)

This was many times the earliest warbler to arrive in spring, usually being found along small streams. It had to endure inclement weather many years. This waterthrush was never common during the study and many more were seen in spring than fall (94 to 1). The Louisiana Waterthrush was fairly easy to separate from the Northern Waterthrush by the bright white and longer eye-line, larger bill, lack of streaks on the throat, and brighter (females a little duller) pinkish legs (at least from spring to August). Usually they started singing shortly after arrival and had a loud song, which was easily distinguished from the Northern Waterthrush. One was singing a whisper song at Sangchris on March 29, 1992. I noted one at Washington Park on March 30, 2006 that had some molt on the head. There were 25 spring arrivals in April and 12 in March. In the spring of 1976 it was missed. High counts in spring were only 3, April 22, 1984 and April 23, 1985. Most spring migrants left in May. Some males in spring seemed to sing for long periods in seemingly good habitat (i.e. Carpenter Park), but would then leave. The summer breeding population in this county was variable, from very few to none on a given year. Three areas where they had nested were Carpenter Park, near Irwin Bridge and below the dam at Sangchris. A pair was nest building at Carpenter Park June 2, 1984. Successful nesting was indicated by the following: two adults and bob-tailed young at Irwin Bridge July 6, 1985 and again June 28, 1987; a pair, with female feeding worms (from a sandbar) to young at Irwin Bridge June 27, 1992; and a family at Sangchris, a male giving a weak song, plus a female and three young on July 3, 2001. This interesting bird should have been nesting every year at Carpenter Park, but there was too much inappropriate human disturbance at this nature preserve. Fall migration, when detectible, was mainly birds leaving this area, since not many breed north of Sangamon County. Still, it seemed to disappear inordinately early. Besides the two August records above, one was at Sangchris August 15, 1996. This warbler winters from Mexico south to northern South America and the West Indies.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 607065 ♂, Lick Creek, April 18, 1979, coll.by HDB, wt. =18.2 gms, testes = 6 mm, gizzard with isopods, Coleoptera (Scarabiadae & others), Diptera, Hemiptera, Lepidoptera (moth).

Highest # Days/Season

Spring12 (2003)Summer2 (1984 & 1985)Fall1 (1993 & 1996)

Highest # Birds/Season

Spring13 (2002 & 2003)Summer5 (1984 & 2001)Fall1 (1993 & 1996)

Kentucky Warbler

Oporornis formosus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	854/472 (37)	202/124 (35)	40/37 (21)	0/0	1096/633
Average/day	1.81	1.63	1.08		1.73
Average/season	23.08	5.77	1.90		

Status: Uncommon Spring Migrant and Summer Resident and Rare Fall Migrant

Dates:

Spring: Earliest arrival = April 7, 1998 ♂ Washington Park Average arrival (37 years) w/range April 7 – May 8 = April 27

Fall:Average departure (27 years) w/range July 15 – September 29 = August 21Latest departure = November 8, 2008 ♂ Washington Park

The Kentucky Warbler, a woodland species of the southeastern US, stayed low in the vegetation except when singing. A skulker, this warbler was heard much more often than seen. It usually arrived in spring in April, but in eleven years it arrived in May. Another early bird besides the one above was present on April 12, 1974 at Carpenter Park, which with its rich yellow and green plumage really stood out in leafless trees. High counts were: 6, May 23, 1971; 6, May 21, 1972; 7, May 8, 1999; and 6, May 8-10, 2005. Some birds, usually males, were seen still wandering in early June apparently looking for mates. The nesting habitat was upland woods with heavy growth of bushes and other low vegetation, though they also occurred in bottomland forest. High counts in summer were 3 – 5 birds with counts of 5 June 9, 1979; June 20, 1982; and June 28, 1987. This suggested high numbers earlier in the study. One was carrying nesting material at Carpenter Park on May 9, 1981. Fledged young were noted June 22 to July 6. Areas in which they nested were Carpenter Park, Irwin Bridge, Sangchris, Horse Creek, Tower Road, and Jefferies Orchard. Places where they tried to nest but failed and died out were Washington Park, Lincoln Gardens, Lick Creek, Lake Springfield Refuge, and South Fork. These died out for various reasons, like size of the wooded area being too small, human disruption, brush clearing, house building, and even Carpenter Park had none in 2001 due to burning of the woods. Molt was seen from July 6 to August 3, and cessation of singing occurred July 16, 2000 and July 21, 1979. Migration in fall was difficult to detect as not many nest north of Sangamon County. However, birds away from breeding areas were noted August 1, 1982 at Riverton; August 28, 1978 at Lincoln Gardens; and August 29, 2003 at Washington Park. Some years this warbler simply disappeared in July (five years), but it departed in August nine years and in September eleven years. There were 21.4 of these birds in spring to one in fall. High counts for fall were 2, August 29, 1971 and 3, August 6, 2002. Other later dates besides the very late one above in the addendum were: September 29, 1987 tv tower kill (see specimen); September 17, 1993 at Washington Park; and September 12, 1997 at Carpenter Park The very late bird on November 8, 2008 was spished up and I had a good look at the bright yellow underparts including the undertail coverts, the greenish back and the black in the face and on the crown. I went back to my truck to get my camera, but the old adage applied "once spished, twice shy" and no photo

was obtained. The Kentucky Warbler winters from southern Mexico south to northern South America.

Documentation: Specimens = 5) IL. Sangamon Co., ISM# 605164 \Diamond , tv tower, May 8, 1972, coll. by HDB, wt. = 14.2 gms, testes = 5.5 mm; ISM# 605920 \Diamond , tv tower, May 14, 1974, coll. by HDB, wt. = 15.3 gms, testes = 7 mm; ISM# 607280 \Diamond , LSpfld, May 23, 1981, coll. by K. Watt, wt. = 15.7 gms, testes = 6 mm; ISM# 606754 \heartsuit , 2 mi north Spfld, May 11, 1978, coll. by HDB, wt. = 12.5 gms, ovary = 5 mm; ISM# 609432 immature \heartsuit , tv tower, September 29, 1987, coll. by HDB, wt. = 15.8 gms, ovary = 2 mm.

Highest # Days/Season		Highest # Birds/Season		
Spring	31 (2006)	Spring	53 (1975, 2005, 2006)	
Summer	11 (2002)	Summer	18 (2006)	
Fall	6 (2002)	Fall	8 (2002)	

Connecticut Warbler

Oporornis agilis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	157/119 (33)	3/3 (3) spring mig	38/32 (18)	0/0	198/154
Average/day	1.32	1.0	1.19		1.29
Average/season	4.76	1.0	2.11		

Status: Occasional Spring Migrant and Rare Fall Migrant

Dates:

- Spring: Earliest arrival = May 6, 1999 ♂ Carpenter Park Average arrival (33 years) w/range May 6 – 25 = May 17 Average departure (32 years) w/range May 19 – June 4 = May 26 Latest departure = June 4, 1980 ♂ south of Springfield
- Fall: Earliest arrival = August 23, 2006 immature Riverside Park
 Average arrival (15 years) w/range August 23 September 20 = September 7
 Average departure (16 years) w/range September 3- October 10 = September 21
 Latest departure = October 10, 1970 east of Spfld & 2002 Carpenter Park

The skulking Connecticut Warbler was the latest warbler to arrive in **spring**, and was difficult to see because the vegetation had become so thick. Fortunately, it had a loud distinctive song which helped to find it. However, it was low in numbers in this county, as I detected very few even when banding with nets, and missed it in four springs (1970, 1971, 1980, 1988). Most years they came through in a short span of time. Other early spring arrival dates were May 9, 1995 & 2002. High spring counts were low: 5, May 19, 1974; 4, May 20, 1991; 4, May 21, 1998; and 4, May 16, 2004. It was usually in woodland and stayed low in bushes, but occasionally it was along hedgerows and other more open brushy areas. One was singing at Lick Creek twenty feet up in a tree on May 16, 1986. It should be noted that occasionally singing males in spring showed a blackish crescent on the breast, but could be distinguished from Mourning Warblers by the complete heavy evering and the song. Since it arrived so late, one would expect that many would linger into June, but I recorded it in June only three times: see above; female, June 1, 1995; and male, June 2, 2000. Like all Oporornis very few females were seen. The Connecticut Warbler breeds in the upper Great Lakes to central Canada. If this warbler was difficult to find in spring, it was nearly impossible to get in **fall** since most deflected east in fall and, of course, there was no singing. It was missed in 18 fall seasons, and it was over four times (actually 4.2) more numerous in spring, plus a lot of fall records were tv kills and banded birds. The fall arrival was five years in August and thirteen years in September. Banding would be the best way to determine whether the numbers in this species were stable. They occurred in more weedy situations in fall, but forest was usually not far away. The only high count in fall was three, and these were tv tower kills, on September 2, 1972. Some years they stayed late as the October 10 dates above indicate. This warbler winters in South America.

Documentation: Specimens = 11) IL. Sangamon Co., all Fall & all tv tower, adult $\eth \circlearrowright = 4$, August 28 – September 11, wts. = 14.5 – 16.6 gms (all w/gray throat & upper breast); immature $\bigcirc \bigcirc \bigcirc = 3$, September 2 – 25, wts. = 15.8 – 17.9 gms; immature $\bigcirc \bigcirc = 4$, August 24 – September 17, wts. = 13.2 – 17.3 gms.

Highest # Days/Season

Spring9 (1976)Summer1 (1980, 1995, 2002)Fall4 (1974)

Highest # Birds/Season

Spring16 (1976)Summer1 (1980, 1995, 2002)Fall4 (1972, 1974, 1981)

Mourning Warbler

Oporornis philadelphia

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	855/383 (36)	67/42 (20) sp mig	310/250 (36)	0/0	1232/675
Average/day	2.23	1.60	1.24		1.83
Average/season	23.75	3.35	8.61		

Status: Uncommon Spring Migrant and Occasional Fall Migrant

Dates:

- Spring: Earliest arrival = May 5, 1978 ♂♂ CP & 1999 North Pt. Average arrival (36 years) w/range May 5 – 19 = May 10 Average departure (36 years) w/range May 21 – June 19 = June 2 Latest departure = June 19, 1980 ♂ Boy Scout Area
- Fall: Earliest arrival = August 15, 1979 immatures CP & 2005 WP Average arrival (36 years) w/range August 15 – September 7 = August 24 Average departure (35 years) w/range September 4 – October 20 = September 24 Latest departure = October 20, 1978 immature Lincoln Gardens

A skulker, the Mourning Warbler was best detected by its song or call notes. It usually stayed near the ground, but a male was seen feeding in the top of a tall oak on May 10, 1983 at Washington Park. They were one of the latest arriving warblers in spring and one of the latest to depart at that season also. Males usually arrived first, but a female was first on May 16, 1986 and a female arrived with three males on May 13, 2005. The average arrival of females was May 19 for 16 years, with extremes of May 12 and 31. Sex ratios for four springs combined = 95 33:19♀♀. High spring counts were: 12, May 19, 1974; 12, May 24, 1976; 14, May 21, 1978; and 10, May 20, 2002. On May 18, 1987 at Lincoln Gardens a probable (not counted in totals) male MacGillivray's Warbler was seen, which is a closely related species. Some female Mourning Warblers were seen with narrow eyerings in spring. This warbler was seen into June in nineteen years. The high count was 4, June 1, 1983. Besides the late spring record above, there was a male June 15, 1988 at Lick Creek and a female June 16, 2007 at Riverside Park. Numbers in spring apparently declined late in the study (2003) by about one-half. This warbler nested in the northern US, including rarely in northern Illinois, and southern Canada. Arrival time in fall was probably always in August, yet, because it was even more difficult to detect at that season, I had four years of arrival dates in early September. Plus, it was missed entirely in the fall of 1973. Other early fall arrivals were: immature, August 16, 1980 at Carpenter Park; three, August 16, 1989 in Sangamon County; and two immatures, August 16, 2006 at Riverside Park. For every one Mourning Warbler seen in fall there were three (2.8) seen in spring. High counts for fall were mostly 2-3 birds except for 8, September 3, 1981. Some males sang in fall in August, and one immature male was singing a House Wren-like song August 28, 2008 at Sangchris. Most left in September, but I had eight departure dates in October, the latest above, plus October 14, 1977 male at Lincoln Gardens and October 11, 1985 tv kill. This warbler winters from southern Central America to northern South America.

Documentation: Specimens = 23) IL. Sangamon Co., Spring = 6, $\bigcirc \bigcirc \bigcirc = 4$, Spfld (3) & 2 mi north Spfld, May 17-31, wts. = 10.9 – 13.5 gms, testes = 6 –7mm (one $\bigcirc \bigcirc$ had a date of May 1 or 2, 1970, but the data was unreliable); $\bigcirc \bigcirc = 2$, Spfld, May 22 – 30, wt. = 12.1 gms, ovary = 5.5 mm, gizzard with Coleoptera, Diptera (some Tipulidae), Homoptera, & Hemiptera.; Fall = 17, adult $\bigcirc \bigcirc = 6$, tv tower, August 31 – September 17, wts. = 11.8 – 14.7 gms; immature $\bigcirc \bigcirc = 4$, tv tower (2) & west Spfld & 2 mi north Spfld, September 10 – 27, wts. = 12.5 – 13.7 gms; adult \bigcirc = 1, tv tower, September 8, wt. = 12.3 gms; immature $\bigcirc \bigcirc = 6$, tv tower, September 2 – 12, wts. = 12.8 – 15.3 gms.

Highest # Days/Season

Spring18 (1984 & 2000)Summer5 (1997 & 1998)Fall16 (1978)

Highest # Birds/Season

 Spring
 62 (1978)

 Summer
 9 (1993 & 1997)

 Fall
 21 (1981)

Common Yellowthroat

Geothlypis trichas

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	5953/1210 (37)	8071/1653 (37)	5087/1667 (37)	14/14 (8)	19125/4544
Average/day	4.92	4.88	3.05	1.0	4.21
Average/season	160.89	218.14	137.49	1.75	

Status: Common Migrant and Summer Resident and Very Rare Winter Resident

Dates:

Spring: Earliest arrival = April 15, 1994 ♂ Sangchris Average arrival (37 years) w/range April 15 – May 1 = April 23

Fall:Average departure (37 years) w/range September 30 –November 23 = October 27
Latest departure = November 27, 2009 \bigcirc Cinder Flats (also see WR)

This was a warbler that had the shape and actions of a wren and a wren-like song. However, it was colored like a warbler with yellow below and greenish above, and males had a black mask. The Yellowthroat was the 3rd numerous warbler (behind Yellow-rumped Warbler and Tennessee Warbler – see Table 35) and the most numerous nesting warbler in the county. Other early spring arrivals were: male, April 16, 1973 at Springfield and males April 17, 1986 & 1992 at Lincoln Gardens and Washington Park. Most of the early birds were males with females arriving on average May 3 based on 16 years of data. A female seen March 16, 1983 at the Cinder Flats was a winter resident. High spring counts were: 25, May 16, 1970; 30, May 8, 1976; 32, May 19, 1997; 29, May 13, 2000; and 25, May 8, 2004. Some high counts may reflect summer residents rather than spring migrants, since this vocal species started singing on territory as soon as it arrived. Summer numbers often outnumbered migrants. Some years migrants, usually females, continued into early June (1993 and 1997). This warbler was ranked 19th on the BBS and recorded every year with the best numbers in the 1970s to mid- 1980s. Equal numbers (both 43) were tallied on the Sangamon River Census in both 1976 and 1991. High counts were 41, June 11, 1979 and 26, June 27, 1998. I noted nest building by females May 22 - 30, and adults carrying food June 27 to August 3. Fledged young were seen from June 21 to September 10 with most seen in July and August. Yellowthroats with young cowbirds were seen June 22 to August 17 and were nine per cent of the fledged young encountered. Some of the young Yellowthroats showed buffy wingbars; and I noted between July 17 – August 12 that juveniles were trying to sing. Cessation of song in adults was August 23, 1980, August 12, 1999, August 17, 2000, but there were some whisper songs from August 17 to September 13, with flight songs to September 13, and sporadic singing until September 25. I noted molt from August 19 to September 18 and usually less activity and thus fewer sightings during this period. Fall migrants arrived from August 28 to September 8. High counts for fall were: 53 (mostly tv kills), September 27, 1972; 99 (mostly tv kills), October 4, 1983; 18, October 5, 1986; and 20, September 25, 2000. Most Yellowthroats left in October, but I had at least 15 November records (see Table 41). Some also tried to overwinter, with nine records in six winters (see Table 42). A potential bilateral gynandromorph was seen at Carpenter Park on September 21, 1991 when one male (?) had a mask only on the left side. An immature male was banded near Nowthen, Minnesota on

September 17, 1983 and was killed at the tv tower east of Springfield on October 4, 1983. Thus, it traveled over 500 miles in 17 days or about 30 miles a day on average on a sse heading. The breeding subspecies and most migrants in the county were the nominate form *G. t. trichas* (includes *brachidactylus*). However, from the specimens in the ISM collection I detected more extensive yellow ventrally on a few fall males and females that could be *G. t. campicola* from the Northwest, except recent literature (Pyle, 1997) considers this a pale subspecies, which is contrary to Graber, Graber & Kirk, 1983? The Common Yellowthroat winters from the Gulf States south to central Panama.

Documentation: Specimens = 72) IL. Sangamon Co., Spring = 12, $\Im \Im = 6$, tv tower (3) & Spfld (2) & north Spfld, April 26 – May 21, wts. = 9.7 – 10.9 gms, testes = 5 – 7 mm; $\Im \Im = 6$, Spfld (5) & north Spfld, May 9 – June 2, wts. = 8.3 – 9.9 gms, ovaries = 3 – 5 mm; Fall = 60, adult $\Im \Im = 16$, all tv tower, September 16 – October 14, wts. = 10.2 – 13.4 gms; immature $\Im \Im = 16$, tv tower (13) & Spfld (2) & east Spfld, September 11 – October 14, wts. = 9.8 – 15.3 gms; adult $\Im \Im = 15$, tv tower (14) & north Spfld, September 11 – October 4, wts. = 9.4 – 11.5 gms; immature $\Im \Im = 13$, tv tower (10) & Spfld & east Spfld & Rochester, September 2 – October 5, wts. = 9.2 – 11.3 gms.

Highest # Days/Season

Spring41 (2000 & 2002)Summer60 (2000, 2001, 2004)Fall68 (2005)Winter4 (1984)

Highest # Birds/Season

Spring325 (2002)Summer444 (2000)Fall281 (1983)Winter4 (1984)

November 18, 1973	3	Sangchris
November 24, 1973	3	Carpenter Park
November 17, 1974	25	Carpenter Park
November 23, 1978	9	Lake Springfield
November 1, 1981	3	Carpenter Park
November 18, 1982	Ŷ	Cinder Flats
November 2, 1987	9	Lake Springfield
November 16, 1987	Ŷ	Cinder Flats
November 22, 1993	3	immature at Carpenter Park
November 9, 1997	3	Carpenter Park
November 13, 2000	<u> </u>	Sangchris
November 14, 2002	Ŷ	Riverside Park
November 5, 2006	<u> </u>	Dam at Lake Springfield
November 22, 2008	Ŷ	Dam at Lake Springfield
November 27, 2009	<u></u>	Cinder Flats

Table 41. November Records of Common Yellowthroats in Sangamon County

1982 -83	December 25 & February 6, \bigcirc at Sangchris January 10, \bigcirc at Lick Creek
1984 –	November 29 – December 29, \bigcirc at Cinder Flats
1986 -	December 29, \bigcirc at Carpenter Park
1993-94	December 16, ♂ at Carpenter Park January 11 & 13, ♂ at Sangchris
2000 -	December 1, 👌 Sangchris
2001 -	December 3, ♂ Sangchris December 18, ♀ at Carpenter Park

Table 42. Winter Records of Common Yellowthroats in Sangamon County

Hooded Warbler

Wilsonia citrina

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	211/177 (35)	5/5 (5)	10/10 (8)	0/0	226/192
Average/day	1.19	1.0	1.0		1.18
Average/season	6.03	1.0	1.25		

Status: Occasional Spring Migrant and Very Rare Fall Migrant and Summer Resident

Dates:

- Spring: Earliest arrival = April 10, 2003 ♂ Washington Park Average arrival (34 years) w/range April 10 – May 7 = April 25 Average departure (34 years) w/range May 2- June 3 = May 15 Latest departure = June 3, 1997 ♂ Lincoln Gardens
- Fall: Earliest arrival = July 1, 1990 ♂ Carpenter Park (SR?) Average arrival (6 years) w/range July 1 – August 29 = August 11 Average departure (8 years) w/range August 6 – September 27 = August 30 Latest departure = September 27, 1999 ♀ Sangchris

This bright yellow warbler with a black hood, though not very findable in spring was still 20 times more numerous than in fall. Females usually did not have the hood, but could still be easily identified by the white in the tail which was frequently flared. Some spring birds could be overmigrants, since the majority of these birds nest to the south. There was also some evidence of recent northward movement of the population. Hooded Warblers occurred low to medium height in the vegetation in woodland and were usually detected by their song. Most of the time they arrived in April (25 times), but due to their scarcity they were found ten times in May and twice they were not recorded (1970 and 1987). Other early spring arrivals were both females, April 15, 1975 at Oak Ridge and April 14, 1995 at Lincoln Gardens. The average spring arrival of females was May 1 for 22 years of data with a range of April 14 to May 17. Most spring high counts were three or less with the highest being four, May 6, 1975. Other late spring departures (all were males) were: May 31, 1995 at Lincoln Gardens; May 30, 2000 and May 29, 2009 both at Washington Park. These males could have been seeking nesting areas, since they were all singing. The spring of 2008, in the addendum, had the highest numbers of birds and days of any season (17/15). The main breeding areas are in the southeastern US. I had singing males in summer in the Irwin Bridge area, June 2, 1979 and June 26, 1983; and also at Carpenter Park, July 1, 1990 and June 13, 1998 (latter bird with only a partial hood = second year bird). Other summer dates were considered migrants. In fall, most birds migrated to the east, plus there was not much of a population to the north, thus, the rarity at that season. This warbler was usually not singing in fall, consequently, the observer must hear the chipmunk-like call note to find the bird. In fall, there were five August and four September records, all single birds. Examples of fall sightings were: immature, August 24, 1976 at Lake Springfield; immature, August 6, 1986 at Washington Park; female, September 6, 2005 at Riverside Park; and a female, September 7, 2006 at Lincoln Gardens. This warbler winters from Mexico south to Panama.

Documentation: Specimens = 2) IL. Sangamon Co., ISM# 660188 $\stackrel{\circ}{\bigcirc}$, 3 mi south Spfld, May 8, 1991, coll. by T. Werner, wt. = 11.0 gms, testes = 7 mm; ISM# 660326 $\stackrel{\circ}{\bigcirc}$, east Lake drive LSpfld, April 28, 1993, coll. by HDB, wt. = 10.9 gms, testes = 6 mm, gizzard with Curculionidae (weevils), Hemiptera, Hymenoptera (ants & wasps), & spiders (Salticidae).

Highest # Days/Season

Spring11 (1974, 1993, 2001)Summer1 (5 years)Fall2 (1985, 2006)

Highest # Birds/Season

Spring14 (1974)Summer1 (5 years)Fall2 (1985, 2006)

Wilson's Warbler

Wilsonia pusilla

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1400/509 (37)	15/13 (10) mig	1104/626 (37)	2/2 (1)	2521/1150
Average/day	2.75	1.15	1.76	1.0	2.19
Average/season	37.84	1.50	29.84		

Status: Common Spring Migrant, Fairly Common Fall Migrant and Very Rare in Winter

Dates:

Spring:Earliest arrival = April 29, 2003 ♂ Adams Sanctuary
Average arrival (37 years) w/range April 29 – May 13 = May 7
Average departure (35 years) w/range May 20 – June 15 = May 30
Latest departure = June 15, 1985 ♂ Carpenter Park

Fall: Earliest arrival = August 11, 1981 immature Refuge Average arrival (36 years) w/range August 11 – September 4 = August 25 Average departure (37 years) w/range September 25 – October 24 = October 5 Latest departure = October 24, 2004 ♂ Oak Ridge Cemetery (also see WR)

This small yellow warbler with a black cap arrived mid- to late in **spring**. There were only two arrivals in April, see above and April 30, 1973; and the rest were in May. Recognizable females (with little or no caps) were first seen in spring from May 10 - 20. The Wilson's Warbler usually stayed low to medium height in the vegetation and was mostly a forest edge species. The song was chatty, and the best way to detect them in spring. High spring counts were usually in the single digits, but the higher ones were: 17, May 10, 1979; 13, May 17, 1997; 15, May 14, 2000; and 12, May 17, 2002. Spring departure was usually in late May, but they lingered into June in ten years and two years in the addendum. Other late departures were males, June 8, 1992 and June 9, 2007 both at Washington Park. There were 3, June 1, 1995 at Washington Park. The subspecies that passed through this area breeds mainly in Canada. Fall migrants were back by August, with numbers at this season somewhat less (1.3 to 1) than in spring, and some falls the migration was spotty with several days of hiatus. Other early arrivals in fall were August 17, 1977 & 2001. Habitat was similar as in spring, but in addition these warblers were seen more in willows along Sangamon River and in weedy areas in fall. High counts for fall were: 7, September 17, 1977; 9, September 20, 1993; 8, September 8, 1995; and 7, September 6, 2008. There were a few stragglers in late fall, the record above, and a male, October 23, 1987 at Lincoln Gardens. One male tried to over winter south of Springfield in a brushy area and was viewed three different days from November 25 - December 23, 1997. The subspecies in Sangamon County is the more eastern and the less brightly plumaged W. p. pusilla. The Wilson's Warbler winters from southern Texas to Panama.

 tv tower (2) & southwest Spfld, August 28 – September 29, wts. = 8.6 - 9.8 gms (crown black edged with green); adult Q Q = 7, tv tower (5) & south Spfld & Lake Springfield, September 8 - 22, wts. = 6.9 - 8.9 gms (crown blackish edged w/green-variable); immature Q Q = 6, tv tower, September 3 - 29, wts. = 7.4 - 9.0 gms (crown w/little or no black).

Highest # Days/Season

Spring24 (1997)Summer2 (1992, 1998, 2003)Fall29 (2006)Winter2 (1997)

Highest # Birds/Season

Spring95 (2000)Summer3 (1995)Fall73 (2004 & 2005)Winter2 (1997)

Canada Warbler

Wilsonia canadensis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1018/396 (37)	27/22 (12)	1297/595 (37)	0/0	2342/1013
Average/day	2.57	1.23	2.18		2.31
Average/season	27.51	2.25	35.05		

Status: Uncommon Spring Migrant and Fairly Common Fall Migrant

Dates:

- Spring: Earliest arrival = April 24, 1992 ♂ Horse Creek Average arrival (37 years) w/range April 24 – May 21 = May 10 Average departure (35 years) w/range May 21 – June 16 = May 31 Latest departure = June 16, 1998 ♂ southwest side of Springfield
- Fall: Earliest arrival = August 10, 2007 immature ♀ Washington Park Average arrival (37 years) w/range August 11 – 26 = August 18 Average departure (37 years) w/range September 10–October 15 = September 20 Latest departure = October 15, 1982 ♂ Oak Ridge Cemetery

This was the warbler with the necklace that sang like an Indigo Bunting, and was bluish above and yellow below. The Canada Warbler fed from low to mid-height in the vegetation and was somewhat of a skulker. Most birds in spring were found in bottomland forest. I had only one April date, showing this was one of the later warblers to arrive in spring. Other fairly early spring arrival dates were May 3, 1975 and May 4, 1991. Males usually came first, with female spring arrival noted in 13 years averaging May 18, with extremes of May 8 - 24. High counts for spring were: 12, May 19, 1974; 20, May 21, 1976; 17, May 21, 1978; and 15, May 20, 1991. Some years there were very few in spring such as 1987, 1988, and 1998, and they may have over-flown this area. Also, by mid-May the vegetation was usually thick making them difficult to see especially the females. Spring migration extended into June in 12 years (and two years in the addendum), but very late birds usually were second year males, which may be wandering and did not breed. Note the record above, plus, singing males, June 10, 1981 at Lake Springfield, and June 24, 2007 at Washington Park. There were 6, June 2, 1997 at Washington Park. The Canada Warbler breeds in northern Illinois north to central Canada. All arrivals in fall were in August, and usually females and immatures came first. Other early records were: (3), August 11, 1977; August 12, 1982; and August 11, 1998. Fall numbers were 1.3 times higher than spring numbers. Habitat in fall was mainly bottomland forest, but additional types of woodland were used. High counts for fall were: 11, September 1, 1974; 28, September 3, 1981; 12, August 21, 1989; and 11, September 3, 2002. Most departure dates were in September, and it was one of the earliest northern migrant warblers to leave in fall. There were two records in October: see above, and October 4, 1973 one was banded at Carpenter Park. Numbers were higher earlier in the study, and there was a drop in numbers about 1981 in spring and 1990 in fall. The Canada Warbler winters in northern South America.

Highest # Days/Season

Spring17 (1979 & 1995)Summer4 (1983 & 1998)Fall28 (1977)

Highest # Birds/Season

 Spring
 93 (1976)

 Summer
 7 (1997)

 Fall
 71 (1981)

Yellow-breasted Chat

Icteria virens

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	556/340 (37)	751/465 (35)	84/74 (25)	0/0	1391/879
Average/day	1.64	1.62	1.14		1.58
Average/season	15.03	21.46	3.36		

Status: Uncommon Spring Migrant and Summer Resident and Occasional Fall Migrant

Dates:

Spring: Earliest arrival = April 24, 2007 ♂ South Fork Average arrival (37 years) w/range April 27 – May 12 = May 4

Fall:Average departure (32 years) w/range July 3- October 10 = August 24Latest departure = October 10, 1992 southeast of Springfield

The Yellow-breasted Chat was a large bird for a warbler that sang like a thrasher, which may be attributes for existence in the open scrubby habitat in which it lived. The chat arrived fairly late in spring, usually in May, but it appeared in April in 11 of 37 years. Also, I noted that in the last half of the study the arrivals in April outnumbered arrivals in May. Other early spring arrivals were both April 27, 1975 and 2009. It was much more numerous just a little further south in Illinois. High counts for spring were: 6, May 10, 1975; 5, May 12, 1979; 5, May 8, 1993; and 5, May 23, 2004. I heard the chat singing at night between June 4 - 25. One was leaf bathing at Carpenter Park on May 17, 2006. It was recorded in summer on nearly half of the BBS, ranked 64th, and the numbers dropped around 1989. The Sangamon River Census also showed a decline in numbers from 1976 to 1991. Nests with eggs were seen at Sangchris in blackberry, June 3 and in a rose bush at Carpenter Park, June 5, 1993. Fledged young were noted from July 22 to August 20, and a female was feeding a cowbird at Sangchris August 2, 1993. The high count for summer was 13, June 18, 1976. The latest date for singing was August 4, 2000. Molt was observed from July 28 to September 1, also birds in basic plumage were seen as early as August 31. The chat became much more difficult to find when it quit singing and went into molt. Sometimes they gave harsh call notes in fall or a "siiib"-like note, the only evidence they were present. Once they were out of molt, they soon migrated, and **fall** migration was mostly the summer resident birds leaving. In fact, there were 6.6 times more chats detected in spring than fall. High daily counts for fall were only three on August 24, 1992 & 1993. Other late dates of departure were: October 9, 1975 at Carpenter Park; September 25, 1980 Lake Springfield; and September 25, 1999 at Sangchris. The subspecies is the eastern nominate form which winters from southern Texas and Florida to Panama. Of the four male specimens in the ISM collection # 607619 was obviously larger, with a larger wing (80 mm) and tail (78 mm) than the other three. Plus, it was richer yellow below and had black streaks on the crown. It could possibly be an intergrade with the western subspecies I. v. auricollis.

Documentation: Specimens = 4) IL. Sangamon Co., all Spring, ISM# 604767 \Diamond , tv tower. May 7, 1971, coll. by HDB, testes = 9 mm; ISM# 607619 \Diamond , Lake Springfield, May 7, 1983, coll. by B. McMillan, wt. = 26.6 gms, testes = 10 mm; ISM# 609310 \Diamond , northwest Springfield, May 8,

1987, coll. by M. Morin, wt. = 27.4 gms, testes = 8 mm, gizzard with 80% ants plus Hemiptera; ISM# 660582 $^{\circ}$, west Spfld, May 5, 2001, coll. by S.Oehmke, wt. = 25.4 gms, testes = 8 mm.

Highest #Days/Season

Spring21 (1993)Summer38 (2000)Fall10 (1993)

Highest # Birds/Season

Spring44 (1993)Summer57 (2000)Fall13 (1993)

Summer Tanager

Piranga rubra

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	430/303 (36)	134/104 (26)	141/126 (31)	0/0	705/533
Average/day	1.42	1.29	1.12		1.32
Average/season	11.94	5.15	4.55		

Status: Uncommon Migrant and Summer Resident

Dates:

- Spring: Earliest arrival = April 19, 1975 ♂ Washington Park Average arrival (36 years) w/range April 19 – May 18 = April 28
- Fall:Average departure (31 years) w/range August 4 October 26 = September 21Latest departure = October 26, 1989 \bigcirc Williamsville

Male Summer Tanagers that arrived in spring could be all red adults or red, yellow and olive second year birds. Females were usually yellow, but may have shown some red in the plumage usually near the head or tail or even on other parts of the plumage. Plus, there were four records of cinnamon colored birds September 8, 1979, May 8, 1996, May 21, 2006 and the specimen below, that were probably older females. The song sounded like a mixture of robin and oriole, and both sexes gave the distinctive pebble call note. On May 23, 1981 an all yellow tanager (female?) was singing at Carpenter Park, and another there was singing June 28, 2009. Spring appeared to have more numbers (3 to 1) than fall, but visibility and singing in spring make them more obvious. Most spring arrivals were in April with nine years in May, and this tanager was totally missed in 1972. Female average arrival was May 4 for 17 years, with extremes April 21 to May 26. There appeared to be an increase (spring in 1999, summer in 2001, and fall in 2002) of numbers late in the study that could be linked to climate change, since this was a southern species moving northward (see Figure 27). High spring counts were low: 5, May 26, 2003; 7, May 23, 2005; and 6, May 24, 2006. I did not discover this tanager in summer until 1976, and did not record it in the summers of 1985, 1989, 1993, 1995, and 1997. Nesting occurred at Carpenter Park, Irwin Bridge area, Boy Scout area, Tower Road, Jefferies Orchard, and Horse Creek. Attempts to nest were made in more modified areas like Lincoln Gardens (nest failed due to clearing understory in 2001) and Center Park (most trees destroyed in 2008). The high summer count was 4, June 28, 2004. Indications of nesting were: a female carrying food at the Boy Scout area (Lake Springfield) June 19, 1980; a female feeding a cowbird August 16, 1986 at Carpenter Park; a pair at a nest at Carpenter Park July 28, 1988; a female with a fledged young at Carpenter Park September 8, 1990; a female photographed on a nest at Carpenter Park June 24, 2002; a male and fledged young at Carpenter Park July 22, 2002; a female with fledged young at Riverside Park July 28, 2006 both giving a call "war – wich" that I had never heard before (but have since); and a female feeding a cowbird August 12, 2008 at Buckhart. One second year male was seemingly paired May 24, 2006 at Riverside Park. I have noted competition between this tanager and the Scarlet Tanager in bottomland forest at Lick Creek on June 10, 1987, but the Summer Tanager usually preferred more upland and open woodland especially oaks. The latest singing dates were July 31, 1978 and August 7, 2005 though one sang a whisper song September

1, 2004. Molt was seen from August 6 to September 8, and basic plumage was observed as early as September 11. Prey items noted were: green darner (September 30, 1990) annual cicadas (May 21, 1998); and wasps (October 10, 1999). **Fall** migration consisted mostly of the summer residents leaving. Summer Tanagers sometimes flock with Scarlet Tanagers as did a pair at Oak Ridge Cemetery September 23, 2005. High counts for fall were usually two except for three September 24 & 29, 2006. Besides the late date above, there was a female at Washington Park October 21, 1982. In the addendum, in 2009 four late females were seen: October 6 at Buckhart; October 11 & 15 at Washington Park; and October 23 at Oak Ridge Cemetery. The subspecies is the eastern nominate form. The Summer Tanager winters in Mexico south to northern Bolivia.

Documentation: Specimens = 4) IL. Sangamon Co., ISM# 661607 adult 3° , east side Spfld, May 9, 2005, coll. by S. Dees, wt. = 30.1 gms, testes = 11 mm; ISM# 661798 second year 3° , 2 mi north Rochester, May 11, 2006, coll. by B. Landers, wt. = 30.0 gms, testes = 10 mm; ISM# 660668 adult 9° , LSpfld, July 2, 2003, coll. by K.Watt, wt. = 32.3 gms, ovary = 10 mm (cinnamon colored); ISM# 661447 adult 9° , LSpfld, July 8, 2005, coll. by HDB, wt. = 28.6 gms, ovary = 10 mm, gizzard with mulberry seeds & Coleoptera.

Highest # Days/Season

Spring28 (2006)Summer15 (2006)Fall15 (2003)

Highest # Birds/Season

Spring53 (2006)Summer20 (2006)Fall17 (2003)

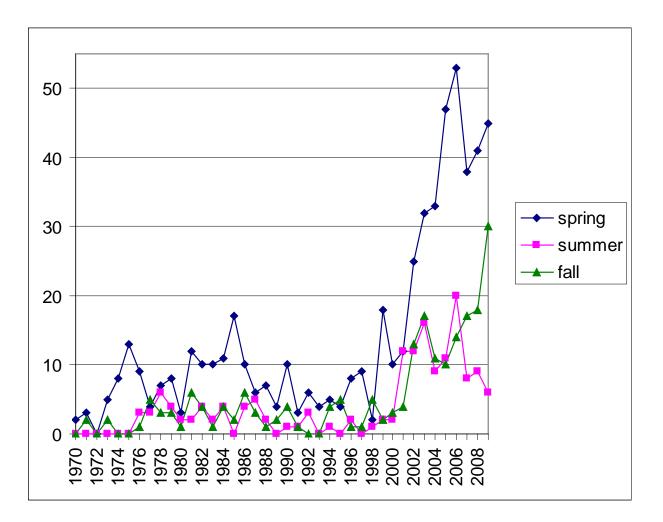


Figure 27. Summer Tanager Numbers by Season.

Scarlet Tanager

Piranga olivacea

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	2181/774 (37)	604/363 (33)	891/575 (37)	0/0	3676/1712
Average/day	2.82	1.66	1.55		2.15
Average/season	58.95	18.30	24.08		

Status: Common Spring Migrant and Uncommon Summer Resident and Fall Migrant

Dates:

Spring: Earliest arrival = April 16, 2002 ♂ Carpenter Park Average arrival (37 years) w/range April 16 – May 5 = April 25

Fall: Average departure (37 years) w/range September 22 – October 30 = **October 8** Latest departure = **October 30**, 2002 Adams Sanctuary

The Scarlet Tanager was one of the most brilliantly colored birds in the county, but it was difficult to see because they stayed fairly high in oaks in woodland. Their hoarse robin-like song was the best way to locate them. Females and males in fall were greenish yellow with darker wings. Spring arrival was usually in late April, but occurred in early May three years (1971, 1972, 1997). Besides the early date above, there was a male April 17, 2005 at Washington Park. Usually males arrived first with the average arrival of females May 3 for 22 years of data. High counts for spring were: 15, May 19, 1974; 12, May 10, 1986; 14, May 13, 2000; and 13, May 9, 2003. Though principally a forest species, one male was seen on May 22, 1997 in an open area with only a few small trees at the Buffalo sewer pond. Many went on north in late May, but some migrants did not leave until early June. These tanagers were spread fairly thin as breeding birds in Sangamon County and were found in upland and sometimes bottomland forest. I did not find them in summer until 1974. Most high counts in summer were 3 - 5, but there were 8, June 2, 1995 and 6, June 28, 2004. They occasionally tried to nest in areas such as Lincoln Gardens, but were unable to maintain steady populations there. The main areas for nesting were Carpenter Park/Riverside Park, other wooded areas along the Sangamon River, Sangchris, Horse Creek, Lick Creek, and Jefferies Orchard. I noted aggressive encounters of this tanager with Summer Tanager on June 3, 1976; a Rose-breasted Grosbeak on June 1, 1989; a cardinal June 30, 2000; and several cowbirds July 5, 2002. Nest building was seen May 6 to 9, and copulation May 6 to 20. Females were seen on nests May 27 and July 23 both high in oak trees. Fledged young were observed being fed by adults July 19 to August 25, with cowbirds being fed in five of the eleven instances (45 %), which was one of the reasons why tanagers did not thrive in the county. One male at Lick Creek on June 25, 1987 was the orange variant instead of scarlet. Molt was seen July 16 to September 2, and birds in basic plumage were seen as early as August 23. By July 30, I noted songs were shorter and softer. Cessation of song was August 3, 1999 and August 10, 2000. On September 6, 2006 a male in basic plumage was with a female at Riverside Park and was singing. I have observed that both sexes gave the "chuck – burr" call note. Fall migration probably started in late August or early September, but the earliest tv tower kills were later in mid-September. Numbers in fall were 2.5 times less than spring probably due to detectability because of song. High counts for fall were: 7, September 21, 1975; 6, October 4, 1983; and 7,

August 7, 2002. Twice, I noted this tanager in loose flocks with Summer Tanagers at Oak Ridge Cemetery: 4 Scarlets and one Summer on October 10, 2001 and 5 Scarlets and 2 Summers on September 23, 2005. Food items were usually fairly large insects, but in fall they also ate berries. Most birds left in October, but in five years they left in September. Other late departures besides the one above were: October 20, 1976 at Washington Park; (male) October 25, 1979 at Springfield; October 21, 1985 at Carpenter Park; and October 25, 2008 at Lake Springfield (someone had shot off its upper mandible). The Scarlet Tanager winters from Panama south to Bolivia.

Highest # Days/Season

Spring35 (2005)Summer31 (2000)Fall37 (2002)

Highest # Birds/SeasonSpring123 (2003)Summer50 (2000)Fall65 (2002)

Western Tanager

Piranga ludoviciana

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	0/0	0/0	2/2 (2)	0/0	2/2
Average/day			1.0		1.0
Average/season			1.0		

Status: Very Rare Fall Migrant

Dates: Two Records: worn adult ♀, Center Park, Lake Springfield August 3, 1999; adult ♂ in basic plumage, Riverside Park, September 29, 2004.

The first Western Tanager occurred in an area where many other birds were feeding on berries. The tanager was close and sat for long periods of time, but was high enough in the trees that the back was difficult to see, it appeared dull gravish. Though the throat and breast were bright yellow, the bird was grayish-white around the legs and on the flanks. Also, two yellowish-white wing-bars were seen. A small percentage of Scarlet Tanagers show wing-bars, but the yellow plumage of this tanager was a different color. Thus, I identified the bird as a Western Tanager, gray-phased female in worn plumage with some molt. In retrospect it could have been a moltmigrant off course. The second record was an adult male, and I instantly knew its identity. The tanager was in bottomland forest coming to the sunny edge after a cold night. Over the next 5-6 hours, I saw the bird three times even through my scope, but was unable to digiscope it. The bright yellow color, the red face (not as extensive or as bright as in basic plumage), the white on the wings, and the black back, wings and tail were well seen. Although there are many records for northern Illinois, including a specimen, these were almost always in spring. The few that have been seen in central Illinois have been mostly in fall. The Western Tanager, from western Northern America, has been seen annually in the east. They winter from Mexico south to Costa Rica.

Documentation: Written descriptions and drawing: Il. Sangamon Co., HDB - on file ISM.

Northern Cardinal

Cardinalis cardinalis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	47532/3154 (37)	15942/1766 (37)	42596/4056 (37)	37823/2600 (37)	143893/11576
Average/day	15.07	9.03	10.50	14.55	12.43
Average/season	1284.65	430.86	1151.24	1022.24	

Status: Common Permanent Resident

This beautiful redbird, the state bird of Illinois, was recorded in all 148 seasons of the study and was 19th in numbers and was number one in days observed (not counting pigeon, starling, and House Sparrow). There was no apparent migration in this species, but they flocked to some extent in winter and must have dispersed to some degree in spring to form pairs. The Northern Cardinal was found in most habitats with some woody vegetation, from heavy forest to a few trees or bushes, from Carpenter Park to downtown Springfield. It had adapted to residential areas and was a main stay at bird feeders. They foraged primarily low, but run the gamut from feeding on the ground to the tops of tall trees like the tulip tree. High counts for **spring** were: 60, May 4, 1974; 65, May 6, 1978; 52, May 6, 1995; 52, April 2, 2000; and 51, March 5, 2006. They really began singing in January, although they had been singing sporadically even in December on sunny days. The competition was fierce and much singing and fighting went on and even the females were singing from March 2 to April 7. During the BBS in summer, it was seen every year and ranked 12th. There were lower numbers early in the survey and a small increase from 1979 to the present. Numbers from the Sangamon River Census increased from 1976 to 1991. The highest daily summer counts were in the first half of the study and seemed to moderate late in the study. High summer counts were: 55, June 18, 1976; 62, June 13, 1978; and 51, June 11, 1991. On April 24, 2002 at Carpenter Park, I watched the nuptial dance in which the female sat on a branch while the male sidled up the branch with wings and tail flared. Nest building was seen from March 24 to June 15, and the nest was usually in a rose bush; but saplings, autumn olive, mulberry and other trees, vines and bushes were used. There were 59 nests found with eggs (1 - 5 cardinal eggs + 1 - 4 cowbird eggs) from April 12 to July 13. Cardinals raised a lot of cowbirds with 14 of the nests parasitized (24 %). Cowbird eggs were in the nests from April 26 to June 11. Later broods may have given the cardinals a chance to raise their own young. Young were noted in the nest from May 6 to July 27. There were 82 sightings of fledged young, 26 were of cowbirds or 32 %. Cardinal young were seen between May 20 and September 25, with the cowbird young seen from May 29 to August 22. Singing of full songs stopped August 28, 1999 and September 13, 2000, with partial songs afterwards. Molting was noted from July 10 to early November, with some heavy molting in August, giving a black headed look to a few birds. Fall high counts were in the 30 - 50 range, with September numbers oddly low, maybe due to molt. Fall high counts were: 35, September 21, 1975; 50, November 11, 1992; 35, October 19, 2001; and 31, August 18, 2003. High counts for winter were: 110, December 26 & 27, 1970; 50, February 28, 1980; 100, December 21, 1986; 80, January 30, 1991; 88, December 19, 2004; and 84, January 13, 2006. Flocks occurred in cold weather, with from 20 to 30 birds per flock, from November 8 to February 12. Occasionally, I saw leucistic cardinals, and especially ones with white heads were always females. I encountered three cardinal bilateral gynandromorphs (February 25, 1996, December 6, 2002, March 15 – December 27, 2006) and was able to

photograph the 2006 bird (see Bohlen, 2006). The subspecies of the cardinal here is the eastern nominate form.

Documentation: Specimens = 22) IL. Sangamon Co., $\bigcirc \bigcirc = 17$, January 11 – November 30, wts. = 38.7 – 54.9 gms, testes = 1-10 mm (2 were still in juvenile plumage September 7 & 19); $\bigcirc \bigcirc = 5$, Sangamon Co., January 5 – December 23, wts. = 34.7 – 51.2 gms, ovaries = 6.5 – 10 mm.

Highest # Days/Season

Spring92 (10 years) maxedSummer61 (5 years) maxedFall122 (7 years) maxedWinter90 (2003) maxed

Highest # Birds/Season

Spring1883 (2000)Summer952 (2000)Fall1848 (2001)Winter1787 (2003)

Rose-breasted Grosbeak

Pheucticus ludovicianus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	5694/1103 (37)	2481/1026 (37)	5414/1500 (37)	3/3 (2)	13592/3632
Average/day	5.16	2.42	3.61	1.0	3.74
Average/season	153.89	67.05	146.32		

Status: Common Migrant, Fairly Common Summer Resident and Very Rare Winter Resident

Dates:

Spring: Earliest arrival = April 19, 2006 ♂ Lincoln Gardens Average arrival (37 years) w/range April 19 – May 1 = April 24

Fall:Average departure (37 years) w/range September 29 – November 1 = October 12Latest departure = November 1, 1999 ♂ Sangchris (also see winter residents)

This grosbeak arrived in spring in April most years when the trees were still fairly open, providing excellent views of the gorgeous males. One of my best memories of this species was a flock of 40 on the hill at Washington Park May 6, 1976. Other early arrivals were April 20, 1992 & 2004 and seven April 21 dates. Two other first arrivals were late on May 1 (1980 and 2005). Males usually arrived first with female average arrival being April 28 for 19 years of data. High counts for spring were: 45, May 10, 1975; 100, May 6, 1976; 35, May 12, 1980; and 40, May 10, 1997. One male was at Marine Pt. during a cold spell feeding on new growth of an elm for three days. Most grosbeaks stayed fairly high in the canopy and sang their hoarse robin-like song. Judging by the excellent numbers early in the study (when there were fewer field hours), this species had declined in spring about 1997. Most migrants left by mid- to late May, but one female was a migrant on June 3, 1981 when it hit a building in downtown Springfield. Most summer grosbeaks nested in second growth woodland habitat. It was recorded on all 31 BBS and reached peak numbers by 1994. High counts for summer were: 16, June 12, 1979; 14, June 11, 1981; and 12, June 12, 1986. Lower high counts later in the study might have indicated a drop in the summer population. Nest building was observed from May 5 to June 8, and a male was sitting on a nest in an elm tree June 5, 1982 at Carpenter Park. Fledged young were seen June 17 to August 20, but most were seen in July. Cessation of singing was the end of August in 1999, with a whisper song September 7, and July 21 in 2000. Some later singing by migrants (?) was heard on August 20 and September 17. Molt was noted from July 19 to September 15. Fall migration began in late August or early September, backed-up by earliest tv tower kills on September 2, 1972. This grosbeak foraged lower in fall especially in stands of giant ragweed, one of its favorite plants usually in bottomland forest. Some years in fall numbers were low, especially 1988, 1989, 1990, 1994, and 2006. High counts for fall were: 60, September 26, 1971; 40, September 16, 1973; and 50, September 17, 1977. In late fall, this bird could leave quite suddenly, being numerous one day and gone the next. Other late departures were October 21, 1972 east of Springfield and October 24, 1997 & 2005 at Washington Park. There were two winter records, both at feeders: a female in northwest Springfield, February 24 & 26, 1983 (Hanson) and a male, (possibly a hybrid with Black-headed Grosbeak-photographed), Chatham,

December 18, 2000 (Kelson). Some grosbeaks showed odd plumages which could be hybrids with the Black-headed Grosbeak (see under that species). A leucistic female was seen May 25, 1978 at Carpenter Park which was all creamy white with some brownish streaking on the breast and yellow under wings. The Rose-breasted Grosbeak winters from southern Mexico to northern South America.

Documentation: Specimens = 41) IL. Sangamon Co., Spring = 13, $\partial \partial = 9$, Spfld, May 1 – 16, wts. = 38.8 – 59.4 gms; testes = 6 – 12 mm; Q Q = 4, tv tower (2) & Spfld & Pleasant Plains, May 2 – June 3, wts. = 38.8 – 47.1 gms, ovaries = 7 – 13 mm; Fall = 28, adult $\partial \partial = 10$, tv tower (9) & LSpfld, late August – September 29, wts. = 43.2 – 50.5 gms (all with fair amount of red on throat or breast); immature $\partial \partial = 6$, tv tower (4) & Spfld (2), July 27 – September 30, wts. = 45.0 - 49.4 gms (all with a smudge of red on throat or breast); adult Q Q = 8, all tv tower, September 20 – October 7, wts. = 41.8 – 54.0 gms (ISM# 606593 has red under wings); immature Q Q = 4, tv tower (2) & Chatham & south Spfld, July 27 – September 27, wts. = 43.3 – 50.8 gms, one gizzard with mealy bugs, wasps, pupil cases of gall wasps and other Hymenoptera.

Highest # Days/Season

Spring38 (1985)Summer46 (1982)Fall66 (1982)Winter2 (1982)

Highest # Birds/Season

Spring274 (1976)Summer179 (1979)Fall275 (1982)Winter2 (1982)

Black-headed Grosbeak

Pheucticus melanocephalus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1/1 (1)	0/0	1/1 (1)	0/0	2/2
Average/day	1.0				1.0
Average/season					

Status: Very Rare Migrant

Dates: Two Records: adult ♂, Carpenter Park, November 24, 1973; immature ♂/♀, Carpenter Park, April 28, 1989.

The Black-headed Grosbeak was a western species which occasionally strayed east. The adult male in November was an instant recognition along the railroad tracks at Carpenter Park with a flock of cardinals. The April bird was feeding in a tree very close to me, and the bright yellowish-orange throat and upper breast were obvious. It was probably an immature male or a very brightly colored female. It had yellow underwing coverts and light streaks along the sides of the breast. I have seen other suspected female Black-headed Grosbeaks (May 3, 1991 and April 23, 2000), but after studying my notes, they seemed to be either hybrids or oddly plumaged Rose-breasted Grosbeaks. Some female grosbeaks would probably be difficult to assign to species even if they were specimens or live birds in the hand. Two other birds, probably aberrant plumages of the Rose-breasted Grosbeak or hybrids (drawing on file ISM), showed only a small badge of orange on the upper breast (May 11, 2002 and May 15, 2005). The Black-headed Grosbeak winters mostly in southwestern Mexico.

Documentation: Drawings and written description: Il. Sangamon Co., HDB on file ISM.

Blue Grosbeak

Passerina caerulea

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	35/27 (14)	133/91 (18)	67/34 (9)	0/0	235/152
Average/day	1.30	1.46	1.97		1.55
Average/season	2.50	7.39	7.44		

Status: Rare Migrant and Occasional Summer Resident

Dates:

Spring: Earliest arrival = April 17, 2002 adult ♂ Buckhart Average arrival (14 years) w/range April 17 – May 25 = May 11

Fall:Average departure (9 years) w/range August 3 – September 24 = September 1
Latest departure = September 28, 2009 immature ♂ north of Sangchris

When this beautiful grosbeak increased during the study, it was a clear-cut example of a southern species moving north (see Figure 28). I did not encounter this bird until June 23, 1975 when an immature male was singing north of New City. The first spring record was May 6, 1977 at Washington Park, and the first fall record was August 10, 1978 at Lake Springfield. Its occurrence in the county was very sporadic until 1992 and it only became regular in 2002. Most of the spring arrival dates were for May except for the very early April record above. However, arrival dates were all in April (April 25, 2007; April 22, 2008; April 26, 2009) from the addendum 2007 – 2009, and I believe late April will be the usual arrival in the future. With the addendum dates, the average arrival was May 8 for 17 years of data. This grosbeak was found in rather barren areas especially those with sandy soil, scrubby trees and bushes, hedgerows, brush around ponds, prairies with some trees, and forest edge. Males sang from small trees, power lines, fences and the ground and had the habit of switching their tail to the side. The usual scenario was that an immature male sang from an area and the next year there was a pair in that habitat. High counts for all seasons were: 5, July 18, 2005; 5, August 9, 2005; 6, August 27, 2006; 7, July 17, 2007; and 4, April 27, 2009. Evidence for breeding besides males singing all summer was: juveniles with a female September 24, 2005 at Buckhart; adult carrying food at Buckhart on July 28, 2007; adults with juveniles August 14, 2007 at Sangchris; a juvenile north of Sangchris September 15, 2008 (photograph); a female with a juvenile at Jefferies Orchard September 15, 2002 and September 19, 2008; and a female carrying food north of Sangchris, June 27, 2009. Other areas with summer birds were southwest of Salisbury, north of New City, and Knapp Lake. On July 1, 1977 east of Irwin Bridge a singing male was harassed by a female House Sparrow and a male Indigo Bunting. The males sang their harsh Purple Finch-like song from spring arrival at least until mid-August, with the latest August 22, 2009. I occasionally saw birds in worn plumage, but not with molt. Subsequently, I observed two adult males in molt on August 20, 2009 a process which should have occurred on the wintering grounds. Other late fall departure dates were: 2, September 6, 1993 at Buckhart; immature, September 24, 1996 at Rochester; 3, September 24, 2005 at Buckhart; female, September 15, 2006 at Buckhart; and male, September 9, 2007 at Oak Ridge Cemetery. Using the addendum fall dates, the average

departure of eleven years was September 3. The subspecies in the county is the eastern nominate form. The Blue Grosbeak winters from Mexico to Panama.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

Highest # Days/Season

 Spring
 7 (2005 & 2006)

 Summer
 25 (2006)

 Fall
 11 (2005)

Highest # Birds/SeasonSpring10 (2005 & 2006)Summer39 (2006)Fall29 (2006)

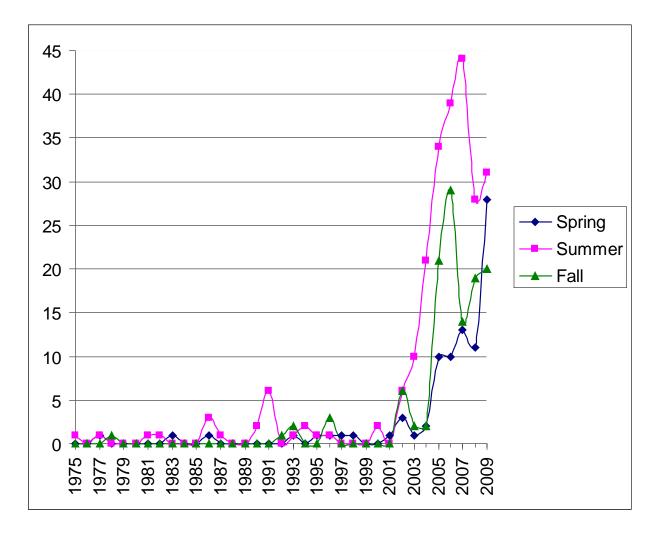


Figure 28. Blue Grosbeak Numbers by Season.

Lazuli Bunting

Passerina amoena

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	2/2 (2)	0/0	0/0	0/0	2/2
Average/day	1.0				1.0
Average/season					

Status: Very Rare Spring Migrant

Dates: Two Records: second year ♂, North Pt., May 7, 1996; ♀, Carpenter Park, May 14, 2006.

This was a western bunting, the counterpart of the Indigo Bunting with which it sometimes hybridizes. Both sightings occurred with large influxes of Indigo Buntings on woodland edge with associated open mowed grassy areas. The male was obvious with a blue head, brown nape and chest, and two white wing-bars. The female was powder blue on the wings and tail with white wing-bars, and the rest of the plumage was a smooth brownish color. I have seen many Indigo Buntings showing some wing-bars, but they were dingy or buff. Several other records exist for this species in Illinois. The Lazuli Bunting winters in the southwestern US and western Mexico.

Documentation: Drawings and written descriptions: IL. Sangamon Co., HDB-on file ISM.

Indigo Bunting

Passerina cyanea

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	11463/1148 (37)	20406/1790 (37)	13175/2103 (37)	4/4 (2)	45048/5045
Average/day	9.99	11.40	6.26	1.0	8.95
Average/season	309.81	551.51	356.08	2.0	

Status: Very Common Migrant and Summer Resident and Very Rare in Winter

Dates:

Spring: Earliest arrival = March 19, 1992 ♂ Adams Sanctuary Average arrival (37 years) w/range March 19 – May 5 = April 25

Fall: Average departure (37 years) W/range October 7 – November 29 = October 24 Latest departure = November 29, 1985 south of Lanesville (also see winter records)

This beautiful bunting was one of the most numerous of the neotropical migrants in the county. It seemingly nested in all habitats from thick bottomland forest to roadsides with only adjacent cornfields. One would think that there must be some genetic differences in at least the two extremes, but it might be that the more dominate birds got the best habitat. Spring arrival was usually in late April, with arrival in early May in six years. It was seen once in March (see above), but this might have been a bird that wintered nearby. Other early spring arrivals were: male, April 20, 1979 at Carpenter Park; male, April 19, 2001 at Lincoln Gardens; a second year male, April 19, 2002 at Sangchris; and three males April 19, 2004 at North Pt. and Carpenter Park. Female average arrival was May 4 in 19 years of data. Sometimes, I saw flocks that consisted of only females in late May. High counts for spring were: 50, May 18, 1978; 50, May 9, 1981; 70, May 4, 1985; 57, May 9, 1987; 58, May 8, 1999; and 46, May 9, 2002. In summer on the BBS, this species ranked 10^{th} with its best numbers from 1976 - 1984. The Sangamon River Census showed high and stable numbers between 1976 and 1991. Though most summer counts were 20 – 40 birds, there were: 104, June 18, 1976; 88, June 13, 1978; and 56, June 13, 1991. These buntings sang constantly, even in the heat of the day, from power lines and the tops of small trees. There was a lot of fighting over territories, not only with other adult males but also with second year males. I saw a male at Horse Creek on June 28, 1989 jump up and down and peck another male which had been road killed, evidently trying to make it leave his territory. Copulation was seen from May 23 to June 5. On June 5, 2004 along a road at Riverside Park a male was on the ground quivering and dragging its wings and strutting, sometimes singing, when a female flew in and lifted its tail. The male strutted around her, and then mounted her, strutted around her again, then mounted her again. The male then walked off to the side and threw its head back, then went bill to bill with the female, went to the rear of the female and tried to mount her again, but she pecked at him and they both flew off. These nuptial dance and copulation, necessary behaviors for all birds, are constantly interrupted by disturbances of humans and their pets. Along with other behaviors, this is another excellent reason for Nature Preserves. Nest building was noted between May 24 and August 3 indicating multiple nestings. Nests (13) with eggs (1-4) were seen June 2 to August 21 and four of these nests contained cowbird egg(s) with

dates June 2 to July 1. Young were seen in the nest only August 13 and September 10, whereas fledged young were seen from July 3 to October 2. Many of the young were observed in August and September, indicating late nesting maybe to avoid cowbirds. Cowbirds were being attended by buntings from July 3 to August 30. Males were noted to still be in alternate plumage until September 7, while molt was seen from August 14 to September 20. Flight songs were observed in fall September 15 to October 9. Normal singing cessation was August 24, 1999 and August 25, 2000. After the males quit singing, these buntings became much less obvious. They then became small brown birds, some with bluish patches, found in brushy, grassy, weedy areas, and especially ragweed. High counts for **fall** may actually include a lot of summer residents. High fall counts were: 30, October 10, 1970; 50, September 17, 1977; 50, August 1, 1999; and 39, September 12, 2003. Most birds left in October, with November dates: November 14, 1980 at Oak Ridge; one above; November 19, 1991 at Oak Ridge; November 4, 2006 at Lake Springfield; and November 24, 2007 Lake Springfield. Plus, there were three winter records: December 1 – 13, 1979 at the west end of Lake Springfield; December 20, 1979 at Sangchris; and January 1, 1985 at Riverside Park. One adult male banded May 26, 1974 was recaptured August 17, 1979, making it at least six years and three months of age. The Indigo Bunting winters from southern Mexico south to Panama.

Documentation: Specimens = 45) IL. Sangamon Co., Spring & Summer = 28, $\Im \Im = 24$, May 6 – July 23, wts. = 12.3 – 16.0 gms, testes = 1 – 10 mm, gizzard with Coleoptera & Diptera; $\Im \Im = 4$, Sangamon Co., May 9 – June 9, wts. = 12.7 – 15.1 gms, ovaries = 5 – 7 mm; Fall = 17, adult $\Im \Im = 6$, Sangamon Co., September 4 – October 15, wts. = 13.3 – 20.8 gms (Sept 4 bird in heavy molt); immature $\Im \Im = 4$, Sangamon Co., September 10 – October 12, wts. = 10.9 – 18.1 gms; adult $\Im \Im = 4$, Sangamon Co., September 2 – October 14, wts. = 14.3 – 17.3 gms; immature $\Im \Im = 3$, Sangamon Co., August 9 – October 27, wts. = 13.0 – 19.0 gms, gizzard with ants & Hemiptera.

Highest # Days/Season

 Spring
 39 (1985 & 2001)

 Summer
 61 (6 years) maxed

 Fall
 79 (2002)

 Winter
 3 (1979)

Highest # Birds/Season

Spring527 (2002)Summer1308 (2000)Fall836 (2002)Winter3 (1979)

Dickcissel

Spiza americana

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	3439/715 (37)	8847/1379 (37)	1409/553 (37)	3/3 (2)	13698/2650
Average/day	4.81	6.42	2.55	1.0	5.17
Average/season	92.95	239.11	38.08	1.50	

Status: Common Migrant and Summer Resident and Very Rare Winter Resident

Dates:

Spring: Earliest arrival = April 6, 1995 ♂ Washington Park Average arrival (37 years) w/range April 6 – May 8 = April 30

Fall:Average departure (37 years) w/range August 22 – November 20 = October 9Latest departure = November 20, 1982 Sangchris (see winter records)

This was an open-country prairie species that had adapted somewhat to agriculture if it was not too intensive. Dickcissels were seen along roads usually in small trees or on wires or fences singing their song over and over, even on the hottest days. Most arrivals in **spring** were in late April or early May. The April 6 date above was probably an individual that wintered close by. Other early arrivals were: April 25, 1984; April 26, 1990 & 2009; and April 22, 2008. Spring numbers were 2.4 times higher than fall numbers, probably due to conspicuousness. Sometimes I heard this bird in flight as it was migrating since it gave a distinctive harsh note "zeraat". Males arrived first in spring, with females average arrival May 13 in eight years of data. High spring counts were: 60, May 16, 1970; 34, May 7, 1977; and 53, May 25, 1998. Many years, it was the last half of May before this bird appeared in numbers and migration usually went into the first week of June. Summer was the time that most Dickcissels were seen, and high counts of 40 were not uncommon. There were 63 on June 23, 2001. Much of the habitat for this species had been lost from destruction of open space ranging from housing to creation of horse pastures (useless to breeding birds). Only undisturbed, set-aside farms had saved it from much lower populations. On the BBS, it was recorded every year but with a definite decrease in numbers in 1972 with other drops in 1975 and 1989. Courtship was seen near Carpenter Park in which male and female pranced on the ground on June 17, 2003. Nest building was noted between May 18 and July 24, indicating two broods, and in fact some broods were quite late. A nest at Sangchris contained four eggs on June 12, 1979. Adults were seen carrying food, evidence that there were young in the nest, from June 14 to September 6. Fledged young were seen July 8 to August 23. Songs in late July became shorter and slurred. Once singing stopped usually by the end of July (August 10 in 2000 and August 15 in 1999), these birds were difficult to find. Most were in worn to very worn plumage by August (one female was in worn plumage September 8, 1985) and some were in molt August 13 - 26. Even though they had quit singing, I found that in **fall** I could spish them up along drainage ditches and in weedy fields where they seemed to form flocks from August to October. Near Buckhart on August 20, 2004 in a grassy weedy field, I found 12 Dickcissels and 4 Bobolinks all in fresh basic plumage in one flock. On August 27, 2004 there were 15 Dickcissels along a hedge, some of which were uncharacteristically in the tops of fairly tall trees. At Sangchris one was migrating August 18, 1979; and two were migrating over on

August 27, 1992. Numbers in fall began to diminish in early September, and a tv tower kill September 2, 1972 proved they were migrating at that time. High counts for fall were: 12, September 1, 2003 and 17, August 27, 2004. By November they were rare, with records: November 5, 1978; November 7, 1979; November 20, 1982; November 6, 1991; and November 12, 1993. There were two **winter** records: one south of Rochester on December 14, 1992 and a female in a milo field west of Sangchris December 31, 1993 to January 3, 1994. In winter, Dickcissels could be very dull plumaged and resembled female House Sparrows with which they would flock. The Dickcissel winters, sometimes in large flocks, in Mexico south to northern South America.

Documentation: Specimens = 8) IL. Sangamon Co., $\bigcirc \bigcirc \bigcirc = 7$, May 3 – September 2, wts. = 27.7 – 37.9 gms, testes = 2 – 9 mm; $\bigcirc = 1$, tv tower, May 8, 1972, wt. = 25.3 gms, ovary = 13 mm.

Highest # Days/Season

Spring28 (1992)Summer58 (2002)Fall32 (1993)Winter2 (1993)

Highest # Birds/Season

Spring245 (1998)Summer619 (2002)Fall115 (1993)Winter2 (1993)

Spotted Towhee

Pipilo maculatus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	14/14 (6)	0/0	34/33 (18)	56/56 (12)	104/103
Average/day	1.0		1.03	1.0	1.01
Average/season	2.33		1.89	4.67	

Status: Rare Migrant and Winter Resident

Dates:

- Fall:Earliest arrival = October 8, 2002 & 2003 both $\bigcirc \bigcirc \bigcirc$ Jefferies Orchard
Average arrival (19 years) w/range October 8 December 24 = October 26
- Spring: Average departure (14 years) w/range January 6 May 1 = February 28 Latest departure = May 1, 1978 ♀ Oak Ridge Cemetery

The Spotted Towhee was lumped with the Eastern Towhee when the study began, but because both were distinctively marked, I kept their numbers separated throughout the study. The Spotted Towhee was elevated to species rank in the 7th edition (1998) of the AOU Checklist. This towhee had white wingbars, white spotting on the scapulars and white to buffy spotting on the back, plus the rump was lighter and the head color was grayish-brown in females and dark slate in males. However, beware of young Eastern Towhees in late summer which have some spots on the back. I had 43 records of the Spotted Towhee during the study (see Table 43). There were two at once at Carpenter Park on November 26, 1970. Some of the same birds may have been returning for several years (note the earliest arrival). Most occurred in **fall** and winter in the same habitat as the Eastern Towhee, but some were in conifers and occasionally at feeders. Though many were one day sightings at least six stayed all winter: male, Carpenter Park November 26, 1970 -January 11, 1971; male, south of Springfield, December 22, 1980 – February 12, 1981; male, south of Springfield December 11, 1984 – April 16, 1985; male, Oak Ridge Cemetery, November 17, 1991 – April 25, 1992; male, Tuckers feeder, December 15, 2000 – January 6, 2001; and female, Washington Park, November 5, 2003 – March 22, 2004. There were only six spring records, two in March, three in April and one in May. The breeding range is in the northwest interior of the US and the main winter area is in New Mexico and Texas. The subspecies of the specimen below is P. m. arcticus, but P. m. montanus might represent some of the sight records. Also, some could be hybrids with the Eastern Towhee such as a female at Clear Lake on January 12, 2004 (B.Dyer). I noted a dark male with a spotted wing at Lincoln Gardens on June 3, 2005 that fit the subspecies in the Pacific Northwest, but was unable to photograph it (not counted in the totals); and this bird, uncharacteristically for a summer resident, flew across the lake.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 606648 \bigcirc , LSpfld, October 19, 1977, coll. by HDB, wt. = 31.5 gms, ovary = 2.5 mm.

Highest # Days/Season

Spring	9 (1985)	S
Fall	5 (1991)	F
Winter	26 (1984)	V

Highest # Birds/Season

Spring	9 (1985)
Fall	5 (1991)
Winter	26 (1984)

1970-71	two ී්, November 26	Carpenter Park, with one until January 11	
1972	්, October 15 – 19	Oak Ridge Cemetery	
1075	්, October 16	Carpenter Park – banded by VK	
1975	්, November 10	Lake Springfield	
1077	$\hat{\mathbb{Q}}$, October 19	Lake Springfield – collected	
1977	♀, October 23	Carpenter Park	
1978	. ⊈, May 1	Oak Ridge Cemetery	
1979	්, April 10	Carpenter Park	
1980	$\hat{\mathcal{Q}}$, December 4 – 12	Lick Creek	
1980-81	්, December 22 – February 12	south of Springfield – HDB feeder	
1000	්, November 6 – 13	Sangchris	
1982	\mathcal{Q} , November 16	Riverside Park	
1004	්, October 23	Washington Park	
1984	්, December 20	Lick Creek	
1984-85	র, December 11 – April 16	south of Springfield – HDB feeder	
1986	්, October 22	Knapp Lake	
1987	්, October 14	Knapp Lake	
1000	්, October 16	Washington Park	
1989	්, October 31	Oak Ridge Cemetery	
1990	$\hat{\mathbb{Q}}$, October 22	Washington Park	
	d, January 25	southeast of Springfield	
1001	♀, October 10 – 17	Washington Park	
1991	♂, November 11	Cinder Flats	
	♂, December 15	south of Rochester	
1991-92	්, November 17 – April 25	at Oak Ridge Cemetery	
1994	්, February 10	east of Springfield	
1994	♂, November 6	Carpenter Park	
1995	♂, February 7	northwest of Springfield – Tucker feeder	
1990	ੋ, March 4	Sangchris Lake State Park	
1997	♂, November 8	Lake Springfield	
	∂', January 19	Springfield – Cline feeder	
2000	∂, February 11	east of Springfield	
	♂, October 11	Sangchris Lake State Park	
2000-01	්, December 15 – January 6	northwest of Springfield – Tucker feeder	
2001	♀, October 22	Sangchris Lake State Park	
2001	\bigcirc , November 17	Jefferies Orchard	
2002	♀, October 8	Jefferies Orchard	
2003	\bigcirc , October 8	Jefferies Orchard	
2003 – 04	\bigcirc , November 5 – March 22	at Washington Park	
2004	\bigcirc , January 12	Clear Lake – hybrid?	
2005	♂, October 26	Carpenter Park	
2006	<i>∛</i> , January 21	east of Loami	
2007	♂, February 17	Lake Springfield	

Table 43. Spotted Towhee Records in Sangamon County 1970 – 2007

Eastern Towhee

Pipilo erythrophthalmus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	5936/2072 (37)	2305/1068 (37)	4230/1852 (37)	112/85 (24)	12583/5077
Average/day	2.86	2.16	2.28	1.32	2.48
Average/season	160.43	62.30	114.32	4.67	

Status: Common Migrant, Fairly Common Summer Resident and Occasional Winter Resident

Dates:

Spring: Earliest arrival = February 19, 1998 ♀ Carpenter Park Average arrival (36 years) w/range February 19 – March 23 = March 11

Fall: Average departure (37 years) w/range October 17 – December 13 = **November 14** Latest departure = **December 13**, 1981 \bigcirc 3 \bigcirc east along Sangamon River

This was a handsome, large sparrow in which the males were black and the females were brown dorsally and on the head. The rufous sides referred to the old name of this towhee. The Eastern Towhee feeds near or on the ground usually in scrub, brushy areas and woodland edge. It arrived in spring twice in February, but mostly in March, and began to sing "drink your tea" about March 18 (March 8 - 28). Other early spring arrivals were: male, February 25, 1977 at Lincoln Gardens; male, March 1, 1983 south of Springfield; and male, March 1, 2004 at North Pt. Males were recorded as first spring arrivals 36 times while females arrived as early or earlier only four times. Females usually arrived later than males, and their average arrival of 12 years was March 23. The towhee did not tend to flock much, though occasionally there might have been loose flocks of migrants. High spring counts were: 12, April 23, 1972; 12, April 22, 1974; 12, May 4, 1992; and 13, April 25, 1998. Migrants disappeared about May 20, leaving only the summer population. The BBS showed that the numbers declined in 1994 and that the towhee ranked 53rd. Most high summer counts were 3 - 9 birds but there were 12, July 24, 1982 and 10, June 24, 2006. A nest with five eggs was at Lincoln Gardens on May 13, 1993. Fledged young were observed June 3 to September 22, with most in July and August. Towhees were feeding young cowbirds July 17 and August 13 and 31. Towhees were double brooded, evidenced by one nest building as late as July 22. Cessation of singing occurred August 28, 1999 and August 25, 2000. I noted birds in molt from August 15 to October 11 and some immatures were still in juvenile plumage in September and October. It was difficult to tell when migrants arrived in fall, but my notes suggested that they arrived in late September and early October. High counts for fall were: 12, October 4, 1977; 12, October 22, 1983; and 12, October 19, 2001. Most towhees had moved south by mid-November and in six years it was late October. This species was difficult to find in winter, and they were usually in sheltered areas with very brushy vegetation or at feeders. There were 13 winters that it went unrecorded. Eastern Towhees were exactly two times more numerous than Spotted Towhees in winter. High counts for winter were: 3, February 15, 1981; 5, December 4, 1982; 6, January 5, 1987; and 4, December 7, 1991. On August 28, 2008 a male towhee at Sangchris called like a Blue Jay and sang like a Carolina Wren; it returned in the spring of 2009 and gave the same odd sounds, but I never heard it sound like a towhee

(photograph). On October 25, 2005 there was a female showing a complete white eyering. The subspecies in the county was the nominate form.

Documentation: Specimens = 3) IL. Sangamon Co., ISM# 606148 \Diamond , south Springfield, April 26, 1974, coll. by HDB, wt. = 38.9 gms, testes = 9 mm, gizzard with *Chenopodium* sp? seeds; ISM# 605907 \heartsuit , Lincoln Gardens, April 22, 1974, coll. by HDB, wt. = 38.7 gms, ovary = 9 mm, gizzard with Coleoptera, Hymenoptera, & Diptera; ISM# 660398 \heartsuit , LSpfld, October 11, 1994, coll. by HDB, wt. = 40.5 gms (head, upperparts & tail much darker brown than spring \heartsuit).

Highest # Days/Season

Spring74 (1992)Summer49 (2000)Fall78 (1982)Winter11 (1999)

Highest # Birds/Season

Spring250 (1998)Summer148 (2000)Fall216 (1999)Winter14 (1999)

American Tree Sparrow

Spizella arborea

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	8986/819 (37)	0/0	5111/571 (37)	37904/1756 (37)	52001/3146
Average/day	10.97		8.95	21.59	16.53
Average/season	242.86		138.14	1024.43	

Status: Common Migrant and Very Common Winter Resident

Dates:

Fall:Earliest arrival = October 15, 1988 Sediment RetentionAverage arrival (36 years) w/range October 15 – November 14 = November 1

Spring: Average departure (37 years) w/range March 24 – April 24 = April 7 Latest departure = April 24, 1982 Oak Ridge Cemetery

This rather pale sparrow has a dot on its plain breast, a rufous cap, and a yellow lower mandible. The American Tree Sparrow breeds in the far north in brushy areas and stunted growth in northern Canada and Alaska. In Sangamon County it was found in weedy, grassy, brushy places usually in open terrain, where they fed near or on the ground. It was sometimes easy to spish whole flocks to the tops of small trees or weeds. Fall numbers were less than spring numbers (1 to 1.8), but winter was the main season for this species. It arrived in fall 15 times in October and 24 times in November. Other early fall arrivals were: October 23, 1976 west of Springfield; October 20, 1996 east of Springfield; and October 22, 2003 at Adams Sanctuary. High counts for fall were: 120, November 20, 1976; 100, November 30, 1977; 60, November 24, 1984; and 58, November 29, 1993. Sometimes, this sparrow did not become common until winter, the snow and cold temperatures pushing them southward. Heavy snows brought them up by the roads in winter to feed, and a few were killed by passing cars. High counts for winter included some northward migrants: 200, February 12, 1975; 200, December 19, 1976; 300, January 22, 1977; 500, February 6, 1982; 830, February 9, 1985; and 270, January 18, 1997. Singing occurred even in winter, such as January 26, 1975, and about the time they started moving back north. The migration north in late winter can be very obvious with flocks moving along hedgerows. I made an effort to record this sparrow into April and managed to do so in 29 years. High counts for the spring season were: 175, March 7, 1982; 130, March 3, 1994; and 85, March 9, 1999. This bird was occasionally noted in bottomland forest in late March and early April, 2002, which was a change in habitat for some with the coming of spring. Other late departures were April 23, 1983 &1997. Numbers appeared to decline by 1985, but were variable with a few seasons producing numbers of birds. One leucistic was seen at Lake Springfield on January 24, 1984 in which the wings and tail were white. Two birds, January 3, 1978 and March 26, 2001, both at Sangchris, were much more rusty especially in the face and breast than nearby birds. All of the specimens below appear to be the eastern nominate form.

Documentation: Specimens = 18) IL. Sangamon Co., adult $\Im \Im = 6$, January 13 – February 12, wts. = 17.7 – 22.1 gms; immature $\Im \Im = 3$, Sangamon Co., November 26 – February 9, wts. = 18.8 – 19.8 gms, gizzard (February 2) with seeds of Polygonum sp?; adult $\Im \Im = 7$, Sangamon

Co., December 24 – April 6, wts. = 13.4 - 17.5 gms; immature $\bigcirc = 1, 2$ mi south Salisbury, November 20, 1980, wt. = 15.7 gms; plus adult sex? = 1, Sangchris, January 19, 1994, wt. = 17.8 gms.

Highest # Days/Season

Spring39 (1990)Fall25 (2004)Winter73 (2000)

Highest # Birds/Season

Spring802 (1982)Fall329 (1984)Winter2813 (1984)

Chipping Sparrow

Spizella passerina

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	8858/1577 (37)	5370/1308 (35)	16694/1908 (37)	21/15 (7)	30943/4808
Average/day	5.62	4.11	8.75	1.40	6.44
Average/season	239.41	153.43	451.19	3.0	

Status: Common Migrant and Summer Resident and Rare Winter Resident

Dates:

- Spring: Earliest arrival = March 23, 1987 ♂ Washington Park & 2008 LSpfld Average arrival (37 years) w/range March 23 – April 22 = April 5
- Fall:Average departure (37 years) w/range October 18 –November 29 = November 13
Latest departure = November 29, 1981 Refuge (also see WR)

The Chipping Sparrow was one species that had benefited from human manipulation of the landscape. It liked yards with mowed grass, nested in evergreens, and its voice even sounded like a lawn sprinkler. Its numbers during the study steadily increased. **Spring** arrivals were in early to mid-April (27 years) and more recently were in late March (13 Years). If spring arrivals were divided into early (1970 - 1987) the average would be April 9 and late (1988 - 2006) the average would be April 1. With the addendum dates factored in the later average arrival would be March 31. High counts for spring were: 40, May 7, 1975; 57, April 21, 2000; and 67, May 3, 2004. Though they were usually in open habitats in spring, they could be in forest and I have seen them in the canopy with warblers. Spring migrant numbers dropped off about mid-May. The summer population was very low in the 1970s, and it went unrecorded in summer in 1970 and 1971 (part of this was due to much less time in the field). It ranked 21st on the BBS with few early but increasing numbers, and jumps in numbers in 1987 and 1993 (see Figure 29). High summer counts were: 29, June 17, 1998; 34, June 11, 2000; and 28, July 27, 2006. Singing on territory started in early April; and copulation was noted between May 4 and July 12 indicating more than one brood per season. Nest building was seen from April 28 to June 13. Young, being streaked and easy to identify, were seen from May 29 to August 29 with the most in July. This sparrow raised numbers of cowbirds (17% of the observations of young) which adults were attending from June 18 to August 20. Singing ceased August 19 in 1999 and August 24, 2000. Molt was noted between August 11 and September 26. During the **fall**, I noticed four of these sparrows with deformed heads, which perhaps could be due to heavy spraying of lawns. Flocks of Chipping Sparrows were seen in September and October sometimes associated with bluebird flocks, especially along the fencerows, woodedge and cemeteries. They were of all age groups, some streaked, some in molt, and some in basic plumage. High counts for fall were: 93, October 31, 1989; 81, October 23, 2001; 80, November 1, 2002; 92, October 11, 2003; and 185, October 21, 2004. Numbers in fall, buoyed by young of the year were higher than in spring (1.9 to 1). I used to think that observing this sparrow in November was unusual, but in 1991 there were 59, and in 2003 there were 86 into November. The first winter record was December 17, 1989 at Marine Pt., and there were seven winters, plus two winters into the addendum, with records (see Table 44). Chippys in winter were usually seen with flocks of juncos or American Tree Sparrows

and were in sheltered areas and at feeders. Most winter from the southern US to southern Mexico. The subspecies in the county is the eastern nominate form.

Documentation: Specimens = 12) IL. Sangamon Co., juveniles = 3 (2 $\Im \Im$ & one sex?), east Spfld, May 29 – August 18, wts. = 9.0 – 11.3 gms, gizzard with caterpillars & Coleoptera; Spring & Summer = 2, adult $\Im \Im = 2$, LSpfld & west Mechanicsburg, May 21 – June 18, wts. = 12.2 – 12.7 gms, testes = 9.5 – 10 mm; Fall = 7, adult $\Im = 1$, tv tower, October 14,1985, wt. = 13.0 gms; immature $\Im \Im = 2$, tv tower & Oak Ridge, October 14 – November 21, wts. = 11.9 – 12.7 gms; immature $\Im \Im = 3$, tv tower, October 14 – 24, wts. = 11.8 – 13.3 gms; plus sex? immature = 1, Spfld, November 5,1977, wt. = 12.6 gms, gizzard with seeds (Panicum & Setaria) & Coleoptera.

Highest #	Days/Season	Highest	# Birds/Season
Spring 6	54 (2004)	Spring	523 (2004)
Summer 6	60 (2005 & 2006)	Summer	450 (2000)
Fall 9	08 (2002 & 2006)	Fall	1705 (2004)
Winter 6	5 (2003)	Winter	7 (2003)

Table 44. Chipping Sparrows in Winter in Sangamon County

1989	one, December 17	Marine Pt.	
1993	two, December 1	Adams Sanctuary	
2000	one, December 8 three, December 10	UIS Oak Ridge Cemetery	
2002	one, December 9	Oak Ridge Cemetery	
2002-03	two, December 27 – February 27	Andrew	
2003-04	one, December 9 – January 5 one, December 30 – January 22	Center Park Andrew	
2004	one, January 1	Oak Ridge Cemetery	
2006	one, January 4	Oak Ridge Cemetery	
2007	one, January 13	Lake Springfield	

Addendum:

	two, January 1	southeast of Lake Springfield
	one, January 2	Buckhart
	three, January 15	Buckhart Cemetery
2009	two, February 13	Refuge Lake Springfield
	one, February 14	Buffalo
	one, February 18	south of Rochester
	two, December 6	Oak Ridge Cemetery

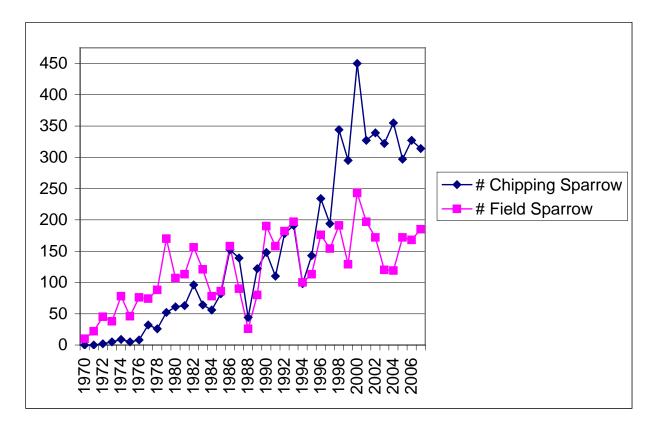


Figure 29. Summer Numbers of Chipping and Field Sparrows

Clay-colored Sparrow *Spizella pallida*

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	39/33 (20)	0/0	19/16 (14)	0/0	58/49
Average/day	1.18		1.19		1.18
Average/season	1.95		1.36		

Status: Rare Migrant

Dates:

- Spring: Earliest arrival = April 25, 2001 Sangchris Average arrival (21 years) w/range April 25 – May 14 = May 2 Average departure (16 years) w/range May 2 – 21 = May 8 Latest departure = May 21, 1997 Washington Park
- Fall: Earliest arrival = September 5, 1997 Carpenter Park
 Average arrival (13 years) w/range September 5 October 14 = October 1
 Average departure (5 years) w/range October 14 November 23 = October 26
 Latest departure = November 23, 2007 south of Lake Springfield

Though this species was almost certainly present every migration, it was difficult to find especially in fall. I saw the first spring Clay-colored Sparrow on May 1, 1974 at Carpenter Park, and the first fall bird was not until September 10, 1980 at the Cinder Flats. They may enter Illinois and the county from the west as does the Bell's Vireo. In spring, its insect-like song alerted me to its location, usually in open brushy or weedy, grassy habitat. They were found in several places feeding on the ground on dandelions in spring with White-crowned Sparrows. Other spring arrival dates were April 26, 1986 at Carpenter Park and April 26, 1999 at Sangchris. Rarely, was more than one observed a day, with spring high counts 3, May 8, 1974, and 3, May 3, 1983. Another late spring departure was May 15, 2006 in Springfield at a feeder (C. Olson). This species breeds on the northern Great Plains and around the Great Lakes, rarely in northern Illinois. Arrivals in fall were variable, with six years in September and 10 years in October. Another fall arrival was September 17, 2004 at Jefferies Orchard. The high count for fall was 3 (tv tower kills), October 14, 1985. Other fall departure dates were: October 27, 1992 at Oak Ridge; October 21, 2006 at Centennial Park; and October 28, 2008 at Centennial Park. The November bird above was nearly a month later than the latest departure and was photographed. This sparrow was seen all three years of the addendum, and by then I saw more in fall than spring. The Clay-colored Sparrow winters in central Texas south to Oaxaca, Mexico.

Documentation: Specimens = 4) IL. Sangamon Co., Spring = 1, ISM# 606571 \Diamond , 2 mi north Spfld, May 2, 1977, wt. = 11.6 gms, testes = 7 mm, gizzard with insect larva; Fall = 3, ISM# 608519 immature \Diamond , tv tower, October 14, 1985, wt. = 11.4 gms; ISM# 608520 immature \Diamond , tv tower, October 14, 1985, wt. = 12.1 gms; ISM# 608521 adult \heartsuit , tv tower, October 11, 1985, wt. = 12.1 gms; ISM# 608521 adult \heartsuit , tv tower, October 11, 1985, wt. = 12.1 gms.

Highest # Days/Season

Spring	4 (1974 & 1997)
Fall	2 (1985 & 2006)

Highest # Birds/Season Spring 6 (1974)

Spring	6 (1974)
Fall	5 (1985)

Field Sparrow

Spizella pusilla

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	10636/2177 (37)	4443/1283 (37)	8199/2098 (37)	236/129 (32)	23514/5687
Average/day	4.89	3.46	3.91	1.83	4.13
Average/season	287.46	120.08	221.59	7.38	

Status: Common Spring Migrant, Fairly Common Fall Migrant and Summer Resident and Occasional Winter Resident

Dates:

- Spring: Earliest arrival = February 27, 1973 LSpfld (arbitrary due to WR) Average arrival (37 years) w/range February 27 – April 1 = March 13
- **Fall:** Average departure (37 years) w/range October 23 –November 30 = **November 21** Latest departure = **November 30**, 1990 & 1998 Hunter Lake (arbitrary due to WR)

Although this slender, plain brown bird had no bold markings, it did have one of the most beautiful songs in the county. Most **spring** arrivals were in March, but in 1984 it was April 1; and it arrived in late February in 1973 and 1998. These early spring records could have indicated winter residents rather than migrants. Other early spring arrivals were: March 2, 1990 at Brunk Cemetery; February 28, 1998 southeast of Springfield; and March 1, 2005 at Beamington Corners. High spring counts were: 30, April 23, 1970; 35, May 5, 1973; 25, May 4, 1992; and 22, April 21, 2006. Usually seen in small numbers, occasionally this sparrow occurred in flocks and also with other sparrows. Singing generally began in mid-March, but I had heard them sing as winter residents as early as February 24, 1992 and February 13, 2009. In summer this bird breeds in brushy open areas, pastures, and wood edge. Many areas in Sangamon County that supported Field Sparrows were being turned into housing complexes, which recently favored the Chipping Sparrow (see Figure 29). This phenomenon was backed up by the BBS data which showed lower numbers of Field Sparrows in1984 and again in 1994. High summer counts were: 17, June 6, 1978; 29, June 21, 1986; and 18, June 28, 1995. Copulation was seen from April 28 -August 3. Nest building was between April 11 and August 31, suggesting as with other data, multiple nestings per year. Nests with eggs were seen from April 1 to May 20, and on May 3, 1986 a nest with 3 eggs plus 2 cowbird eggs was at Carpenter Park. Young were seen in the nest May 14 to September 12, and fledged young were noted from June 7 to September 14. Adults were feeding a young cowbird June 28. A streak breasted juvenile Field Sparrow at Sangchris on September 3, 1993 was singing. Singing cessation was September 1, 1999 and August 30, 2000 with some partial singing to September 10. Molt was seen from August 15 to October 7. Though some fall migration occurred in September, October was the main month of movement, and migration was mostly over by November, though it varied due to weather. High fall counts were: 40, October 15, 1980; 38, October 22, 1983; 28, October 18, 1998; and 27, October 19, 2006. Numbers were usually low in winter, and there were none of these sparrows in five winters (1979-80, 1983-84, 1985-86, 1988-89, 1989-90). Sometimes they were seen in small flocks in winter: 5, January 18, 1983; 4, January 6 & February 21, 1994; 5, January 21 & 23, 2000; and 6, December 29, 2006 & January 1, 2007. Many times, they were mixed in flocks of American Tree Sparrows. The winter of 2008-09 was a good season for this species, with 33 birds up to February 15. Many Field Sparrows usually winter in southern Illinois and south to the Gulf Coast and northern Mexico. The subspecies in the county is the nominate form.

Documentation: Specimens = 13) IL. Sangamon Co., Spring = 6, $\bigcirc \bigcirc \bigcirc = 3$, Spfld (2) & 2 mi north Spfld, April 12 – May 3, wts. = 11.8 – 13.3 gms, testes = 2.5 – 6 mm; $\bigcirc \bigcirc \bigcirc = 3$, Spfld (2) & 2 mi north Spfld, April 26 – May 6, wts. = 12.9 – 15.2 gms, ovaries = 4.5 mm – greatly enlarged ovary (with largest ovum = 11 mm), gizzard with Coleoptera; Fall = 7, $\bigcirc \bigcirc \bigcirc = 3$, tv tower (2) & 4 mi south Spfld, October 5 – 22, wts. = 12.2 – 14.7 gms; $\bigcirc \bigcirc \bigcirc = 4$, Spfld, September 30 – November 5, wts. = 11.5 – 13.0 gms (Sept 30 bird in molt).

Highest # Days/Season

Spring77 (2000)Summer54 (1982 & 2000)Fall81 (2002)Winter15 (1999)

Highest # Birds/Season

Spring441 (1982)Summer243 (2000)Fall412 (2002)Winter35 (1999)

Vesper Sparrow

Pooecetes gramineus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1631/732 (37)	719/419 (34)	953/481 (35)	7/7 (4)	3310/1639
Average/day	2.23	1.72	1.98	1.0	2.02
Average/season	44.08	21.15	27.23	1.75	

Status: Uncommon Migrant and Summer Resident and Very Rare Winter Resident

Dates:

- Spring: Earliest arrival = March 18, 1990 two east of Springfield Average arrival (35 years) w/range March 18 – April 6 = March 27
- **Fall:** Average departure (35 years) w/range October 11 December 4 = **November 6** Latest departure = **December 4**, 1980 near Lick Creek

The Vesper Sparrow noted for its rusty shoulder patch and white outer tail feathers mostly arrived in March, although in four years it arrived in early April. Other early spring arrivals were March 21, 1994 at Buckhart and March 21, 2009 at Marsh Road. These sparrows spent much of their time in the open on the ground and even gave their song there. At other times they perched on fences, power lines, and in small trees. Spring numbers were 1.7 times higher than fall numbers. Most years spring daily high counts were less than ten, but there were 17, April 11, 1984. However, the highest counts occurred in 1982 when an ice storm grounded thousands of migrants. Counts of Vesper Sparrows were: 60, April 6; 70, April 8; 140, April 9; and 48, April 10. I did not record this sparrow in summer until 1973, and numbers varied with the higher years being 1990, 1998, 2000, and 2002. It was recorded on the BBS in 24 years with 1987 the high year. High counts in summer were mostly 3 – 5 but with: 6, July 3, 1982; 6, June 16, 1987; and 7, July 5, 1992. On May 25, 1992 near Buffalo, two males fighting over territory would face each other, hop into the air and hit chest to chest, while flaring their tails showing the white outer feathers. Much of the singing in summer was from power lines, and territories were in agricultural areas with some grassy edges. I found a nest on the ground with three eggs at Jefferies Orchard on May 21, 1989. Fledged young were seen between June 21 and August 26. Although not an abundant species, three males were singing in site of each other on July 5, 2001 in the Hunter Lake area. Cessation of singing dates were August 9, 1999 and July 30, 2000, but one was still singing October 2, 1982 near New City. Molt was noted between July 22 and at least past September 3, while an October 2 bird had no apparent molt. High counts for **fall** were: 10, October 22, 1983; 10, September 28, 1984; and 12, October 28, 2003. Most birds left by early November, but I had four winter records: December 4, 1980 at Lick Creek; January 11, 1987 at Oak Ridge; December 26, 2002 to January 3, 2003 north of Andrew; December 3, 2005 at the Cinder Flats, plus one near Berry, December 8, 2007 in the addendum. The subspecies in the county is the eastern nominate form. Normally these birds winter in the southern US and Mexico.

Documentation: Specimens = 3) IL. Sangamon Co., ISM# 607158 \Diamond , Sangchris, April 2, 1980, coll. by HDB, wt. = 26.0 gms, testes = 2 mm; ISM# 607385 \Diamond , 3 mi east Spfld, April 11, 1982, coll. by HDB, wt. = 27.3 gms, testes = 10 mm; ISM# 660736 immature \Diamond , 20 mi east Spfld on Water Tower road., October 24, 2004, coll. by HDB, wt. = 27.0 gms, testes = 1.5 mm.

Highest # Days/Season

Spring40 (1991)Summer27 (2002)Fall34 (1997)Winter4 (2002)

Highest # Birds/Season

Spring365 (1982)Summer53 (1990)Fall94 (1997)Winter4 (2002)

Lark Sparrow

Chondestes grammacus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	355/230 (32)	256/136 (27)	23/13 (10)	0/0	634/379
Average/day	1.54	1.88	1.77		1.67
Average/season	11.09	9.48	2.30		

Status: Occasional Spring Migrant and Summer Resident and Rare Fall Migrant

Dates:

- Spring: Earliest arrival = April 8, 1995 northwest of Springfield Average arrival (32 years) w/range April 8 – May 9 = April 22
- Fall:Average departure (21 years) w/range July 4 August 28 = August 1
Latest departure = August 28, 1977 two west of Springfield

This rather large sparrow was distinctive with rufous and black head markings, a white rimmed tail and a clear breast with a black spot in the center. The Lark Sparrow was not evenly distributed, preferring sandy or poor soil areas with open sparse vegetation. Therefore, I had to search special areas such as northwest and east of Springfield to find this sparrow. Earlier, it had nested at Carpenter Park in the sand prairie, but the Lark Sparrow was eliminated about the time the houses were built on the adjacent golf course. Over a span of 34 years this species arrived in spring 32 times in April and twice in May. The next earliest arrival was April 11, 1974 south of Springfield, and there was a male April 12, 2002 at Lincoln Gardens. High daily counts in spring were low, with 1-4 usual and 5, May 19, 1992 the exception. Actually higher counts occurred in summer: 7, June 7, 2001; 7, July 24, 2002; and 8, July 31, 2004. The song, given from the ground or a small tree was spaced with buzzes. A singing male south of New City on June 11, 1987 was a wandering bird and was chased off by House Sparrows. The Lark Sparrow principally nested at Jefferies Orchard and at Buckhart, both sand areas. Also, they were present east of Irwin Bridge for many years until housing construction forced them out. One nest found at Carpenter Park on May 11, 1974 had four eggs and later four young were seen May 26 and two young May 31. There were two copulation dates, June 17, 1991 and May 26, 2005. One male was nest building at Carpenter Park on April 26, 1981. Fledged young were seen between May 26 – August 19, but most were noticed in late June to late July. An adult was feeding a young cowbird at Buckhart in the addendum on July 26, 2009. As many as 7 pairs of Lark Sparrows were found the summer of 1992. Probably the years with the highest numbers were 1992 – 2006. The latest singing date was July 11, 2008 northwest of Springfield. Fall migration mostly consisted of summer residents leaving, but occasionally there were others in nonbreeding areas such as the latest departure date above. Another late departure was August 26, 2007 at Buckhart. The high count for fall was 4, August 3, 2001. This sparrow left inordinately early in fall, and I have never seen it in September! These sparrows may relocate elsewhere to molt and stage for migration, but occasionally some showed molt in this area (August 4, 1998). This local species, with a low population that was found in specialized habitat, was always on the cusp of extirpation in the county. The subspecies in the county is the nominate form and winters in southern Texas and Mexico.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 660672 immature \mathcal{Q} , north Buckhart, August 17, 2003, coll. by HDB, wt. = 19.0 gms.

Highest # Days/Season

Spring21 (1976)Summer19 (2005)Fall2 (2001, 2002, 2005)

Highest # Birds/Season

Spring28 (1976)Summer39 (2004)Fall5 (2001 & 2005)

Lark Bunting

Calamospiza melanocorys

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	0/0	0/0	0/0	1/1	1/1
Average/day				1.0	1.0
Average/season					

Status: Very Rare Migrant

Dates: One Record: non-breeding ♂, near fair grounds Springfield, December 4, 1977. Plus a second record in the addendum: ♀, Sangchris, April 17, 2008.

Since the breeding grounds of the Lark Bunting were in the interior west I would have expected more records of this species. I only found the one in an area where piles of cut brush and logs had been placed, and the area had also grown up in weeds. Many sparrows were using this habitat, but places like this were seldom left alone for very long and it was soon "cleaned up". Although the bird initially looked like a Vesper Sparrow, one view at the white patches in the wings told me otherwise. The bill was bluish-gray, black malar stripes were obvious, and there was a cream-colored longitudinal stripe on the wing at rest. Although it was seen in December it was probably a late fall migrant and could not be found the next day. Several observers saw it later the same day. The second bird (in the addendum) was seen on the ground, but immediately flew to a small tree, where I had a look through my telescope. It was large and sparrow-like, with a large bill and black malar stripe and streaked ventrally. I reached for my camera to photograph the bird, when it launched into migration and flew west across Sangchris Lake. This sparrow breeds on the Great Plains and winters in the southwest and northern Mexico.

Documentation: Photographic: IL. Sangamon Co., R.Q. Randall, and also drawing and notes HDB – on file ISM.

Savannah Sparrow

Passerculus sandwichensis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	4676/1093 (37)	61/47 (21)	5129/1004 (37)	104/55 (26)	9970/2199
Average/day	4.28	1.30	5.11	1.89	4.53
Average/season	126.38	2.90	138.62	4.0	

Status: Common Migrant, Rare Summer Resident and Occasional Winter Resident

Dates:

Spring: Earliest arrival = February 21, 1971 Sangchris (arbitrary due to WR) Average arrival (36 years) w/range February 21 – April 6 = March 16 Average departure (37 years) w/range May 8 – 29 = May 20 Latest departure = May 29, 2001 Sangchris (arbitrary due to SR)

Fall: Earliest arrival = August 14, 1989 Sangchris
Average arrival (37 years) w/range August 14 – October 7 = September 4
Average departure (37 years) w/range November 2 – 30 = November 17
Latest departure = November 30, 1985 east of Spfld (arbitrary due to WR)

This small sparrow was usually chased up along the roadsides and had a fairly short squared off tail, streaks, and a variable yellow supercilliary. Because of wintering birds, spring arrivals were occasionally difficult to discern, but nearly all arrived in March except three years in February and two years in April (1985 & 1993). Other early spring arrivals were: March 2, 1974 east of Springfield; February 25, 1981 south of Springfield; February 29, 1992 east of Springfield; and March 1, 1998 at the Sediment Retention. High counts for spring were: 72, May 8, 1976; 60, May 3, 1977; 117, April 9, 1982; 33, May 18, 1997; and 47, April 29, 2003. The Savannah Sparrow occurred in loose flocks and could be walked up to perch in bushes or spished to the tops of weeds or grasses. They were almost playful at times. When flushed, they usually flew further and more in a straight line than other grass sparrows. Spring departure of migrants was always in May. Not many breed in Sangamon County, and in summer it was recorded 21 years and missed 16 years. I did not detect them in summer until 1977 when a male was singing on the Rail Golf Course on June 24. The high summer count was 3, June 13, 1982. Sangamon County was on the southern edge of this sparrows breeding range. In this area they preferred extensive grasslands. Other areas of breeding were the sod farms, the clover leaf of Interstate 72 East, Capital Airport, Buffalo sewer pond, east of Pleasant Plains, Marsh Road and the valley of South Fork. Most of the evidence of breeding was singing males from April 26 to August 5. Also, one adult was carrying food June 10, 1989 at Buffalo exit on I-72, and one young was along Marsh Road July 26, 2004. Apparently, some of these sparrows began to move around as early as August considering I had 13 fall arrival dates for that month; e.g. August 17, 1978 east of Springfield and August 17, 1999 at Sangchris. Early in the study this sparrow was not found in fall until October in two years. High counts for fall were: 43, October 15, 1997; 54, October 24, 2000; and 50, October 23, 2003. Most had departed by the end of November. In winter, these birds were difficult to find, though I believe they wintered almost (not seen in 11 years) every year in tall grasses and came up to the roads when the fields were covered with snow. High

counts for winter were: 4, December 13, 1981; 10, February 27, 1983; and 8, January 30, 2000. From the specimens below and photographs most were identified as *P. s. mediogriseus* which is also the breeding population in the county. Other subspecies represented are the lighter birds from the northwest *P. s. nevadensis* (ISM# 660311), the dark birds from further north *P. s. oblitus* (ISM# 608699, 608703 & 608705), and the dark brown birds from the northeast *P. s. labradorius* (ISM# 604924 & 605395). Plus, there were other different looking specimens. Some of this variation was visible in the field, but separation to subspecies would have been difficult. The population of this sparrow varied from year to year, but it seemed to be fairly level overall. The Savannah Sparrow winters as far south as northern Central America.

Documentation: Specimens = 32) IL. Sangamon Co., Spring = 3, 3 = 1, tv tower, April 7, 1972, wt. = 18.9 gms, testes = 3.5 mm; 99 = 2, New City & 3 mi northwest Spfld, April 27 –30, wts. = 14.2 – 17.0 gms, ovaries = 4 mm; Fall = 29, adult 33 = 8, tv tower, October 14 – 19, wts. = 17.5 – 22.1 gms; immature 33 = 8, tv tower (5) & LSpfld & east Spfld & Sed Ret, wts. = 17.1 – 20.9 gms; adult 99 = 4, tv tower, October 14 – 24, wts. = 16.2 – 18.0 gms; immature 99 = 9, tv tower (7) & Sangchris & 3 mi south Spfld, October 4 – November 14, wts. = 15.3 – 21.7 gms.

Highest # Days/Season

Spring52 (2004)Summer6 (2001 & 2002)Fall63 (1989)Winter7 (1999)

Highest # Birds/Season

Spring401 (1976)Summer7 (1980 & 2001)Fall468 (1989)Winter16 (1999)

Grasshopper Sparrow

Ammodramus savannarum

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	927/427 (37)	1216/518 (36)	438/225 (35)	0/0	2581/1170
Average/day	2.17	2.35	1.95		2.21
Average/season	25.05	33.78	12.51		

Status: Uncommon Migrant and Summer Resident

Dates:

Spring: Earliest arrival = April 1, 1977 Sangchris Average arrival (37 years) w/range April 1 – May 13 = April 23

Fall:Average departure (35 years) w/range August 8 – November 10 = September 29Latest departure = November 10, 1993 juvenile Sediment Retention

This was a small, light-colored sparrow with a long, high buzz for a song. The Grasshopper Sparrow was associated with short grass areas and was a prairie species, back when Sangamon County had prairie. Eifert (1945) listed it as common in the county. The population had most likely dropped before my study began in 1970, and there was a further decline during the study after 1982. Spring arrivals were all in early to mid-April until 1983, when they changed to mid-April to early May in the remainder of the study. This change may be an indication of a disintegrating population. The only other early arrival was April 8, 1982 south of Springfield. High spring counts were: 27, May 7, 1971; 12, May 4, 1974; 10, May 10, 1975; and 13, May 7, 1977. All other counts in spring were in the single digits. One female was apparently still migrating on May 30, 1973 when it hit a tv tower east of Springfield. Oddly, summer numbers were higher than either migrational period. High summer counts were: 20, July 31, 1977; 12, June 24, 1979; and 14, July 2, 1979. Number decreased again after a fairly good count of 11 on July 25, 2005. The BBS also showed that this sparrow was seen on about half the counts, was ranked 55th, and had better numbers early and then declined. The pastures in which this sparrow tried to nest were later over-grazed and little if any edge was left, and other grassy areas were mowed too often to produce young. One sparrow was noted displaying in which it vibrated its wings showing the yellow patch on May 2, 2003 at Jefferies Orchard. Singing perches used were fence wire and posts, bales of hay, weeds, tufts of grass, power lines, and the ground. There was an early, juvenile, bobtailed specimen that was probably not capable of sustained flight when killed, June 3, 1970 (ISM Collection). Adults were seen carrying food June 27 to September 18, and fledged young were seen between June 23 and August 29. A female was giving a distraction display August 5, 1980 at the sod field. A bird still in streaked juvenile plumage was seen November 10, 1993 indicating late nesting. Late singing was heard July 27, 1975, August 18, 1979, August 1, 1999, and August 3, 2000. Molt was observed from September 25 to October 18, and birds in basic plumage were seen September 29 to October 17. In fall, these sparrows probably went into molt as early as August and few birds were seen at this time. When molt was completed, if conditions were correct for migration, most usually left, and they were not further recorded. Therefore, the departure date for fall would be August (nine years). If conditions were not good for migration, I would find some in September - November (24 years). Departure most

years was probably in October, since the few August dates distorted the average. Fall numbers were low (over two times lower than spring) and I missed them in two years (1972 and 1997). High counts for fall were: 10, September 13, 1979; 10, August 17, 1980; and 13, August 8, 2003. When chased up in grassy fields in fall, they looked buffy gray in flight and plunged forward in a fairly straight line just above the grass. Other November records were 3, November 7, 1977 and 1, November 5, 1979. This sparrow winters from the southern states to Costa Rica. The subspecies in the east and breeding here is *A. s. pratensis*. The ISM collection had two males (May 2 and 21) and maybe a female (May 2) which were migrants that looked much lighter and had smaller bills and were probably *A. s. perpallidus* from the west.

Highest # Days/Season

Spring28 (1977)Summer30 (1982)Fall30 (1980)

Highest # Birds/Season

Spring105 (1977)Summer103 (1982)Fall64 (1980)

Henslow's Sparrow

Ammodramus henslowii

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	27/21 (12)	16/11 (4)	13/9 (5)	0/0	56/41
Average/day	1.29	1.45	1.44		1.37
Average/season	2.25	4.0	2.60		

Status: Rare Migrant and Very Rare Summer Resident

Dates:

Spring: Earliest arrival = April 8, 1999 Sangchris Average arrival (13 years) w/range April 8 – May 19 = April 30

Fall:Average departure (5 years) w/range October 7 – 27 = October 14Latest departure = October 27, 1999 Carpenter Park

This was a small prairie sparrow with an olive head and a hiccup for a song, and probably was common before the destruction of the tall grass prairie in the county. With the agricultural set aside program, it recently made a comeback in some areas, but it was still rare and local. My best year for this species was in 2006, the last year of the study. Another early spring arrival date was April 10, 2001 at Sangchris. High counts for spring were: 2, May 7, 1971 and 5, May 20, 2006, and there were 4, May 30, 2007 and 3, May 9, 2008 in the addendum. The best way to find this secretive sparrow was by hearing their song, but they occasionally sat up in small trees after being flushed. They could be indentified by their wispy flight in which they often twist their tail to the side. The first **summer** birds were seen in 2002 as habitat was very scarce. This area was east of Pleasant Plains, but was later not fit habitat due to mowing. In 2003, breeding habitat existed along Marsh Road and north of Sangchris, though by 2009 only one pair was at Marsh Road. I noted that in 2008 they were flooded out of the nesting territory north of Sangchris in May and not seen again until July. The high summer count was 3, July 22, 2007. In a case of interspecific aggression, one male Henslow's Sparrow was chased off by a Dickcissel at Marsh Road on July 25, 2005. However, this sparrow was persistent as three males there were singing in 95 degree heat on August 1, 2006. One fledged young was seen August 1, 2006 along Marsh Road. Late dates of singing were August 17, 2006 and August 9, 2007. High counts for fall were: 4, August 1, 2006; 2, August 6, 2007; and 2, August 2, 2008. Other late departures were October 26, 1999 at Lincoln Gardens; October 19, 2006 at Riverside Park; and October 18, 2008 at Centennial Park. The Henslow's Sparrow winters in the states along the Gulf Coast. The subspecies is the western nominate form.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

<u>Highest # Days/Season</u>

 Spring
 8 (2006)

 Summer
 7 (2006)

 Fall
 4 (2006)

Highest # Birds/SeasonSpring13 (2006)Summer11 (2006)Fall8 (2006)

LeConte's Sparrow

Ammodramus leconteii

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	406/237 (37)	0/0	217/121 (35)	10/8 (6)	633/366
Average/day	1.71		1.79	1.25	1.73
Average/season	10.97		6.20	1.67	

Status: Occasional Migrant and Very Rare Winter Resident

Dates:

- Spring: Earliest arrival = March 3, 1992 three Sangchris Average arrival (36 years) w/range March 3 – April 6 = March 19 Average departure (36 years) w/range March 28 – May 5 = April 18 Latest departure = May 5, 1977 tv tower area
- Fall: Earliest arrival = September 17, 1991 Sediment Retention
 Average arrival (32 years) w/range September 17 October 24 = October 11
 Average departure (32 years) w/range October 16 December 6 = November 4
 Latest departure = December 6, 1980 two east of Spfld (also see WR)

It was somewhat of a surprise to find this golden-buff colored sparrow in numbers in the county. It did need special habitat of wet weedy fields with foxtail grass. LeConte's Sparrows were also found in clover, alfalfa fields, and other grassy areas. Usually, these sparrows flushed near the observer, flew low with a bounding flight for a short distance and dived back into the grass. Often by the time I got to the spot where the bird had landed, it had disappeared. On April 8, 1989 at Sangchris one was hopping through the grass like a toad. They would on occasion spish up, but they tended to sit lower than the tops of the vegetation and were still difficult to see. I recorded its arrival in spring mainly in March except for three years in April (1980, 1993, 2002). Other early spring arrivals were: March 7, 1990, March 7, 1994, and March 8, 2000 all at Sangchris. High daily counts in spring were 6, March 19 & 29, 1977 and April 9, 1992. There appeared to be some molt in spring, and I noted body molt March 28 and head molt April 7-13. One was singing a raspy, buzzy song on May 1, 1993 at Sangchris. Usually, they had passed on north from mid- to late April, but there were four May departure dates: see above; May 3, 1975 & 1992; and May 1, 1993 all at Sangchris. They breed in the north central US and north to central interior Canada. There were only half the numbers in **fall** as in spring, but this may be due to more dense vegetation in fall making it more difficult to find them. I missed this species in fall in 1988 and 2004 and barely recorded it six other years. Other early fall arrivals were: (4), October 2, 1976 at Knapp Lake; October 3, 1981 at Sangchris; and September 29, 1990 at the Sediment Retention. High counts in fall were: 7, October 18, 1980; 7, October 17, 1994; and 10, October 23, 2003. In fall, they gave a tap note which was given fairly often in response to spishing, but it was difficult to hear. Some of these sparrows were in molt (October 17 – November 11) and some were not, which may reflect a difference between adults and juveniles? On November 4, 2006 there were five birds one of which was very golden and could have been an adult male. Other late fall departures were: November 24, 1993 at Sediment Retention; November 25, 1999 at Sangchris; and November 25, 2000 at Lincoln Gardens Prairie. From

1970 to 1980 I occasionally recorded this species in **winter** (in six years), usually in foxtail at Sangchris, with dates such as January 26, 1975 and two, January 15, 1976. The span of dates for winter was December 5, 1970 to February 21, 1976. The habitat had changed at Sangchris, and though I looked, they were not present in winter recently. Numbers in general had declined toward the present in all seasons. A few in December could be late fall migrants. The LeConte's Sparrow winters from southern Illinois south to the Gulf Coast.

Documentation: Specimens = 4) IL. Sangamon Co., Spring = 2, ISM# 605578 $\stackrel{>}{\circ}$, tv tower, April 2, 1973, coll. by HDB, wt. = 13.1 gms, testes = 2 mm; ISM# 607384 $\stackrel{\bigcirc}{\circ}$, tv tower, March 20, 1982, coll. by HDB, wt. = 11.2 gms, ovary 4 mm; Fall = 2, ISM# 606470 sex?, Knapp Lake, October 2, 1976, coll. by HDB, wt. = 13.1 gms; ISM# 608392 immature $\stackrel{\bigcirc}{\circ}$, tv tower, October 14, 1985, coll. by HDB & DO, wt. = 13.4 gms.

<u>Highest</u>	# Days/Season	<u>Highest</u>	Highest # Birds/Season		
Spring	26 (1992)	Spring	46 (1992)		
Fall	12 (1980)	Fall	39 (1980)		
Winter	2 (1971 & 1976)	Winter	3 (1976)		

Nelson's Sharp-tailed Sparrow

Ammodramus nelsoni

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	14/13 (12)	0/0	47/40 (18)	0/0	61/53
Average/day	1.08		1.18		1.15
Average/season	1.17		2.61		

Status: Rare Spring Migrant and Occasional Fall Migrant

Dates:

Spring: Earliest arrival = May 13, 1971 Sangchris Average arrival (11 years) w/range May 13 – 22 = May 18 Average departure (2 years) w/range May 21 – 26 = May 24 Latest departure = May 26, 1999 Sangchris

Fall: Earliest arrival = September 10, 1993 Sangchris Average arrival (19 years) w/range September 10 – October 22 = September 28 Average departure (16 years) w/range September 22 – October 29 = October 11 Latest departure = October 29, 1989 two Sediment Retention

This elusive golden sparrow was probably present every spring and fall, but it took a lot of work to ferret it out and obtain good views. The ochre color, especially on the breast and face and the gray crown and nape set Nelson's Sparrow apart from other grass sparrows. They sat up just below the tops of grasses and weeds, and occasionally they could be seen on mudflats near and in aquatic vegetation. They would feed in the open on the mudflats, and run in and out of the vegetation. In flight they appeared brown and usually the ochre-head was obvious. Most of the time, they flew only short distances before darting back into the grasses. Sangchris was the most reliable and consistent area for this sparrow. All records in spring were in May, and I felt fortunate if I found one per season. This sparrow arrived later in spring than any other sparrow, did not stay long, and therefore, could easily be missed. Other arrivals were May 16, 1972, 1998, and 2006. The only multiple count for spring was two on May 17, 1973. This sparrow breeds in the Dakotas and the prairie providences of Canada, at the southern end of Hudson Bay, and coastal northeastern US and eastern Canada. The Nelson's Sparrow was somewhat more findable in fall occurring in the county in September and October. When mudflats formed in fall, these birds inhabited the emergent vegetation. They were also found in weedy (smart weeds) and grassy (especially foxtail) fields. One at Sangchris on September 16, 1989 gave soft grating sounds and may have been singing. High counts in fall were also two: October 6, 1970; October 3 & 7, 1971; October 8, 1990; October 10, 1992; and October 9, 2008. Other rather late dates were: October 24, 1971; October 23, 1992; and October 22, 1998. These sparrows winter in marshes in the southern Atlantic and Gulf Coasts. Of the three subspecies, it seemed possible that two could occur in this area, but primarily it is A. n. nelsoni, the prairie form. However, A. n. alterus the James Bay subspecies, nests straight north of Illinois, but most of these may migrate directly to and from the East Coast.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

<u>Highest # Days/Season</u>		Highest	<u>Highest # Birds/Season</u>		
Spring	2 (1994)	Spring	2 (1973 & 1994)		
Fall	5 (1971 & 1992)	Fall	8 (1971)		

Fox Sparrow

Passerella iliaca

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	4520/903 (36)	0/0	3887/1042 (37)	463/237 (36)	8870/2182
Average/day	5.01		3.73	1.95	4.07
Average/season	125.56		105.05	12.86	

Status: Common Migrant and Occasional Winter Resident

Dates:

- Spring: Earliest arrival = February 11, 2002 two Sangchris Average arrival (36 years) w/range February 11 – March 15 = February 28 Average departure (36 years) w/range April 3 – 25 = April 12 Latest departure = April 25, 1979 Sangchris
- Fall: Earliest arrival = September 25, 2001 Rochester sewer pond Average arrival (37 years) w/range September 25 – October 17 = October 7 Average departure (37 years) w/range November 14–December 26 = December 1 Latest departure = December 26, 1970 five Spfld & Sangchris (arbitrary due to WR)

This large, heavily streaked sparrow with a reddish tail was an early spring migrant that arrived in February or early March. Other early spring arrivals were: February 17, 1971 at Sangchris; February 14, 1999 at Sangchris; and February 15, 2005 at Hunter Lake. They were usually feeding on the ground in wooded areas using their feet to thrash in the leaf litter, but at times sat higher to sing. Fox Sparrows did a lot of singing during spring migration. This sparrow was similar in markings to a Hermit Thrush, plus they both fed near or on the ground and occurred in much the same seasons. On March 30, 1982 at a pine area, Fox Sparrows came to roost with robins. High counts for this species were early in the study (pre-1988), and could mean numbers had decreased during the study. High spring counts were: 52, March 14, 1976; 38, April 2, 1980; 50, April 6, 1982; and 33, March 29, 1987. These birds passed on north as early as mid-April, and I have never recorded it in May. They breed in the forests in central and northern Canada and Alaska. The Fox Sparrow was a late fall migrant in the county. There were four other late September arrival dates for fall, all the rest were in October. The September dates were: September 28, 1976; September 27, 1980; September 26, 1989; and September 29, 2009. High counts for fall were: 30, October 29, 1972; 50, November 8, 1979; 30, November 9, 1997; and 23, October 22, 2003. Late departures were difficult to assess because of confusion with winter birds. Wintering numbers varied greatly, the best years were 1984, 1997, 1999, and 2003. Some winters there were one or two or none (1972, 1974, 1978, 1985, 1987, 1988); plus, another 13 years had numbers under 10. High daily counts for winter were 10, December 16, 1980 and December 23, 1997. In late fall and winter, these sparrows liked ragweed in low wooded areas, brushy tangles and also honeysuckle. Nearly all specimens and records are apparently referable to the eastern P. i. iliaca, but P. i. zaboria from the Northwest could account for duller birds I saw on December 13, 1981 and December 7, 1986; and one female specimen (ISM# 605146) was either zaboria or an intergrade with iliaca. Plus, a dull reddish Fox Sparrow seen below the dam at Lake Springfield November 5 & 6, 2006 appeared to be a Sooty Fox Sparrow (some have elevated this subspecies to species rank). It had solid flanks like a towhee, an almost solid colored breast, and blackish spots toward the center of the under-parts (it most closely resembled photograph 38.3 in Beadle & Rising, 2002 of *P. (unalaschensis) fuliginosa* which breeds in British Columbia and Washington). Fox Sparrows winter south to the southern US.

Documentation: Specimens = 7) IL. Sangamon Co., Spring = 4, $\bigcirc \bigcirc = 2$, Spfld & west Spfld, March 15 – 27, wt. = 40.6 gms, testes = 1.5 – 2 mm; $\bigcirc \bigcirc \bigcirc = 2$, Spfld & tv tower, March 15 – April 7, wts. = 36.1 – 37.8 gms, ovary = 4 – 6 mm; Fall = 3, immature \bigcirc , south Spfld, October 20, wt. = 36.9 gms; adult $\bigcirc = 1$, tv tower, October 14, wt. = 34.7 gms; immature $\bigcirc = 1$, WP, October 11, wt. = 30.6 gms.

Highest # Days/Season

Spring38 (1979)Fall44 (1980)Winter18 (1999)

Highest # Birds/SeasonSpring374 (1982)Fall204 (1982)

Winter 52 (1999)

Song Sparrow

Melospiza melodia

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	20961/3047 (37)	8634/1683 (37)	19798/3077 (37)	10134/1955 (37)	59527/9762
Average/day	6.88	5.13	6.43	5.18	6.10
Average/season	566.51	233.35	535.08	273.89	

Status: Common Migrant and Fairly Common Summer and Winter Resident

Dates:

- Spring: Earliest arrival = February 1, 1993 Sangamon Co. (arbitrary due to WR) Average arrival (36 years) w/range February 1 – March 17 = February 26 Average departure (37 years) w/range March 23- May 6 = April 11 Latest departure = May 6, 1978 Sangamon Co. (arbitrary due to SR)
- Fall: Earliest arrival = September 25, 1994 Sangamon Co. (arbitrary due to SR) Average arrival (37 years) w/range September 25 – October 23 = October 7 Average departure (37 years) w/range November 4 – 30 = November 23 Latest departure = November 30, 1977, 1984, 1998 Sang Co. (arbitrary due to WR)

The Song Sparrow had streaked underparts and a spot in the middle of the breast, and was seen in all 148 seasons of the study. It was 40th in total numbers, and 14th in days recorded. Though seen all year, there was definite migration as evidenced by changing numbers and some tendency to flock in migration and winter. Most spring migration started in February or March and ended in April, but some years it ended in late March. High spring counts were: 60, March 14, 1976; 100, March 20, 1982; 45, March 18, 1997; 45, March 13 & 16, 2003; and 52, March 26 2005. The Song Sparrow in summer was recorded on all 31 BBS and was ranked eleventh with the early 1970s having the best numbers. There were lower numbers in 1977 and 1999 on the BBS probably due to severe winters. The numbers from the Sangamon River Census were higher in 1991 (151 birds) than 1976 (95 birds). I noted that the Song Sparrow took advantage of the open brushy areas along the river. High counts in summer were mostly 20 - 35 but there were 55, June 18, 1976. This sparrow sang practically all year given the right conditions (December 4 – January 30), but on territory they began February 1 - 18. Nest building was noted March 20 to April 26 and egg dates were May 5 to June 26, with four out of five nests containing cowbird eggs. Adults were carrying food (= young in nest?) from April 29 to July 31. Fledged young were seen 48 times from May 11 to August 31, with most in June and July. Cowbirds were being attended on nine occasions from June 2 to August 31, which was 19 % of the young found. Cessation of singing was difficult to pin point in this vocal sparrow, but was between August 21 to September 5 with some singing in October and other months. Molt was noted from August 5 to October 6 and most of the birds were difficult to find at this time of year. Once out of molt and given the right conditions, fall migration started usually in October, though it was in September twice (1993 and 1994). High counts for fall were: 50, October 23, 1977; 53, November 26, 1982; 80, October 22, 1983; 65, October 30, 1984; 64, November 1, 1995; and 63, October 21, 1996. Migration must be nocturnal because these sparrows had been killed at tv towers, especially in October. Most years numbers dropped in late November. These birds were seen in winter along

creeks at log jams, in grassy and weedy areas, in brush piles, and along wood edge. High winter counts were: 45, December 26, 1970; 60, December 16, 1973; 44, December 21, 1975; 37, January 6, 2001; and 37, January 7, 2006. Harsh winters affected the populations and lower numbers were found in the winters of 1978, 1983, 1985, 1988, 1994 & 2004. Looking at the specimens some appeared grayer and the streaks were sharper, but this can be spring vs. fall specimens and the most recent revision (Patten & Pruett, 2009) lumped *juddi* and *euphonia* with *M. m. melodia*.

Documentation: Specimens = 35) IL. Sangamon Co., $\bigcirc \bigcirc \bigcirc = 18$, January 31 – December 6, wts. = 18.1 – 25.9 gms, testes = 1 – 9 mm (one still showing juvenile plumage September 25); $\bigcirc \bigcirc = 13$, Sangamon Co., January 21 – November 20, wts. = 14.9 – 23.2 gms, ovaries = 1.5 – 4.5 mm; sex? = 4, Sangamon Co., February 5 – December 4, wts. = 19.8 – 20.1 gms.

Highest # Days/Season

 Spring
 92 (1987, 1991, 1992) maxed

 Summer
 61 (5 years) maxed

 Fall
 105 (1983)

 Winter
 77 (1993)

Highest # Birds/Season

Spring	857 (1997)
Summer	436 (2000)
Fall	774 (1983)
Winter	495 (1993)

Lincoln's Sparrow

Melospiza lincolnii

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	933/467 (37)	1/1 (1) sp mig	2089/809 (37)	7/7 (4)	3030/1284
Average/day	2.0	1.0	2.58	1.0	2.36
Average/season	25.22	1.0	56.46	1.75	

Status: Uncommon Spring Migrant, Fairly Common Fall Migrant and Very Rare Winter Resident

Dates:

- Spring: Earliest arrival = April 7, 2007 Rochester sewer pond Average arrival (36 years) w/range April 11 – May 6 = April 25 Average departure (37 years) w/range May 13 – June 5 = May 21 Latest departure = June 5, 1992 Washington Park
- Fall: Earliest arrival = September 4, 1991 Buckhart
 Average arrival (37 years) w/range September 4 30 = September 18
 Average departure (37 years) w/range October 20 November 26 = November 4
 Latest departure = November 26, 1984 south end Lake Springfield
 (also see winter residents)

This little known sparrow, though widespread in North America was fairly easy to identify, but could be confused with immature Song or Swamp Sparrows. The Lincoln's Sparrow occasionally sang in **spring** and the song sounded more like a wren or warbler than a sparrow and the call note was like a weak Fox Sparrow note. Other early spring arrivals were: April 11, 1978; April 14, 1992 & 1999; and April 15, 2001. For a sparrow it usually arrived fairly late in April and there were five years it was not seen until May. It stayed low to the ground in brushy, weedy areas, woodland edge, and even in bottomland forest. High counts for spring were: 14, May 8, 1976; 9, May 13, 1989; 8, May 4, 1992; 8, May 7, 1994; and 8, May 13, 2005. It was one of the later sparrows to leave in spring and besides the only June date above, other late departures were May 28, 1982 & 2005, and May 29, 1997. It breeds in the very northern US and Canada and southern Alaska. In the addendum, on July 19, 2009 I found this sparrow at the Buckhart Bridge (photograph), which was the only mid-summer record for the county. This sparrow always arrived in fall in September, with other early arrivals September 7, 1976 and September 9, 1998. For unknown reasons (possibly different migratory routes) it was 2.2 times more numerous in fall than spring. High counts for fall were: 20, October 10, 1970; 18, October 5, 1980; 42 (some tv kills), October 14, 1985; and 17, October 14, 2004. Departures occurred in October in 14 years, but some stayed into November in 23 years, such as November 17, 1991; November 25, 1994; and November 20, 2003. The highest number was 4, November 2, 1982. There were five **winter** records: December 19, 1976 below the dam at Lake Springfield; December 30, 1984 at Knapp Lake; December 4, 1999 at Lake Springfield; December 5 -January 21, 1999-00 in a milo field at Sangchris; and December 16 – 18, 2000 at the North sewer pond. The Lincoln's Sparrow winters from southwestern Missouri south to Costa Rica. The subspecies in this area is the northern nominate form.

Documentation: Specimens = 18) IL. Sangamon Co., Spring = 3, $\bigcirc = 1$, LSpfld, April 25, wt. = 15.7 gms, testes = 2 mm, gizzard with Lepidoptera larva & body cavity with tape worms; $\bigcirc +$ sex ? = 2, north Spfld & LSpfld, May 5 – 10, wts. = 16.2 – 22.6 gms, ovary = 5.5 mm, gizzard with Coleoptera; Fall = 15, adult $\bigcirc \bigcirc = 3$, all tv tower, September 27 – October 14, wts. = 18.6 – 19.7 gms; immature $\bigcirc \bigcirc \bigcirc = 3$, tv tower (2) & east Spfld, October 13 – 22, wts. = 18.0 – 20.7 gms; adult $\bigcirc \bigcirc = 7$, all tv tower, September 28 – October14, wts. = 15.4 – 17.9 gms; immature $\bigcirc \bigcirc \cong = 2$, both tv tower, October 14, wts. = 17.0 – 18.0.gms.

Highest # Days/Season

Spring21 (1983)Summer1 (1992)Fall39 (2001)Winter3 (1999)

Highest # Birds/Season

Spring60 (2003)Summer1 (1992)Fall126 (1985)Winter3 (1999)

Swamp Sparrow

Melospiza georgiana

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	10243/1723 (37)	5/5 (1)	11490/1594 (37)	2101/551 (37)	23839/3873
Average/day	5.94	1.0	7.21	3.81	6.16
Average/season	276.84	5.0	310.54	56.78	

Status: Common Migrant, Uncommon Winter Resident and Very Rare Summer Resident

Dates:

- Spring: Earliest arrival = February 15, 1999 six Hunter Lake (arbitrary due to WR) Average arrival (37 years) w/range February 15 – March 31 = March 10 Average departure (36 years) w/range May 7 – 23 = May 14 Latest departure = May 23, 1971 Springfield (note: see SR June 6, 2002)
- Fall: Earliest arrival = September 12, 1985 Buffalo Sewer Pond Average arrival (37 years) w/range September 12 – 30 = September 20 Average departure (22 years) w/range November 6 – 29 = November 22 Latest departure = November 29, for four years (arbitrary due to WR)

The Swamp Sparrow was rufous with a gray head and a chipping trill for a song. It stayed low in marshy or swampy habitat and weedy fields. Spring migrants were sometimes hard to distinguish from wintering birds. There were only six February spring arrivals compared to 31 March arrivals. Other early spring arrivals were: 12, February 21, 1976; 13, February 25, 1981; and 1, February 22, 1994. During spring close looks at these sparrows showed they were in head molt, which I noted from March 23 – April 18. They frequently sang in spring from low perches. High counts were usually 35 or less, sometimes considerably so, but there were: 60 April14, 1978; 42, April17, 1992; and 44, April 14, 1994. Occasionally, this sparrow fed higher in trees like one at Jefferies Orchard April 25, 1993. Other late spring departures were May 20, 1976, 1995 and 2000. One male set up a territory in summer at the Cinder Flats and sang until June 6, 2002, but apparently could not attract a female. Swamp Sparrows nest regularly in northern Illinois. When returning in fall immature birds were more buff and more streaked. All fall arrivals were in September. Other early fall arrivals were September 14, 1980 and September 15 in six years. High fall counts were: 90, October 29, 1975; 100, October 23, 1983; and 62, October 12, 2001. The trend was downward in numbers in Sangamon County. Winter numbers were high in the early 1970's then severe winters knocked them down, but by 1980 they were back up, then another set of bad winters diminished the numbers again. This continued to occur and by 2008 numbers were quite low and had been since 1999. High counts for winter were: 35, December 26, 1970; 21, January 18, 1983; and 20, December 21, 2002. These sparrows preferred thick cover in winter and planted prairies seemed to provide good habitat at that season. There are two possible subspecies, the majority M. g. georgiana which is the population that breeds in northern Illinois. There was also the more northwestern subspecies M. g. ericrypta that should occur in Illinois. The only specimen in the collection that fits *ericrypta* is an adult male specimen (ISM#609325) from the tv tower on October 4, 1980 which seems lighter on the back, had

brighter more buff flanks, less gray on throat and breast, and muted black on the upper tail coverts. The Swamp Sparrow winters as far south as central Mexico.

Documentation: Specimens = 27) IL. Sangamon Co., Spring = 4, $\Im \Im = 2$, north Spfld & south Spfld, April 7 – May 3, wts. = 13.7 – 18.5 gms, testes = 4mm (rust in crown).; $\Im \Im = 2$, tv tower & New City, May 8 – 14, wts. = 17.0 – 17.6 gms, ovary = 5.5 – 6 mm (no rust in crown); Fall = 23, adult $\Im \Im = 6$, tv tower (5) & LSpfld, October 4 – 14, wts. = 14.9 – 19.1 gms (rust in crown); immature $\Im \Im = 2$, both tv tower, October 24, wts. = 16.4 – 18.1 gms (little rust in crown); adult $\Im \Im = 5$, all tv tower, October 12 – 24, wts. = 15.5 – 17.4 gms (no rust in crown); immature $\Im \Im = 10$, tv tower (6) & south Spfld (2) & north Spfld & Spfld, September 27 – October 29, wts. = 14.4 – 18.4 gms (no rust in crown).

Highest #Days/Season

Spring62 (1992 & 1996)Summer5 (2002)Fall57 (1984)Winter43 (1993)

Highest # Birds/Season

Spring537 (1994)Summer5 (2002)Fall666 (1983)Winter177 (1993)

White-throated Sparrow

Zonotrichia albicollis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	23060/1717 (37)	7/7 (6) most mig	40962/1974 (37)	5850/1140 (37)	69879/4838
Average/day	13.43	1.0	20.75	5.13	14.44
Average/season	623.24	1.17	1107.08	158.11	

Status: Very Common Migrant and Fairly Common Winter Resident

Dates:

- Spring: Earliest arrival = March 11, 2004 Sangamon Co. (arbitrary due to WR) Average arrival (37 years) w/range March 11 – April 20 = April 5 Average departure (37 years) w/range May 10 – June 2 = May 21 Latest departure = June 2, 1993 & 1997 Washington Park
- Fall: Earliest arrival = September 10, 1998 north of Sangchris Average arrival (37 years) w/range September 10 – October 3 = September 21 Average departure (37 years) w/range November 4 – 30 = November 20 Latest departure = November 30, 2002 Sangamon Co. (arbitrary due to WR)

During migration this was the primary woodland sparrow, although it was found in scrubby and more open areas also. The White-throated Sparrow was usually seen in flocks from a few individuals to 20-30 birds or more. Due to the winter population, earliest spring and latest fall dates were difficult to determine. Furthermore, there seemed to be additional movements of birds before spring and after fall migration which were difficult to quantify. Most of the time I tried to indicate arrival dates with noted increases. This showed arrival dates in March 14 years and in April 23 years. Although there were two color phases of this sparrow I did not keep records of the distinction in the field, but see specimens below. The prealternate molt of the head in spring was observed from March 19 to April 11. Although the average spring arrival was April 5, the larger flocks did not usually appear until about April 20. High counts for spring were: 200, April 21, 1974; 300, May 6, 1976; 227, April 30, 1997; and 175, May 1, 2000. Toward the end of the study, the numbers in spring became more erratic and fewer, possibly, the birds were more spread out over time due to earlier warming temperatures. Other late spring departures were: June 1, 1984 at Washington Park; injured bird, June 11, 1994 at Lick Creek, one heard many times, June 13, 1999 at the Refuge; and June 1, 2003 at Oak Ridge. The White-throated Sparrow breeds to the north and northeast US and boreal Canada. All fall arrivals were in September except for October 3, 2002; but the big push in numbers was in October. Other early fall arrivals were: September 13, 1976; September 12, 1977; September 14, 1985; and September 13, 1986. Fall numbers were higher than spring (1.8 to 1) probably because of recruitment of young. High counts for fall were: 350, October 24, 1971; 300, October 13, 1973; 200, October 5, 1980; 240, October 15, 1982; 250, October 22, 1984; and 130, November 3, 2002. Not all of these sparrows left in fall, but most did by late November. There seemed to be more in winter late in the study rather than earlier, with a jump in numbers in the winter of 1991. Many White-throats were associated with feeders, but the increase in the exotic honey-suckle which provided cover and berries had much to do with the increases in winter. High counts for winter: 35, January 1, 1998;

50, December 17, 2000; 24, February 27, 2003; and 56, January 29, 2004. This sparrow was much more numerous in winter from southern Illinois southward; and it winters as far south as northern Mexico. I saw several of these sparrows that were leucistic: one with a white cap, October 17, 1976; one with a white head and upper back, May 10, 2000; and one with a mostly white tail, November 10, 2003.

Documentation: Specimens = 30) IL. Sangamon Co., Spring = 5, $\Im \Im = 2$, Spfld & 4 mi south Spfld, April 27 – May 5, wts. = 22.1 – 27.9 gms, testes = 2.5 – 3mm (both dull); $\Im \Im = 3$, 2 mi north Spfld & Sangchris & south end LSpfld, April 22 – May 8, wts. = 22.8 – 28.3 gms, ovaries = 4 – 6 mm (2 bright & 1 dull); Fall = 23, adult $\Im \Im = 8$, tv tower (4) & 2 mi north Spfld (2) & Spfld & LSpfld, October 12 – 28, wts. = 22.7 – 27.0 gms (4 bright & 4 dull); immature $\Im \Im = 6$, tv tower (3) & Spfld (2) & LSpfld, September (no day) – November 8, wts. = 27.1 – 31.6 gms (3 bright & 3 dull); adult $\Im = 1$, tv tower, October 24, wt. = 25.6 gms (dull); immature $\Im \Im = 8$, tv tower (4) & LSpfld (2) & 2 mi north Spfld & Spfld, September 15 – November 1, wts. = 21.5 – 27.4 gms (all dull) & (ISM# 600539 was collected in 1898); Winter = 2, immature $\Im = 1$, LSpfld, February 17, wt. = 17.5 gms (bright); immature $\Im = 1$, LSpfld, January 17, wt. = 27.2 gms (dull).

Highest # Days/Season

Spring69 (2001)Summer2 (1993)Fall69 (2001)Winter80 (2003)

Highest # Birds/Season

Spring1246 (1976)Summer2 (1993)Fall2020 (2003)Winter861 (2003)

Harris's Sparrow

Zonotrichia querula

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	13/13 (7)	0/0	42/40 (22)	21/19 (4)	76/72
Average/day	1.0		1.05	1.11	1.06
Average/season	1.86		1.91	5.25	

Status: Rare Spring Migrant and Winter Resident and Occasional Fall Migrant

Dates:

- Spring: Earliest arrival = March 7, 1996 immature northwest Springfield Average arrival (7 years) w/range March 7 – April 30 = April 2 Average departure (8 years) w/range March 19 – May 13 = April 10 Latest departure = May 13, 1989 adult Jefferies Orchard
- Fall: Earliest arrival = October 6, 1974 & 1975 immatures Carpenter Park Average arrival (18 years) w/range October 6 – 31 = October 18 Average departure (17 years) w/range October 13 – December 8 = November 11 Latest departure = December 8, 1984 immature south of Rochester (also see WR)

The Harris's Sparrow was a large, well-marked sparrow found in hedgerows, brushy areas and woodland edge; mostly feeding on the ground. Its main winter range was to the west on the Great Plains, but I had 8 spring, 32 fall and 5 winter records, plus three records (two spring and one fall) in the addendum. The Harris's Sparrow was usually associated with flocks of Whitecrowned Sparrows, but several were alone. The four March records could have either been spring arrivals or could possibly represent wintering birds. These records were March 23, 1986, see above, March 15, 1997 and March 29, 2001. Singing birds were encountered March 21, 1996 and May 2, 2007. They sounded similar to White-crowned Sparrows, but were weaker and had a less burry quality. All spring records were of single birds. Fall numbers were 3.2 times spring numbers. Other early fall arrivals were an immature, October 9, 1977 at Sangchris and adult, October 10, 1981 at Carpenter Park. Most fall records were in October and November. In fall there were counts of two November 28, 1971, and October 14, 1985. Winter records were: Sangchris, December 8, 1999 – February 11, 2000; Sangchris, December 19, 2000 – February 27, 2001; Island Grove, January 8, 2001; Sangchris, December 2, 2006 – May 2, 2007 (same individual?). High counts for the winter period were two, December 1, 1984 and January 8, 2001. The last individual observed in the study was an adult May 9, 2009 at Sangchris. The Harris's Sparrow breeds in north central Canada and winters on the Great Plains.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 606245 juvenile \bigcirc , 2 mi north Spfld, October 6, 1975, coll. by HDB, ovary = 1.5 mm, gizzard with seeds.

Highest	# Days/Season	Highest	# Birds/Season
Spring	4 (2001)	Spring	4 (2001)
Fall	5 (1977)	Fall	5 (1977)
Winter	13 (2000)	Winter	14 (2000)

White-crowned Sparrow

Zonotrichia leucophrys

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	4439/842 (37)	0/0	8707/1078 (37)	1886/445 (37)	15032/2365
Average/day	5.27		8.08	4.24	6.36
Average/season	119.97		235.32	50.97	

Status: Fairly Common Spring Migrant, Common Fall Migrant and Uncommon Winter Resident

Dates:

- Spring: Earliest arrival = April 4, 1971 Sangchris (arbitrary due to WR) Average arrival (37 years) w/range April 4 – May 4 = April 25 Average departure (37 years) w/range May 8 – 27 = May 16 Latest departure = May 27, 2001 Sangchris
- Fall: Earliest arrival = September 17, 2007 immature Carpenter Park
 Average arrival (38 years) w/range September 17 October 9 = September 29
 Average departure (35 years) w/range October 29 December 3 = November 21
 Latest departure = December 3, 1972 eight Sangamon Co. (arbitrary due to WR)

This was a fairly large, grayish sparrow with handsome black and white head stripes. They inhabited wood edge, brushy areas, weedy fields, and hedgerows. Immatures had brown head stripes in fall, winter, and early spring. Head molt was noted from March 1 – April 18, which made all of these sparrows look like adults when completed. Arrival of White-crowned Sparrows in spring was difficult to ascertain because of wintering birds, whether these winter birds and migrants represented different populations was unclear. Migrants definitely increased in April and May, and I noted these sparrows feeding on dandelions along the roads with other sparrows. Other early sping arrivals were: 12, April 14, 1978; 2, April 12, 1985; and 12, April 16, 2003. High counts for spring were: 60, May 8, 1976; 40, May 7, 1983; and 56, May 7, 1994. Numbers in spring were about half those in fall. Other late departures were May 23, 1978 & 1999 & 2009. White-crowned Sparrows breed in central and northern Canada and Alaska. Fall migrants arrived in September in 22 years and in October in 15 years. Other early fall arrivals were September 21, 1998 and September 22, 1979 & 1992. High counts for fall were: 110, October 25, 1980; 90, October 22, 1983; 66, October 27, 2002; 75, October 25, 2003; and 75, October 19, 2006. Fall numbers definitely dropped in November. These sparrows overwintered in the county, but only in special places such as areas with brush piles and a source of berries (honeysuckle), very weedy fields, or areas with multiflora rose hedges (now mostly destroyed). They occasionally went to birdfeeders. High counts for winter were: 45, December 26, 1970; 30, February 20, 1972; 30, January 24, 1980; 43, January 28, 2004; and 20, March 4, 2006. Immatures were noted singing December 17, 1986 and December 3, 2001. This sparrow winters south to central Mexico. There were two races found in the county, by far the most prevalent one is Z. l. leucophrys, but Z. l. gambelii did occur. One immature specimen (ISM# 608790) from the tv tower, October 14, 1985 appeared to be gambelii from the northwest. I had at least 12 sight records of this subspecies with three, February 25, 2005 the highest number. The range of dates

for *gambelii* was October 13 to May 2, with a definitive photograph of an adult March 9, 2003 along Wahl Road.

Documentation: Specimens = 15) IL. Sangamon Co., Spring = 7, $\bigcirc \bigcirc \bigcirc = 4$, LSpfld, April 30 – May 5, wts. = 29.8 – 37.8 gms, testes = 2.5 – 4 mm; $\bigcirc \bigcirc \bigcirc = 3$, Sangchris (2) & CP, May 6 – 15, wts. = 24.8 – 31.5 gms, ovaries = 5 – 6 mm; Fall = 6, adult $\bigcirc = 1$, from tv tower, October 14, 1985, wt. = 30.5 gms.; adult $\bigcirc = 1$, Buckhart, October 22, 1994, wt. = 29.2 gms; immature $\bigcirc \bigcirc = 4$, all from tv tower, October 10 – 14, wts. = 25.6 – 27.4 gms; Winter = 2, adult $\bigcirc = 1$, south LSpfld, January 22, 1977, wt. = 27.4 gms; immature $\bigcirc \bigcirc = 1$, Sangchris, January 2, 1972, wt. = 29.3 gms.

Highest # Days/Season

Spring45 (2003)Fall45 (1982)Winter31 (2003)

Highest # Birds/SeasonSpring390 (2003)Fall700 (2006)Winter277 (2003)

Dark-eyed Junco

Junco hyemalis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	34182/1713 (37)	0/0	61486/1894 (37)	66440/2525 (37)	162108/6132
Average/day	19.95		32.46	26.31	26.43
Average/season	923.76		1661.70	1795.57	

*numbers do not include other subspecies

Status: Very Common Migrant and Winter Resident

Dates:

- Fall:Earliest arrival = September 9, 1998 Oak Ridge Cemetery
Average arrival (37 years) w/range September 9 October 6 = September 28
- Spring: Average departure (37 years) w/range April 15 May 10 = April 26 Latest departure = May 10, 1979 Carpenter Park

The Junco was the small, gray bird with white outer tail feathers seen in flocks during cold weather. They occurred in woodland and edge, weedy brushy areas, conifers, residential areas, and cemeteries. Even though they were here only part of the year, they ranked 18th in total numbers and 29th in number of days. Most **fall** arrival dates were in September (26 times), but it was not seen until October in eleven years. Other early fall arrivals were: September 21, 1975 in Sangamon County; September 20, 1997 at Sangchris; and September 17, 2005 at Oak Ridge Cemetery. Fall numbers were 1.8 times more than spring numbers, which might be due to timing of spring departures. High counts for fall were: 250, November 22, 1973; 300, October 31, 1984; 250, November 20, 1991; 390, October 30, 1995; and 207, November 11, 2006. The junco stayed all **winter** to animate and brighten the dullest days and was especially welcome at bird feeders, where they mostly fed on the ground. I recaptured a Junco on January 6, 1974 that I had banded in the same place south of Springfield on January 16, 1972, indicating some wintering site fidelity. In severe weather, they came up to the roadsides, and if the winter blasts continued some juncos went further south, but some may have moved into the city where it was slightly warmer and feeders were more available. There was a lowering of the numbers with the harsh winters from 1978 to 1983 and again from 1987 to 1989. High counts for winter were: 250, December 13 & 27, 1970; 300, December 12, 1971; 200, December 20, 1981; 225, January 12, 1997; and 295, January 1, 1999. There seemed to be attrition as the winter wore on in most years. As spring approached, Juncos started singing their chipping-like song sometimes as early as January 25 (1974), but usually in March and April. High counts for spring were: 200, March 23, 1974; 200, March 23, 1978; 150, March 20, 1979; 140, April 8, 1984; and 133, March 21, 1999. There was about a decade of lower numbers from 1988 to 1998 in spring for unknown reasons. When it warmed up, Juncos ate available insects; and I saw several hawking flying insects from the treetops on March 19, 1975. In April, Juncos were seen more in the woods, but could be seen in parkland with conifers which may simulate their breeding habitat or feeding on lawns with newly arrived Indigo Buntings and Chipping Sparrows. Most Juncos left in late April, and I had only four records for May: above; May 2, 1985 & 1995 at Carpenter Park and May 8, 2001 at the RCC. Dark-eyed Juncos breed in the coniferous belt in the northern US, Canada, and Alaska.

The Junco was one of the most variable species (see different subspecies) in the county, and I had spent considerable time examining flocks. There was some partial albinism, especially one odd bird noticed at Washington Park on March 28, 1999 that had a white throat, eyeline, and nape, plus, it was larger than nearby juncos (drawing on file ISM). Several juncos were seen with white wing-bars such as February 7, 1980, December 21, 1981, October 16, 1991, and February 27, 2009 (photograph), but were not considered to be the White-winged Junco *J. h. aikeni*. The subspecies found in the county were almost all *J. h. hyemalis*, but a few *J. h. cismontanus* were seen, such as December 19, 2002, November 6, 2003, December 6, 2004, and March 19, 2006. Six (some repeats) sightings of possible Pink-sided Juncos 2000 to 2004 were lumped with Dark-eyed Junco for lack of definitive photographs.

Documentation: Specimens = 34) IL. Sangamon Co., $\Im \Im = 24$, January 5 – November 22, wts. = 12.3 (very small) – 24.7gms, testes = 0.5 - 2 mm ($\Im ?$ appears to be *cismontanus* -November 22, 1997); $\Im \Im = 10$, Sangamon Co., January 19 – December 15, wts. = 16.2 - 21.4 gms, ovaries = 1.5 - 6.5 mm.

Highest # Days/Season

Spring	61 (1979)
Fall	62 (1980)
Winter	89 (2003)

Spring	2502 (1982)
Fall	2670 (1977)
Winter	3539 (1998)

Oregon Junco

Junco hyemalis –subspecies

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	16/15 (8)	0/0	43/42 (22)	77/72 (21)	136/129
Average/day	1.07		1.02	1.07	1.05
Average/season	2.0		1.95	3.67	

Status: Rare Migrant and Winter Resident

Dates:

Earliest arrival = **October 15,** 2006 Oak Ridge Cemetery Latest departure = **March 29,** 1996 Oak Ridge Cemetery

The Oregon Junco is considered a subspecies of the Dark-eyed Junco, not a separate species. Most observations were of males because they were more obvious. Some were seen for extended periods and wintered, such as a male north of Sangchris November 23, 1996 to January 5, 1997 (photograph); a male at Sangchris December 6, 2001 to March 6, 2002; and a male at Center Park, November 28, 2003 – January 5, 2004. Occasionally, two were seen: December 13, 1970; January 9, 1972; February 9, 1974; December 29, 1980; March 22, 1982; and February 8, 2004. They had the same habits as the Dark-eyed Juncos and were almost always found in the flocks with them. Some may represent hybrids/intergrades with the eastern form, but all of the birds under Oregon Junco had well defined hoods and brown sides and backs. Most of these birds were probably the subspecies *J. h. montanus* or a few were possibly *J. h. shufeldti*.

Documentation: Photographic: IL. Sangamon Co., DO & HDB – on file ISM.

Gray-headed Junco

Junco hyemalis – subspecies

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1/1 (1)	0/0	0/0	5/5 (2)	6/6
Average/day					1.0
Average/season					

Status: Very Rare Migrant and Winter Resident

Dates: Three Records: Lake Springfield, February 9, 10, 25 & 26, 1974; Island Grove, December 12, 2000; Sangchris, April 17, 2001.

The Gray-headed Junco breeds in the central and southern Rocky Mountains and winters south to north- central Mexico. It has a migrational population, but three sightings in the county, two backed up with photographs, seemed quite unusual. I did try to look at every junco because they were so variable, and in this form the reddish back, black lores, and extensive gray below were obvious characters. The first bird I found was in an open area near Lake Springfield and was later determined to be attending a feeder. I was able to catch it in a mist net and band it, and later it was photographed. This junco stayed until February 26, 1974 and was seen by several observers (see Bohlen, 1974). The second bird was feeding on the ground west of Springfield at Island Grove with a flock of juncos. Later that day, it was also photographed. The next spring on April 17, 2001 another bird was seen at Sangchris feeding on the ground quite close to my truck. It could have been the same bird that was at Island Grove, but these places are at opposite ends of the county. In all three cases the birds appeared to be the northern migratory subspecies *J. h. caniceps*.

Documentation: Photographic: IL. Sangamon Co., VK & DO – plus drawings and notes HDB – on file ISM.

Lapland Longspur

Calcarius lapponicus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	14860/213 (36)	0/0	22231/368 (37)	22262/434 (37)	59353/1015
Average/day	69.77		60.41	51.29	58.48
Average/season	412.78		600.84	601.68	

Status: Irregular Common Migrant and Winter Resident

Dates:

- Fall:Earliest arrival = October 4, 1989 Sangchris
Average arrival (36 years) w/range October 4 November 11 = October 28
- Spring: Average departure (36 years) w/range March 7 April 24 = April 4 Latest departure = April 24, 1983 ♀ east of Springfield

These hardy little finches breed in the Arctic, and were most often seen in Sangamon County up by the roads when it snowed. Lapland Longspurs were found in open areas from ploughed to grassy fields, but most often in corn stubble in this county. Usually, they were encountered in flocks, and in flight these birds became a swirling mass giving their clicking call notes. Longspurs could be difficult to find without snow since they blended into their environment and seemed to disappear in a field upon landing. Many longspurs were killed by heedless drivers when the longspurs came up to the roads to feed during snow storms. Another early **fall** arrival was two, October 7, 1999 at Centennial Park. High counts for fall were: 3000, November 26, 1977; 1430, November 22, 1984; and 1000, November 16, 1997. American Kestrels and other raptors hung around flocks of longspurs, and on November 18, 2006 about 600 longspurs mobbed a kestrel on a power line near Berry. Sometimes these birds did not migrate until forced to, such as December 1, 2006 when longspurs, larks and many other birds were flying past Marine Pt. Some landed exhausted with ice on their tails. In winter on January 11, 1987, in snow I observed these birds bending over grass stems to get at the seeds, which was the main food at this season other than waste grain. These birds came to feeders that were in open areas and on the ground, but one male attended a feeder in a residential area in Springfield in February 1982. High counts in winter were: 520, February 14, 1976; 1000, February 12, 1986; 950, January 26, 1991; 1000, January 23, 1997; and 1000, February 27, 1999. In spring in March and April, when flocks were encountered the males, in bright plumage with extensive black throats, sat on corn stalks and sang. High counts for spring were: 1000, April 8, 1982; 2200, March 2, 1986; and 1500, March 13, 1999. Spring departure was usually in March (12 times) and April (24 times) and timing was probably due to the weather. Another late spring departure was April 23, 1993. My data showed the numbers declining and the longspurs arriving later and departing earlier from 2000 – 2007. The subspecies is the eastern C. l. subcalcaratus.

 - April 10, wts. = 25.6 - 29.7 gms, ovaries = 2 - 4.5 mm (all QQ w/steaks or necklace on throat, except one that has black throat = older Q?), gizzard with Chenopodium sp? & Setaria sp?

<u>Highest # Days/Season</u>		Highest	<u>Highest # Birds/Season</u>		
Spring	13 (1999)	Spring	2565 (1999)		
Fall	21 (1985)	Fall	4082 (1984)		
Winter	26 (1983)	Winter	2293 (1997)		

Smith's Longspur

Calcarius pictus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	9159/269 (36)	0/0	24/6 (6)	0/0	9183/275
Average/day	34.05		4.0		33.39
Average/season	254.42		4.0		

Status: Fairly Common Spring Migrant and Rare Fall Migrant

Dates:

- Spring: Earliest arrival = March 6, 1976 two east of Springfield Average arrival (37 years) w/range March 6 – April 8 = March 19 Average departure (36 years) w/range April 3 – May 7 = April 21 Latest departure = May 7, 1976 near Carpenter Park
- Fall: Earliest arrival = October 30, 2001 four Berry
 Average arrival (6 years) w/range October 30 November 23 = November 7
 Latest departure = November 23, 1998 three Sangchris

This was a species of wide open spaces and it occurred in Sangamon County mainly in spring and to a much lesser extent in fall. In spring the Smith's Longspur was on its way to the tundra in Alaska and northern Canada and they staged in Central Illinois until the time was right to fly over the extensive wooded areas to the north, which would have been historically unsuitable habitat. Males in spring were quite striking with bright ochre underparts and a black and white head pattern. Also of note were the white shoulder patch and two white outer tail feathers. All spring arrival dates were for March except April 3, 1983 and April 8, 2005. Other early arrivals were March 8, 1996 and March 10, 1980, 2000 & 2006. These were inconspicuous birds since they tended to stay in the middle of fallow fields. These fields could be grassy clover fields, corn stubble with foxtail grass, alfalfa fields, occasionally soybean and wheat stubble fields and other short grassy areas such as very open golf courses and airfields. Rarely, they were seen on plowed ground. These longspurs preferred areas in fields with grassy puddles or where most of the water had dried producing a few bare spots. Places I observed this species were Berry, Sangchris, around Berlin, Buffalo, Loami, northwest of Illiopolis, north of Pawnee, Sediment Retention, Rail Golf Course, west of Williamsville and other open agricultural areas. It was usually difficult to obtain good views of this bird since they hid in the grass and flew at close range, giving clicking calls, usually going considerable distance, calling and circling before landing. They seldom sang in this county, but the song was reminiscent of the Western Meadowlark at a distance. Occasionally, the Smith's Longspur occurred in the same fields as the Lapland Longspur but they tended not to flock together. High counts for spring were: 200, April 13, 1974; 100, March 26, 1977; 150, March 29, 1980; 500, March 31 & April 4, 1984; 200, March 30, 1997; 125, April 14, 1999; and 100, March 17, 2004. They stayed most years through April, but I recorded them in May in nine years. Other late spring departures were May 6, 1978 & 1995. I noted that hot and dry conditions might have driven them on north in 1987, 1997, 2000, 2001, and 2002. Another factor was that many of the fields became unsuitable because they were plowed and planted. Numbers were apparently higher in the 1970s and 1980s when there were

more clover and other fallow fields (see Figure 30). Urban sprawl in Sangamon County had eliminated many open areas. The numbers in 2007 – 2009 were much reduced, and I would classify this species as occasional or rare toward the end of the study. I had much less data from **fall** and believe that this species had an elliptical migration route with most in fall being deflected west of this county. All fall sightings (only six) were one day events of small flocks and occurred in November except four on October 30, 2001(the last fall observation). The highest fall count was 9, east of Springfield on November 4, 1979. I have never encountered this bird in winter. On March 27, 2008 at Sangchris I photographed a leucistic female that had a bright white head. They typically winter in the east half of Oklahoma and Texas east to Arkansas.

Documentation: Specimens = 3) IL. Sangamon Co., Spring = 2, ISM# 606358 \Diamond , 2 mi southwest Springfield, April 2, 1976, coll. by HDB, wt. = 30.5 gms, testes = 3 mm; ISM# 606359 \Diamond , 2 mi southwest Springfield, April 2, 1976, coll. by HDB, wt. = 31.7 gms, testes = 2 mm; Fall = 1, ISM# 606877 \Diamond , 10 mi west Springfield, November 5, 1978, coll. by HDB, wt. = 29.4 gms, testes = 2 mm.

Highest # Days/Season

 Spring
 27 (1976)

 Fall
 1 (6 years)

 Highest # Birds/Season

 Spring
 1918 (1984)

 Fall
 9 (1979)

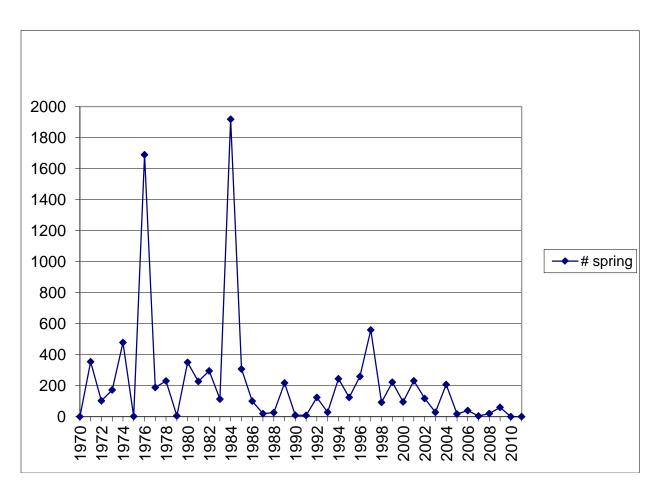


Figure 30. Smith's Longspurs in Sangamon County in Spring

Chestnut-collared Longspur

Calcarius ornatus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	3/3(3)	0/0	0/0	0/0	3/3
Average/day	1.0				1.0
Average/season					

Status: Very Rare Spring Migrant

Dates: Three Records: ♀, east of Berlin, March 29, 1980; ♂, west side of Sangchris, April 10, 1982; one, Berry, April 14, 1999.

This Great Plains species, though seldom reported, could be nearly an annual occurrence in small numbers, but the possible habitat was extensive and private. As with all longspurs, the Chestnut-collared Longspur was found in open areas such as grain stubble and pastures. Also, obtaining good views of these nomadic field birds was difficult. The Berlin bird was in a dry, grassy, weedy field with other longspurs, but was not associated with them and was feeding alone. While the Sangchris bird was along the roadside for most of the day, and was a beautiful adult male feeding on grass seed (R. Biss and R. Chapel). The Berry longspur was in among other species of longspurs and I heard its different calls. It gave a sputtering, weak, hissing click note and it also had finch-like calls. The Chestnut-collared Longspur had a lot of white in the outer tail feathers and an inverted black V in the center of the tail (for details see Bohlen, 1980). They winter in the southwest US and Mexico.

Documentation: Photographic: IL. Sangamon Co., HDB, plus drawings and notes - on file ISM.

Snow Bunting

Plectrophenax nivalis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	0/0	0/0	74/42 (21)	1468/88 (27)	1542/130
Average/day			1.76	16.68	11.86
Average/season			3.52	54.37	

Status: Irregular Occasional Migrant and Sporadic Uncommon Winter Resident

Dates:

- Fall:Earliest arrival = October 25, 1987 LSpfld & 1999 SangchrisAverage arrival (30 years) w/range October 25 January 1 = November 23
- Spring: Average departure (20 years) w/range January 8 February 28 = February 4 Latest departure = February 28, 1971 four Sangchris

The presence of the Snow Bunting from the Arctic was made clear by its rattle notes and the white wing patches. Most of the ones seen here were brownish, buff and white and they blended into their surroundings until they took flight. I have seen several albino Horned Larks and care should be taken not to confuse these with Snow Buntings. Other early fall arrival dates were October 30, 1986 and October 28, 1992, but most arrivals were in November, with some not seen until December or January. High fall counts were meager with 9, November 25, 1977 and 5, November 15 & 17, 1987. Sangamon County was on the southern edge of the regular wintering grounds, which were a little further north in Illinois. It was recorded every year but four (1975, 1996, 1997 and 2002), and there were three winters with relatively higher counts (1977-78, 1981-82, 1985-86). High daily winter counts were: 100, February 8, 1978; 200, February 17, 1982; and 500, February 12, 1986. These were field birds and they occurred with longspurs and larks. However, when numbers were high, Snow Buntings were many times in pure flocks. They preferred wide-open places with an austere environment. I had seen them in October on gravel roads and areas with rocks like Marine Pt., but when it snowed they came up to the roads. They also were found in fields with manure. Occasionally, flocks would perch on power lines and fences. These birds seemed more prone to fly than larks, but I have also seen tame individuals easily approached. I have not seen this species into spring (March), but a male was in a small tree singing on February 4, 1971 at Sangchris Dam. Other late departure dates were 70, February 19, 1978 and one, February 24, 1986. The most recent record of any numbers was 15, January 26, 2009 at Southwind Park. The subspecies in the county is the nominate form.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 606479 adult \mathcal{Q} , 1 mi west Berlin, January 22, 1977, coll. by HDB, wt. = 33.4 gms, ovary = 3 mm.

Highest # Days/Season		Highest	<u>Highest # Birds/Season</u>		
Fall	6 (2001)	Fall	17 (1977)		
Winter	11 (1981)	Winter	533 (1985)		

Bobolink

Dolichonyx oryzivorus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1562/276 (36)	98/37 (21)	2111/318 (37)	0/0	3771/631
Average/day	5.66	2.65	6.64		5.98
Average/season	43.39	4.67	57.05		

Status: Uncommon Migrant and Rare Summer Resident

Dates:

- Spring: Earliest arrival = April 20, 2005 ♂ Cinder Flats Average arrival (36 years) w/range April 20 – May 7 = April 30 Average departure (35 years) w/range May 8 – June 5 = May 22 Latest departure = June 5, 1995 ♂ Berry
- Fall: Earliest arrival = August 12, 1979 two Buffalo sewer pond Average arrival (37 years) w/range August 12 – September 11 = August 26 Average departure (36 years) w/range September 10–October 19 = September 30 Latest departure = October 19, 2001 two Sangchris

In **spring**, the extreme sexual dimorphism of the Bobolink made it fairly easy to tell that males arrived first. Later flocks were mostly mixed, but some contained only females, such as a flock of eight, May 23, 1999 at Jefferies Orchard and 60 mostly females, May 15, 2004 north of New City. The average spring arrival of females for eleven years was May 8. Bobolinks were easy to locate because of their bubbling song and distinctive call notes. These birds were found in grassy, weedy places usually in wet areas, but also along wood edge if open grass areas were nearby. They typically perched in small groups on fences, in small trees, and on the ground. Other early spring arrivals were April 22, 1973 & 1977. High counts for spring were 75, May 14, 1981 and 75, May 18, 1997. Most birds went on north by the end of May. Occasionally, a male tried to establish a territory, for example in 2009 at South Fork Valley, until May 27 when the field was plowed. High summer counts were: 8, June 9, 1997; 6, June 15, 2002; 8, June 22, 2004; and 10, June 12, 2005. It was 1977 before I found any in summer, the areas and years were: east of Pleasant Plains (1977 and 1978, 1996 – 2008); north of Dawson (1979); north of Buckhart (1982); south of Springfield (1982); east of Buffalo (1986, 1989 and 1990); north of Sangchris (2005) and Marsh Road (2005). Most of these records consisted of singing males or flight songs in June or July, but a female was carrying nest material east of Buffalo May 25, 1986; a bob-tailed young was east of Pleasant Plains June15, 2002; and a fledged young was at Marsh Road July 25, 2005. The most consistent area and the most birds (between one - eight males) was east of Pleasant Plains, in a huge pasture, but usually it was mowed too soon destroying the nests, and near the end of the study several houses were built in the area. There were no Bobolinks found there in the summer of 2009. The Bobolink, on the verge of being extirpated as a nesting species in Sangamon County during the entire study was one of our last links with the prairie. Most breed in the northern US and southern Canada, including northern Illinois. Bobolinks in fall were usually detected by their call notes and by then all birds resembled the female in plumage. High counts for fall were: 75, September 21 & 23, 1993, 60,

September 20, 1994; 50, September 23, 1997; and 70, September 12, 2002. One Bobolink came to roost with other blackbirds on September 11, 1996 at the Cinder Flats. Numbers declined after 2002 in fall. Late departures dates were about even between September and October, with other late departures: October 16, 1983; October 14, 2000; and October 15, 2009. This long distant migrant winters in southern South America.

Documentation: Specimens = 22) IL. Sangamon Co., Spring = 2, $\Im \Im = 2$, tv tower, May 7, 1971, no wt., testes = 6 – 7mm; Fall = 20, adult $\Im \Im = 5$, tv tower, September 10 – 17, wts. = 44.0 – 55.5 gms; immature $\Im \Im = 2$, tv tower, October 1 – 4, wts. = 46.4 – 50.0 gms; adult $\Im \Im = 9$, tv tower, September 2 – 29, wts. = 28.3 – 47.1 gms; immature $\Im \Im = 4$, tv tower, September 2 – 12, wts. = 34.7 – 45.3 gms (many of these fall specimens were fat or very fat).

Highest # Days/Season

Spring18 (1997)Summer5 (1996)Fall25 (1999)

Highest # Birds/SeasonSpring284 (1997)Summer15 (2005)Fall234 (1990)

Red-winged Blackbird

Agelaius phoeniceus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	3514534/3112 (37)	68351/1735 (37)	1101119/3405 (37)	386986/934 (37)	5070990/9186
Average/day	1129.35	39.40	323.38	414.33	552.03
Average/season	94987.41	1847.32	29759.97	10459.08	

Status: Very Common Migrant and Summer Resident and Common, but Variable Winter Resident

Dates:

Fall: Average departure (35 years) w/range October 31 – December 19 = **November 22** Latest departure =**December 19**, 1971 Sangamon Co. (arbitrary due to WR)

The male Red-winged Blackbird was well known since it was a familiar and easy to identify roadside bird, while the female, which was smaller, had the appearance of a large, streaked sparrow. This was one of the most numerous birds in the county and was ranked second only to the grackle in numbers and was 16th in days observed. Though wintering birds sometimes confused the arrival of **spring** migrants, males singing on territory usually signaled the arrival date. Most spring arrival dates were in February (27 yrs). Other migrants that would pass on north temporarily joined the roost at the Cinder Flats. I noted that the evening routine at the roost was that redwings came in early, then grackles and last were starlings. The redwings flew in low and the grackles would drop in to the roost. In spring, the male redwings arrived first, and the flocks became mostly females around April 10. High counts (all estimates) for spring were: 1,000,000, March 24 & 25, 1971; 25,000, March 28, 1990; 30,000 March 8, 1994; 50,000, March19, 1998; 50,000 March 24, 2001; 50,000 March 15, 2003; and 200,000 March 9, 2006. The average departure in spring for migrants was April 25 with 22 years of data. In summer on the BBS, this species ranked 4th, and there were population dips in 1983 and 1984, but it was easily recorded every year. The redwing nests mostly in marshy situations, but was found in many other habitats including fields, pastures, scrub areas especially with willow, wood edge, and lake and pond edge. Redwings were very aggressive and territorial birds, each male had several females. I had males swoop at me and on occasion hit me on the back of the head when I was too close to their nest. Nest building dates were from April 10 to 25, and copulation was seen June 13. Of 52 nests from May 1 to July 23, one had 5 eggs, 9 had 4 eggs and 15 had 3 eggs (other nests had incomplete clutches or young). Also four contained one cowbird egg each (May 4-26) which was 8 % of the nests parasitized. Fledged young were seen from May 25 to August 9. Redwings began to form flocks as early as late June or early to mid-July, some consisted of several hundred birds. High counts in summer varied from 50 – 500 but there were 2000, July 25, 1989 and 1000, July 23, 1993 (both counts from the roost). Cessation of singing was noted July 27, 1999 and July 22, 2000, but occasional singing occurred into the fall especially at the roost. There was a noticeable hiatus in numbers of this species in late August and September due to molt, though many birds were found at the roost. High counts for fall were: 15,000 October

Spring: Earliest arrival = January 15, 1999 Sangamon Co. (arbitrary due to WR) Average arrival (36 years) w/range January 15 – March 15 = February 13

25, 1986; 10,000 September 30, 1992; 25,000 October 29, 2004; and 10,000 October 16, 2006. Usually the numbers dropped from mid- to late November (a few times in early December) depending on the weather. Many of the numbers shown for the **winter** season were mostly migrants toward spring (February) and many winters the numbers were less than 100. Sometimes it appeared there were no redwings in winter, but in the evening some came into the roost, their location in the daylight unknown. High counts in winter were: 1,000, December 22, 1975; 10,000 February 28, 1981; 700, January 9, 1993; 50,000 February 27, 1996; 40,000 February 24, 2002; 15,000 February 19, 2005; and 500, January 1, 2006. It seemed that in checking the roost, I would almost certainly find a leucistic blackbird, and I had seen some really odd ones like on October 8, 1998 in which the bird was mostly white with black stripes, with a small red patch on the wing and a buffy eyebrow. Some of the females normally had varying amounts of rufous, buff, yellow, orange or pink on the throat and or forehead. The breeding subspecies in Sangamon County is the nominate form, but in migration and winter a few specimens matched the northern *A. p. arctolegus*. One female collected in November was darker on the back, face and malar and was not as buffy as other females and could be from a western subspecies.

Highest # Days/Season

 Spring
 92 (10 years) maxed

 Summer
 61 (6 years) maxed

 Fall
 120 (1983)

 Winter
 53 (2001)

Highest # Birds/Season

Spring2005296 (1971)Summer4235 (1991)Fall87468 (2002)Winter157101 (2001)

Eastern Meadowlark

Sturnella magna

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	21093/2879 (37)	9341/1459 (37)	8659/1949 (37)	2193/481 (37)	41286/6768
Average/day	7.33	6.40	4.44	4.56	6.10
Average/season	570.08	252.46	234.03	59.27	

Status: Common Spring Migrant and Summer Resident, Fairly Common Fall Migrant and Occasional Winter Resident

Dates:

Spring: Earliest arrival =January 20, 1992 four east of Springfield Average arrival (36 years) w/range January 20 – March 7 = February 13

Fall:Average departure (36 years) w/range October 25 – December 22 = November 19Latest departure = December 22, 1977 (arbitrary due to WR)

This was a chunky brown-backed bird with white outer tail feathers and a bright yellow breast marked with a black V. The Eastern Meadowlark had a mellow whistled song which carried long distances in the open spaces that it inhabited. It had been associated with the prairies, but during the study it was found in pastures, agricultural fields, and any grassy areas available. A lot of the open spaces it lived in were disappearing, and the population was declining. Spring migration was mostly diurnal as I saw them frequently flying low, with choppy wing beats, across Lake Springfield and Sangchris in February, March, and April. There was a flock of 18 flying by Sangchris on March 13, 1982 and a loose flock of 10 flying about 20 feet above the water at Lake Springfield in the evening on March 7, 1988. More wintered in the early 1970's, but after the harsh winters of the late 1970's the winter population never fully recovered. Part of this phenomenon was habitat loss at the same time. High counts for spring were: 45, May 10, 1975; 60, May 8, 1976; 55, March 29, 1980; 44, May 9, 1987; 40, May 17, 1998; and 42, March 27, 2004. Singing started on a sunny day in late January, February or some times not until March. This species was ranked 14th on the BBS and seen every **summer**. Also, the BBS showed the decline because of severe winters of the late 1970s, a slight comeback in the mid-1980s, and then numbers lowering again in 1994 to the present. High summer counts were 44, June 28, 1980 and 53, June 25, 2000. I saw a nuptial display March 4, 1992 at Sangchris in which two birds on the ground would point their bills up while opening their outer tail feathers and flashing them. The birds then flew up a short distance, dropped to the ground, and jumped forward. Nest building was seen April 17 and June 30, with the latter date indicating a second brood. Nests with eggs were seen April 24 to June 20 and the number of eggs was 1 - 4. Fledged young were seen from May 19 to August 17, with most seen in June. Cessation of singing was August 24, 1999 and July 29, 2000, but occasional singing was heard in August, September and October. Sometimes, they sang in winter on warm days, and two were singing at Sangchris December 3, 2001. Molt was noted August 27 – September 21; and meadowlarks seem to "disappear" at this time of year. When they reappeared they were in migrant flocks. Migration in fall also seemed to be diurnal and flocks or individuals were seen in September, October and early November flying south. The numbers in fall were 2.4 times less than spring and even though they did not sing nearly as much

in fall, that alone did not explain the numerical differences. High counts for fall were: 35, October 11, 1970; 38, September 18, 1971; 40, September 11, 1975; 36, September 25, 1985; and 35, October 12, 1986. Seemingly, I had to go further and further out in the county to find this species as the study wore on. Practices like excessive mowing at the wrong season (destroying nests), allowing cats and dogs to roam (destroying nests and young) and fall plowing (destroying cover) had negative effects on the meadowlark population. **Winter** numbers were low, because this species essentially became a migrant instead of a winter resident due to harsh winters and the lack of cover during the study. A few tried to overwinter in favored areas of high grasses with adjacent corn stubble where they kept a low profile, coming up to the roads only during heavy snows. High counts for winter were: 30, January 2, 1972; 38, February 21, 1975; 27, January 19, 1998; and 18, December 28, 2002. The subspecies is the nominate form.

Documentation: Specimens = 12) IL. Sangamon Co., $\bigcirc \bigcirc = 7$, March 8 – October 24, wts. = 87.5 – 118.0 gms, testes = 2.5 – 16 mm, one gizzard with Carabidae & caterpillars of Noctuidae; $\bigcirc \bigcirc = 5$, Sangamon Co., April 5 – September 29, wts. = 77.5 – 93.9 gms, ovaries = 10 – 13 mm (one in juvenile plumage, July 1, with ovary = 2 mm).

Highest # Days/Season

 Spring
 92 (1991 & 1992) maxed

 Summer 60 (2002)
 Fall
 87 (1989)

 Winter
 33 (1991)
 State

Highest # Birds/Season Spring 846 (2000) Summer 604 (2000)

Fall488 (1992)Winter216 (1991)

Western Meadowlark

Sturnella neglecta

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	155/138 (30)	22/19 (11)	27/24 (15)	37/30 (16)	241/211
Average/day	1.12	1.16	1.13	1.23	1.14
Average/season	5.17	2.0	1.80	2.31	

Status: Occasional Spring Migrant and Rare Fall Migrant, Summer and Winter Resident

Dates:

Spring: Earliest arrival = January 21, 1972 Sangchris (arbitrary due to WR) Average arrival (31 years) w/range January 21 – April 28 = March 6

Fall:Average departure (15 years) w/range October 2 – December 23 = November 9
Latest departure = December 23, 1984 Sangchris (arbitrary due to WR)

Though difficult to distinguish from the eastern species, the Western Meadowlark had a different song and call note ("kluk"), was paler on the back, and had a yellow malar. All meadowlarks in this study were assigned to Eastern Meadowlark unless proven otherwise. A few were probably hybrids, but they would have been difficult to ascertain. The Western Meadowlark was most obvious when singing, and thus the discrepancy in numbers between spring and fall and maybe winter also, but they sang occasionally in all seasons. The Western Meadowlark inhabited the more upland areas, very open and dryer areas such as large pastures, the airport, open golf courses, sod fields, clover fields, and the few sandy areas the county possessed. Arrival in spring was extremely variable, but this may be due to the low population and difficulty in finding singing birds. The only spring high count was four, March 17, 1974. Summer residents were found as early as 1970, when there were birds at Sangchris on June 4 and July 2. The only nesting evidence was at the Capital Airport on July 12, 1994 when a male and two fledged young were seen. Other areas not already mentioned as summer habitat were east of Buffalo 1972 -1986, the Rail Golf Course 1978, north of Lick Creek 1984, and southwest of Curran 1993. Summer residents continued sporadically until 1999 when the last singing male was at the sod field at Auburn on July 7. Many areas that did have these birds have been converted into other uses (housing) or the disturbance and increased predation (both natural and unnatural) did not favor ground nesting. Most records for fall were in October and November, with high counts of two on November 6, 1976 and November 11, 1979 & 1981. All meadowlarks had become much less numerous in winter, and the Western Meadowlark numbers fell off after the winter of 1976-77, and many of these records were probably early spring migrants. There were winter high counts of three on February 28 & 29, 1976. Other winter records were: December 21, 1975, December 14, 1976; January 15, 1984; December 23, 1984; December 3, 2006, and February 14, 2010 (photograph). The Western Meadowlark was another prairie species that was being squeezed out of Sangamon County. The subspecies in this area is the nominate form.

Documentation: Photographic: IL. Sangamon Co., HDB – on file ISM.

Highest # Days/Season Spring 21 (1978)

Spring21 (1978)Summer4 (1978)Fall4 (1981)Winter5 (1975)

Highest # Birds/Season

Spring23 (1978)Summer4 (1978)Fall5 (1981)Winter10 (1975)

Yellow-headed Blackbird

Xanthocephalus xanthocephalus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	26/23 (17)	1/1 (1)	25/17 (11)	7/7 (3)	59/48
Average/day	1.13	1.0	1.47	1.0	1.23
Average/season	1.53	1.0	2.27	2.33	

Status: Rare Migrant and Very Rare Winter Resident.

Dates:

- Spring: Earliest arrival = April 3, 1990 ♀ Sediment Retention Average arrival (16 years) w/range April 3 – May 5 = April 23 Average departure (9 years) w/range April 15 – May 18 = May 4 Latest departure = May 18, 1988 ♀ Sediment Retention
- Fall:Earliest arrival = July 30, 1987 immature ♂ Cinder Flats
Average arrival (9 years) w/range July 30 September 11 = August 14
Average departure (4 years) w/range September 11 October 19 = October 1
Latest departure = October 19, 1987 ♂ Cinder Flats

I first detected this beautiful blackbird on May 16, 1971 at Sangchris. All total, the Yellowheaded Blackbird was recorded in 24 of 37 years. Arrival in spring was in April (13 times) and May (3 times). Apparently this species passed through in spring in a short span of time. There were three years in which it was seen in February, but I believe these were winter records. Other early arrivals were males April 14, 1978 and April 12, 1995. Most of the birds seen in spring were singles except three males on April 24, 1975 and two males on April 22, 1989. These birds were usually associated with water, especially marshes, but Sangamon County had very little, if any of this habitat. I have seen them at the Cinder Flats, Sangchris, Sediment Retention, and Buckhart as well as at feed lots and a second year male was at a feed lot northwest of Springfield May 1, 2005 (B.Dyer). A male was singing the harsh screeching song of this species April 29, 1988 at the Sediment Retention, and another male was walking the levy there catching insects on May 11, 1988. Yellow-headed Blackbirds could have potentially nested at the Sediment Retention had the area remained, since they breed in northern, and in the past, central Illinois. On April 23, 1984 a male came to roost at dusk at the Cinder Flats with Red-winged Blackbirds. However, breeding Red-wings chased off a male Yellow-headed Blackbird at Sangchris April 14, 1978. A possible hybrid Red-wing X Yellow-head was seen northwest of Springfield April 1, 1995. Although primarily males were seen in spring, immatures and females were seen as often in fall (especially early fall) as adult males. Other fairly early fall arrivals were immature males August 3, 1996 and August 7, 2000 both at Sangchris. On August 31, 1989 a female was feeding with cowbirds, but many times Yellow-headed Blackbirds were found alone. In 1986 from October 1 - 11 several males came into roost at the Cinder Flats, when sitting up they glowed like light bulbs. On October 3, 1986 there were six present, the highest one day count. There were three winter records: an immature male came to a feeder just south of Springfield February 20-25, 1991(A.Spencer); an adult male was at Sangchris January 31- February 5, 2000; and an adult male was at the Cinder Flats February 12 - 15, 2002. Some of these could have possibly

been early spring migrants. Most winter in the southwestern US and Mexico. This species was not seen after the spring of 2005 nor in the addendum 2007 - 2010.

Documentation: Photographic: IL. Sangamon Co., HDB on file ISM.

Highest # Days/Season

Spring3(1988 & 1991)Summer1 (1987)Fall5 (1986)Winter3 (1999)

Highest # Birds/Season

Spring3 (1975, 1988, 1991)Summer1 (1987)Fall13 (1986)Winter3 (1999)

Rusty Blackbird

Euphagus carolinus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	9202/785 (37)	0/0	2563/277 (37)	7470/349 (35)	19235/1411
Average/day	11.72		9.25	21.40	13.63
Average/season	248.70		69.27	213.43	

Status: Uncommon Migrant and Winter Resident

Dates:

- Fall:Earliest arrival = October 5, 1994 Cinder FlatsAverage arrival (37 years) w/range October 5 November 12 = October 25
- Spring: Average departure (37 years) w/range March 29 May 19 = April 20 Latest departure = May 19, 2006 ♂ Riverside Park (photograph)

Most blackbirds viewed in good light were interesting birds, but on October 18, 2006 when two Rusty Blackbirds were seen at close range, the dark blue and rust colors and light eye made a beautiful sight. These birds could be found in either open areas or woodland swamps. Sometimes they waded in shallow water and fed by turning over leaves. On October 31, 2005 there were 30 feeding on dogwood berries at Sangchris. In **fall** they were easily identified because of the rusty coloration and gurgling call notes. Fall migration arrival usually occurred in October (30 years), but occasionally they were not recorded until November (7 years). The next earliest fall arrival was October 13, 1991. High counts for fall were: 75, November 24, 1981; 100, November 25, 1991; 100, November 28, 1994; 100, November 2, 2002; and 100, November 18, 2003. They roosted at the Cinder Flats with thousands of other blackbirds in spring, fall and winter. Some years the numbers dropped off in late November and December, but usually some stayed all winter. They were missed in winter in two years (1978 and 1988). Much moving around and migration took place in winter. High counts for winter were: 500, December 22, 1975; 2000, February 9, 1976; 200, January 1, 1985; 200, January 24, 1998; and 200; December 29, 2002. Sometimes, there was a noticeable increase in February or March for spring. High counts for spring were: 200, March 23, 1973; 140, March 24, 1984; 200, April 6, 1987; 300, March 6, 1995; and 100, March 15, 2003. Besides the very late departure above, there were only two other May departures: May 2, 1988 and May 1, 1999. The data showed an apparent decline in numbers from 1998 - 2010 and this agreed with a national population decline, not only in Sangamon County. Rusty Blackbirds breed in bogs in the northeastern US and Canada and Alaska. Some winter as far south as the Gulf Coast.

Documentation: Specimens = 14) IL. Sangamon Co., $\bigcirc \bigcirc = 8$, Cinder Flats (4) & Transportation Bldg. (4), March 7 – December 22, wts. = 62.9 – 73.9 gms, testes = 1- 3 mm (4 March birds had little rust in plumage, but 4 December birds were buff on throat & breast and rust on back); $\bigcirc \bigcirc = 6$, Transportation Bldg.(4) & Cinder Flats (2), February 9 – December 22, wts.= 51.8 – 63.2 gms, ovaries = 3 – 7 mm (all $\bigcirc \bigcirc$ were gray, but ISM# 606324 & 606377 were somewhat darker gray).

Highest # Days/Season

Highest # Days/Season		<u>Highest</u>	Highest # Birds/Season		
Spring	39 (1983)	Spring	875 (1995)		
Fall	23 (1991)	Fall	277 (2002)		
Winter	28 (1998)	Winter	2534 (1975)		

Brewer's Blackbird

Euphagus cyanocephalus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	703/82 (30)	0/0	289/47 (26)	15/8 (7)	1007/137
Average/day	8.57		6.15	1.88	7.35
Average/season	23.43		11.12	2.14	

Status: Occasional Migrant and Very Rare Winter Resident

Dates:

Spring: Earliest arrival = February 16, 2005 ♂ specimen Cinder Flats Average arrival (31 years) w/range February 16 – April 16 = March 22 Average departure (25 years) w/range March 18 – April 24 = April 12 Latest departure = April 24, 1972 fifteen Sangamon Co.

Fall: Earliest arrival = October 14, 1974 ♀ Sangchris
Average arrival (26 years) w/range October 14 – November 15 = October 30
Average departure (23 years) w/range October 23 – December 7 = November 12
Latest departure = December 7, 1981 ♂ Spaulding Orchard Road & 2001 ♂♀ Sed Ret

The Brewer's Blackbird looked like some other blackbirds and great care was taken to make correct identifications. They were found in plowed grain fields or wet fields and pastures. The high gloss to the plumage of males without much rust color and the dark eyes and darker overall color of the females helped distinguish them from Rusty Blackbirds. Brewer's Blackbirds were also slightly larger and had a somewhat thicker bill. Note that Rusty Blackbirds were 19 times more numerous than Brewer's Blackbirds. Most spring arrivals occurred in March (20 times). Other early spring arrivals were: five males and a female, March 12, 1973 in Sangamon County; six males, February 28, 1981 southeast of Springfield; two males, March 11, 1990 at Buffalo; seven males, March 5, 2004 at Sangchris; and six males and a female, March 11, 2006 west of Sangchris. The spring numbers were higher than fall numbers (2.4 to 1), but it was still missed in seven years in spring. High counts were: 25, March 23, 1978; 60, April 12, 1981; 30, March 31, 1985; and 62, April 20, 1997. Other late spring departures were: April 21, 1983; April 20, 1997; April 22, 2002; and April 20, 2005. Brewer's Blackbirds departed fairly early in spring and went north, with a few nesting in northern Illinois and the majority in the western US and Canada. They did not return until October or November, and were missed 10 years in fall. Other early fall arrivals were one, October 19, 1986 and two, October 17, 1999. Some females had pale eyes and a flock of eight Brewer's Blackbirds at Berry November 6, 2009 included two females with pale eyes, two with dark eyes and four males. High counts were: 15, November 12, 1973; 16, October 22, 1997; and 14, October 28, 2003. The few that were found in winter were late migrants or seen at feedlots: 2, December 21, 1975; 1, January 5, 2001; and 1, January 7, 2002. The highest count during the winter period was 6, February 28, 1981, though they were possibly early spring migrants. Most winter from the Gulf States south to Mexico and Guatemala. The subspecies in the county should be *E. c. brewsteri*.

Documentation: Specimens = 3) IL. Sangamon Co., ISM# 607219 3, 2 mi southeast Salisbury, November 11,1980, coll. by HDB, wt. = 86.7 gms, testes = 2 mm; ISM# 607715 3, Cinder Flats, November 14,1983, coll. by HDB, wt. = 74.8 gms, testes = 2 mm; ISM# 660763 3, Cinder Flats, February 16, 2005, coll. by HDB, wt. = 73.5 gms, testes = 2.5 mm, gizzard with corn.

Highest # Days/Season

 Spring
 7 (1993 & 2001)

 Fall
 6 (1999)

 Winter
 2 (2001)

Highest # Birds/Season Spring 83 (1981)

Spring65 (1901)Fall74 (1999)Winter6 (1980)

Common Grackle

Quiscalus quiscula

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	3617218/3136 (37)	103939/1787 (37)	3490513/3774 (37)	380912/1037 (37)	7592582/9734
Average/day	1153.45	58.16	924.88	367.32	780.01
Average/season	97762.65	2809.16	94338.19	10294.92	

Status: Very Common Migrant and Summer Resident and Common, but Variable Winter Resident

Dates:

Fall: Average departure (37 years) w/range October 30 –November 30 = **November 20** Latest departure = **November 30**, 1977 Sangamon Co. (arbitrary due to WR)

This was by far the most numerous species in the study and was # 15 in days observed. Only the European Starling could have rivaled the Common Grackle in numbers, but numbers of starlings were not recorded. Most grackle numbers were estimated, and they were buoyed up by covering the roost in the evenings. The grackle sometimes moved in immense numbers with flocks strung out for miles and showed spectacular tandem flying (a crack the whip formation). I estimated these by counting a segment and extrapolating to include the whole flock, which could take some time to pass a given point. Though some usually stayed for winter, **spring** migration started early and the numbers quickly increased with any warming trend. Most spring arrivals occurred in February (27 years). High counts were: 1,000,000, March 24 & 25, 1971; 30,000, March 3, 1994; 50,000, March 19, 1998; 200,000, March 11, 2002; and 50,000, March 15, 2003. These large numbers lasted mostly through March and by late April and May only breeding birds were left. The grackle ranked 2nd in **summer** on the BBS with higher numbers toward the end of the survey. Like the cowbird, the grackle did disgustingly well in agricultural and residential areas. Copulation was observed April 12 - 19, and nest building was between March 6 to April 14. Egg dates were from April 20 (4 eggs) to August 13 (5 eggs). Fledged young were noted from May 12 to June 24, with most in May. These blackbirds started flocking and went to a communal roost almost immediately after nesting as early as June 28. Most summer counts were 50 - 500but 1000 were recorded July 16, 1991, July 29, 1992, and July 24, 1999. Fall arrivals presumedly appeared between the end of July to mid-September. High counts for fall were: 10,000, August 28, 1975; 80,000, September 20, 1978; 20,000 October 20, 1996; 30,000, October 9, 2001; 600,000, November 7, 2002; 50,000, October 29, 2004; and 50,000, November 1, 2006. Most of these estimates were very conservative, and had I gone to the roost every evening the numbers would be much higher. These large grackle flocks came in to woodland and disrupted other songbirds using the forest, and would also deplete the available food. Usually by mid- to late November the numbers decreased, sometimes dramatically so. With migrants at both ends of winter, it was difficult to assess the true wintering birds, many years there were few or none in January. Although in some years, after not seeing any all day, grackles came in to the roost in the evening. High counts for winter were: 10,000, December 22, 1975; 10,000, February 28, 1980;

Spring: Earliest arrival = January 24, 1999 Sangamon Co. (arbitrary due to WR) Average arrival (34 years) w/range January 24 – March 19 = February 17

1,400, January 9, 1993; 20,000 February 27, 1995; 3,000, December 27, 2003; and 5,000, January 20, 2005. Many that did leave in winter could have joined the great flocks that wintered in southern Illinois. Leucistic individuals of this species did not seem rare as I have seen many, and if a large flock was watched for a length of time one was sure to be seen. The subspecies in Illinois and in the county is Q. q. versicolor.

Documentation: Specimens = 31) IL. Sangamon Co., $\Diamond \Diamond = 20$, February 9 – December 9, wts. = 101.1 – 140.3 gms, testes = 1.5 – 11.5 mm; $\bigcirc \bigcirc = 11$, Sangamon Co., March 5 – October 5, wts. = 76.8 – 114.0 gms, ovaries = 2 – 11 mm (2, August 24 birds were in heavy molt).

Highest # Days/Season

 Spring
 92 (9 years) maxed

 Summer
 61 (7 years) maxed

 Fall
 120 (1983 & 2002)

 Winter
 58 (1998)

Highest # Birds/Season

Spring2007364 (1971)Summer8605 (1998)Fall245093 (2006)Winter68507 (2001)

Great-tailed Grackle

Quiscalus mexicanus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	8/8 (1)	0/0	0/0	1/1 (1)	9/9
Average/day	1.0			1.0	1.0
Average/season					

Status: Very Rare Spring Migrant and Winter Resident

Dates:

Two Records:

QSangchris, February 2, 2000;

♂ north of Andrew April 1 – 30, 2005.

The first record at Sangchris was a close leisurely study while the bird was at a feeder and on the ground with other blackbirds including much smaller Common Grackles. The flat crown with well delineated buffy eye-line and creamy white eye eliminated it from the unlikely Boat-tailed Grackle (drawing on file ISM). Also, the under-tail coverts and lower belly were dark and the tail was broad and flat. That winter attracted many birds to Sangchris because of millet patches, which for some obscure reason have not been planted again, and the wintering birds have gone elsewhere or perished. The second record (found by KB) was a vocalizing male that stayed the whole month of April and was on territory, but failed to attract a female. This large bird was observed as it sat in a pine tree, and as it walked in a nearby pasture while displaying and flipping over cow pies to eat the associated insects and corn. It gave calls of loud clicks, whistles, and chattering. The sexual dimorphism in size of this species was great, with males being half again larger than females. The bluish iridescence, golden yellow eyes, the vocalizations, and the displays (wings not held above the horizontal) helped identify this bird. The Great-tailed Grackle was expanding its range, especially west of the Mississippi River (in Missouri and Iowa), and though there were few records for Illinois, they should increase in the coming years. The subspecies expected would be Q. m. prosopidicola. There is a female specimen in the collection, ISM # 605929, from Morgan County, Illinois, October 7, 1974 (HDB, R. Q. Randall).

Documentation: Photographic: IL. Sangamon Co., HDB, plus drawings and notes - on file ISM.

Brown-headed Cowbird

Molothrus ater

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	517550/2804 (37)	18495/1537 (37)	332969/2012 (37)	167249/661 (36)	1036263/7014
Average/day	184.58	12.03	165.49	253.02	147.74
Average/season	13987.84	499.86	8999.16	4645.81	

Status: Very Common Migrant and Winter Resident and Common Summer Resident

Dates:

Spring: Earliest arrival = January 12, 2005 Sangamon Co. (arbitrary due to WR) Average arrival (30 years) w/range January 12 – March 16 = February 14

Fall:Average departure (31 years) w/range October 21 – December 22 = November 22Latest departure = December 22, 1970 Sangamon Co. (arbitrary due to WR)

This blackbird was the eighth most numerous bird in the county, due in part to its roosting with other blackbirds at the Cinder Flats. Many of the higher counts for this species were conservative estimates, and I am sure that the numbers were substantially higher. Migration was much clearer early in the study, but by 1996 wintering birds had confused spring arrivals and fall departures. Migration still occurred, but it was much more difficult to define. High counts for spring were: 5,000, March 24, 1992; 20,000, March 8, 2002; 30,000, March 15, 2003; and 200,000, March 9, 2006. On April 1, 2001 the Nipper Prairie was burned and a flock of 75 cowbirds immediately arrived, showing that burned areas were like magnets to these birds. A lot of the migration took place in late winter, and by April and May most cowbirds had broken into much smaller groups. The cowbird was a brood parasite, that laid its eggs in other birds nests and the young were raised by the adopted parents (see Table 45). I noted males displaying at Sangchris March 19, 1998. These birds moved into the forest in late March (March 27, 1980) where several males pursued a female. It was found in all 31 years of the BBS and increased on the Sangamon River Census. High summer counts were 100 – 150 birds, but 500 were seen going to roost July 23, 1993. Copulation in this species was obvious and was seen from April 25 – July 5. Egg dates for cowbirds were from April 25 to June 11, and fledged young were seen May 29 to August 31. By July 4, small flocks were apparent, and some young males with blotchy black feathers could be seen. Molt continued and was especially seen in August and September. Mowed grass at Center Park attracted over 100 cowbirds on July 17, 1995 and 200 were on the lawn at Sangchris August 18, 1994. High counts for fall were: 1,000, September 28, 1972; 5,000, October 8, 1984; 8,000, October 7, 1991; 10,000, October 12 & 29, 2004; and 20,000, October 16, 2006. This bird had increased in winter, maybe due to the roost, but the larger counts consisted of late fall or early spring migrants. Many foraged during winter in feed lots and pastures, but they could also be seen at bird feeders. High counts for the winter period were: 3,000, February 9, 1975; 5,000, February 27, 1995; 1,000, January 24, 1999; 30,000, February 24, 2002; and 3,000, January 29, 2006. Several odd plumages were seen: 1) some males had light brown heads, possibly showing in a small percentage of male cowbirds; 2) leucistic birds on October 12, 2001, March 22, 2001, January 21, 2002 (photograph), and February 21, 2005; and 3) a male-like bird with tan head,

breast and upper belly and rusty wingbars on March 10, 1996 at Sangchris (drawing on file at ISM). The subspecies is the eastern nominate form.

Documentation: Specimens = 11) IL. Sangamon Co., $\bigcirc \bigcirc \bigcirc = 6$, Spfld (3) & LSpfld (2) & tv tower, February 9 – July 1, wts. = 49.4 – 55.0 gms, testes = 1.5 – 5 mm; $\bigcirc \bigcirc \bigcirc = 5$, LSpfld (3) & Chatham & 2mi north Spfld, March 10 – November 13, wts. = 37.2 – 43.5 gms, ovaries = 4 mm – greatly enlarged.

Highest # Days/Season

Spring92 (3 years) maxedSummer61 (4 years) maxedFall98 (2004)Winter48 (2003)

Highest # Birds/Season

Spring214312 (2006)Summer1595 (2004)Fall36699 (2006)Winter73710 (2001)

Eastern Wood-Pewee	
Acadian Flycatcher	
Eastern Phoebe	
Horned Lark	
Tufted Titmouse	
Carolina Wren	
Blue-gray Gnatcatcher	
Eastern Bluebird	
Wood Thrush	
Gray Catbird	
Warbling Vireo	
Red-eyed Vireo	
Northern Parula	
Yellow Warbler	
Yellow-throated Warbler	
Prothonotary Warbler	
Common Yellowthroat	
Yellow-breasted Chat	
Summer Tanager	
Scarlet Tanager	
Northern Cardinal	
Blue Grosbeak	
Indigo Bunting	
Eastern Towhee	
Chipping Sparrow	
Field Sparrow	
Lark Sparrow	
Song Sparrow	
Red-winged Blackbird	
Orchard Oriole	
Baltimore Oriole	
Eurasian Tree Sparrow	

Table 45. Host Species of Brown-headed Cowbirds in Sangamon County (1970–2010)

Orchard Oriole

Icterus spurius

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1258/634 (37)	1357/675 (37)	136/78 (24)	0/0	2751/1387
Average/day	1.98	2.01	1.74		1.98
Average/season	34.0	36.68	5.67		

Status: Uncommon Migrant and Summer Resident

Dates:

- Spring: Earliest arrival = April 18, 1992 ♂ south of Lake Springfield Average arrival (36 years) w/range April 18 – May 6 = April 27
- Fall:Average departure (36 years) w/range July 13 September 20 = August 16Latest departure = September 20, 1984 Knapp Lake

Males almost always arrived first in **spring**, some being obvious second year plumaged birds. Their song seemed a jumbled bunch of notes, some melodic and others harsh, and both adult and second year males sang. Orchard Orioles usually arrived in late April, but I had nine arrival dates in May. Other early spring arrivals were all April 19 for the years; 1996, 2002, and 2006. The average arrival of the first female for eleven years was May 5 and the earliest was April 26, 2006. High counts were usually 2 – 8 with maximum counts being: 9, May 9, 1981; 10, May 9, 1998; and 9, May 12, 1999. In spring, these orioles were usually associated with flowering trees, and occasionally I saw some females with red pollen on their faces from probing flowers, as at Oak Ridge May 12, 1996. On the BBS, this oriole ranked 47th of summer residents and was recorded in 28 of 31 years. Its status stayed about the same on the BBS. High counts in summer were 3 – 8, but there were 10, June 21, 1986 and June 16, 1987. On June 4, 1998 at Sangchris one was feeding on periodical cicadas. Nest building was noted between May 21 – June 16 by the females. Some of the older females showed chestnut color ventrally, usually just a few spots or blotches. A female was feeding young in the nest on June 10, 1993. Fledged young were being fed June 21 – July 12 and in one case by the male, female and second year male (helper at the nest). On July 10, 1977, July 14, 1993, and June 29, 2000 females were seen feeding young cowbirds. Singing stopped in July, and I had cessation of singing July 21, 2000; July 23, 1999 with the latest being July 29, 1996. Some years these orioles disappeared in July, but I had 10 years in which they stayed into September. The years (about half) this oriole left early was probably due to dry conditions and or a poor crop of wild black cherries. Since Orchard Orioles molted in the tropics, they did not usually linger very long in the north and hence the fall numbers were 9.3 times less than spring numbers. They liked weedy fields in fall and (family?) groups were sometimes seen, most of which were the yellow females and juveniles, such as six on August 15, 2009 at Wahl Road. High counts for fall were 7, August 1, 1993 and 8, July 24, 2002. Besides the late departure above there were three, September 13, 1998 north of Bradfordton and one, September 18, 2007 at Sangchris. The subspecies is the northern I. s. spurious. The Orchard Oriole winters from Mexico south to northern South America.

Documentation: Specimens = 2) IL. Sangamon Co., ISM# 660357 adult 3° , $\frac{1}{2}$ mi north Buckhart, July 19, 1993 coll. by HDB, wt. 24.7 gms, testes = 13 mm, gizzard with caterpillars; ISM# 661924 immature 3° , 2 mi west Glenarm, June 22, 2009, coll. by Claire Roscetti, wt. = 21.7 gms, testes = 8.5 mm, gizzard with sawflies.

Highest # Days/Season

Spring35 (1992)Summer41 (2000)Fall9 (1993)

Highest # Birds/Season

Spring125 (1999)Summer100 (2000)Fall18 (2000)

Baltimore Oriole

Icterus galbula

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	5374/1092 (37)	3793/1211 (37)	4260/1031 (37)	1/1 (1)	13428/3335
Average/day	4.92	3.13	4.13	1.0	4.03
Average/season	145.24	102.51	115.14	1.0	

Status: Common Migrant and Summer Resident and Very Rare in Winter

Dates:

Spring: Earliest arrival = April 19, 2002 ♂ Sangchris Average arrival (36 years) w/range April 19 – May 2 = April 25

Fall:Average departure (37 years) w/range September 4 – October 10 = September 14
Latest departure = October 10, 2005 immature ♂ Carpenter Park
(note also stragglers)

The Baltimore Oriole, a gorgeous song bird, had managed to survive and even increased in the county. The most numbers were found at Lake Springfield and along the Sangamon River. Spring arrival was in April, although it arrived four times in May in the 1970s probably due to inclement weather. Other early arrivals were April 20, 1992, 1994, & 2006. The average spring arrival for females was April 30 for 9 years of data. High counts in spring were: 25, May 6, 1986; 35, April 28, 1989; 25, May 6, 1994; and 27, May 10, 2003. On April 28, 1989 there were 12 orioles mobbing a Barred Owl at Carpenter Park. In May 1997, many orioles were probing the flowers of tulip trees; and mulberries were later utilized as food on May 30, 2005. This oriole was recorded 29 of the 31 years on the BBS and was ranked 41 (the Orchard Oriole ranked 47). The Baltimore Oriole increased on the Sangamon River Census. High summer counts were 19, June 13, 1978 and 25, June 11, 1998. Orioles build a woven bag for a nest, and these last through the winter. On February 8, 1999 I found two (!) that were made of blue string maybe their favorite color. Competition was noted when three males were all singing in the same tree on June 15, 2006. Copulation was seen on May 21, 1981 and May 14, 2005. An oriole was seen chasing a cowbird May 22, 1993. Nest building took place April 28 – June 29 (second brood?) and was done by the female. Young were being fed in the nest from May 21 to June 22, and fledged young were seen June 16 to July 24. A female was with two young cowbirds July 9, 2002. Orioles started singing soon after arrival in spring, but were one of the earliest to quit usually by July 4. There was sporadic singing until July 31, with the latest songs on August 11, 1999 and August 28, 2000. Molt was noticed in adults from July 21 to August 5. Fall migration started early, probably in late July and coincided with the fruiting of wild black cherry trees, which the orioles feed on. At Sangchris orioles were being chased out of cherry trees by flocks of starlings on July 30, 2001. Flocks of Baltimore Orioles could be seen migrating such as 24 (all immatures) moving along Lake Springfield July 25, 2000. An adult male tv tower kill east of Springfield September 2, 1972 had been banded near Delta, Manitoba on May 26, 1969 (ISM# 605250). High fall counts were: 20, September 3, 1976; 37 (mostly tv tower kills), September 3, 1981; 27, August 17, 2001; and 30, August 28, 2002. Some stragglers were found (two into the winter period): male, Washington Park, December 11, 1975; male, south of Springfield, November 30,

1990; male with injured wing, Farmingdale, November 30, 1993, and an immature female, Lake Springfield, December 4, 2009 (photograph). A possible male hybrid with Bullock's Oriole (*I. bullockii*) was seen May 3, 1986 at the Cinder Flats, and an immature male probable Bullock's Oriole was seen at Oak Ridge Cemetery on May 20, 1997 (neither counted in the totals). Also a very atypical female Baltimore Oriole was observed at Lake Springfield May 25, 2007 (drawing on file ISM). Baltimore Orioles winter from Mexico south to northern South America and the Greater Antilles.

Documentation: Specimens = 46) IL. Sangamon Co., Spring = 9 all $\Diamond \Diamond$, LSpfld (3) & tv tower (2) & north Spfld (2) & southeast Spfld & Co., May 1 – 28, wts. = 31.2 – 39.5 gms, testes = 9 – 15 mm; Summer = 1 juvenile \Diamond , 2 mi east New City, June 18, 2001, wt. = 34.3 gms, gizzard with mulberries; Fall = 36, adult $\Diamond \Diamond$ = 12, all tv tower, September 2 – 14, wts. = 35.0 - 48.7 gms; immature $\Diamond \Diamond$ = 8, all tv tower, September 2 – 8, wts. = 34.6 – 44.5 gms; adult $\bigcirc \bigcirc$ = 9, tv tower (8) & Spfld, August 29 – September 13, wts. = 31.1 – 42.6 gms; immature $\bigcirc \bigcirc$ = 7, tv tower (6) & south Spfld, August 12 – September 3, wts. = 31.1 – 44.9 gms.

Highest # Days/Season

Spring42 (2006)Summer57 (2000)Fall42 (1982)Winter1 (1975)

Highest # Birds/Season

Spring321 (2006)Summer287 (2000)Fall250 (1999)Winter1 (1975)

Pine Grosbeak

Pinicola enucleator

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	0/0	0/0	0/0	6/6 (1)	6/6
Average/day				1.0	1.0
Average/season					

Status: Very Rare Winter Resident

Dates: One Record: adult ♂ north of Springfield near airport February 7 – 20, 1985.

When I first glimpsed this bird it was so bright I thought it was a tanager. It spished into a crab apple tree in which it fed for several days and was easy to approach. The grosbeak also fed on buds of Scotch Pine. The birds arrival coincided with a cold snap of minus twelve degrees F. This winter finch periodically erupted south of its normal range, but very seldom to this latitude. It breeds in the coniferous zone in the extreme northern US including the mountains in the western US, Alaska and Canada. This was probably the subspecies *P. e. leucurus* from the north since it was pinkish-red, had red flanks, and black marks on the back.

Documentation: Photographic: IL. Sangamon Co., DO, plus notes HDB - on file ISM.

Purple Finch

Carpodacus purpureus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	1812/585 (37)	0/0	2809/932 (36)	1136/407 (35)	5757/1924
Average/day	3.10		3.01	2.79	2.99
Average/season	48.97		78.03	32.46	

Status: Uncommon Migrant and Winter Resident

Dates:

- Fall:Earliest arrival = August 30, 1972 & 1976 Carpenter Park
Average arrival (37 years) w/range August 30 October 24 = September 24
- Spring: Average departure (38 years) w/range April 19 May 15 = May 2 Latest departure = May 15, 1984 south of Springfield

In the early years of the study, the Purple Finch would have been considered common, but with the coming of the House Finch things changed. These species were closely related and by 1987 had divided the habitat (competitive displacement). The House Finch took urban and suburban areas and the Purple Finch was left with the rural habitat, but of course there was some overlap (see Figure 31). Purple Finch numbers, which fluctuated greatly in a given year, were lower in both good and bad years after the arrival of the House Finch. Also arrival and departure dates were less extreme. No Purple Finches were found in the fall of 2002 or the winters of 1994-95 and 2002-03. In fall these finches could be seen in ash trees feeding on the winged seeds, and 14 were feeding in the top of a tulip tree November 20, 2005. I noted some birds in molt in September. Many of these finches could be detected by their dry 'tic' call note, and the warble of their song seemed to be heard at any season. The only fall arrivals in August were those above, the rest were in September (22 years) and October (12 years). High counts for fall were: 30, October 27 & 28, 1975; 25, October 19, 1980; 21, October 13, 1985; and 20, November 25, 2005. Winter numbers were lower than fall numbers as some birds went further south. High counts for winter were: 16, December 16, 1980, 20, February 2, 1985; and 17, December 23, 1990. These birds commonly used bird feeders, now mostly in rural areas. Those that had gone further south returned in March and April feeding on the tree buds. Adult and immatures (female plumaged) males did much singing in spring. High Counts for spring were: 40, April 16, 1976; 20, March 3, 1977; 20, April 25, 1981; and 18, April 23, 2004. Spring numbers were lower than fall (1 to 1.6). Most years they departed in May (21 years), but sometimes it was in April (16 years). Other late departures in spring were May 13, 1974 and May 14, 1978. Purple Finches in the east breed in the northern US and south and central Canada. The nominate subspecies was present in the county.

Documentation: Specimens = 18) IL. Sangamon Co., Fall = 4, $\partial \partial = 3$, 2 mi north Spfld, October 14 – November 5, wts. = 23.1 – 26.4 gms; Q = 1, 2 mi north Spfld, October 15,1975, wt. = 24.4 gms; Winter = 8, $\partial \partial = 2$, Spfld, December 4 – February 6, no wt.; Q = 6, Spfld (5) & 2 mi north Spfld, December 15 – February 15, wts. = 24.0 – 25.5 gms; Spring = 5, $\partial = 1$, Spfld, March 22,1982, wt. = 31.5 gms, testes = 3.5 mm; Q = 4, LSpfld (2) & 2 mi north Spfld & 3 mi south Spfld, March 23 – April 25, wts. = 21.3 - 28.9 gms, ovaries = 4.5 - 6 mm; plus Q? = 1, banded November 6, 1975, 2 mi north Spfld and recovered at Lincoln, Logan Co. in 1976 (no month or day).

Highest # Days/Season		<u>Highest</u>	<u>Highest # Birds/Season</u>		
Spring	48 (1977)	Spring	320 (1976)		
Fall	52 (1975)	Fall	373 (1975)		
Winter	43 (1976)	Winter	130 (1982)		

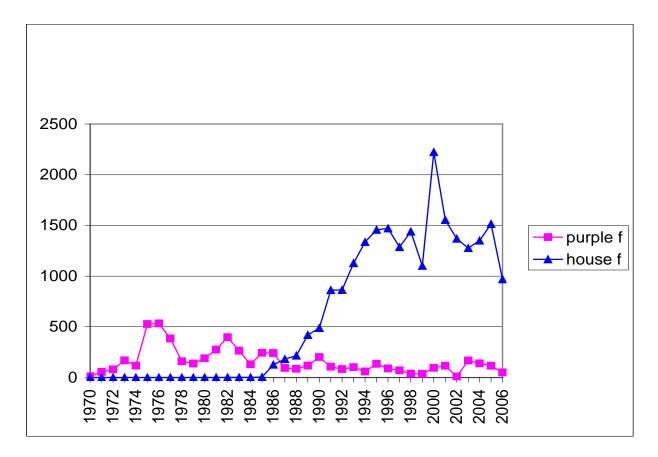


Figure 31. Purple and House Finch Numbers by Year.

House Finch

Carpodacus mexicanus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	4544/1415 (23)	2700/782 (23)	8766/1489 (22)	7032/941 (23)	23042/4627
Average/day	3.21	3.45	5.89	7.47	4.98
Average/season	197.57	117.39	398.45	305.74	

Status: Introduced, first recorded in 1982, now a Common Permanent Resident

Dates: (see text for migration)

The first twelve years of the study the House Finch was not present in the county, my first record was at a feeder in Springfield of an adult male, July 18, 1982 (E.Snider). The House Finch was a western species that was introduced on Long Island, New York about 1940, and then the population began expanding back westward. It recently had become a familiar bird to anyone with a bird feeder in Sangamon County. They were also found feeding in ash trees and in other natural situations. High counts for spring were 20, March 2, 2003 and 18, March 12, 2005. These counts usually occurred before these finches broke up into pairs. It was 1986 before any numbers were seen in **summer** and nests were found. The males started singing in late January or February, and nest building was seen March 31 and April 9. They preferred artificial places for their nests such as window awnings, hanging baskets, and small spruce trees. A nest with four eggs in the top of a small spruce was at Washington Park on April 24, 2005. Most young were seen between May 26 and July 17. High counts in summer were: 16, July 18, 1993; 21, July 1, 1999; 17, June 11, 2000; and 22, June 17, 2001. Migration developed rapidly in this species, and it was usually detected in **fall** when flocks were migrating over Marine Pt., such as 87 flying south October 7, 1994; 97, October 18, 1994; 72, October 23, 1995; and 60, September 27, 1996. This migration was not observed recently, because of the human sprawl at the lake. Some stayed for winter usually at feeders. High winter counts were: 25, January 12, 1988; 75, January 3, 1994; 60, December 21, 1997; and 55, February 1, 2002. The House Finch apparently competed with the Purple Finch, and they divided the habitat by 1987 (see Figure 31) with the House Finch taking urban and suburban areas (unfortunately increasing) and the Purple Finch the rural areas. Some House Finches were in molt in September, and singing lasted until August 4, 1985. On September 11, 2005 a flock of 80 House Finches were feeding in a sunflower field. Yellow variants rarely occurred, but I photographed one at Lake Springfield on December 31, 2008. The subspecies is C. m. frontalis which was introduced from California to the East Coast.

Highest # Days/Season Spring 89 (1999)

 Spring
 89 (1999)

 Summer
 52 (2000)

 Fall
 98 (1995)

 Winter
 71 (2003)

Highest # Birds/Season

Spring396 (1995)Summer280 (2000)Fall797 (2000)Winter758 (2000)

Red Crossbill

Loxia curvirostra

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	53/20 (6)	0/0	194/42 (12)	181/28 (12)	428/90
Average/day	2.65		4.62	6.46	4.76
Average/season	8.83		16.17	15.08	

Status: Occasional and Irregular Migrant and Winter Resident, and attempted to Breed

Dates:

Fall:Earliest arrival = August 9, 1972 ten Oak Ridge Cemetery
Average arrival (15 years) w/range August 9 – January 15 = November 6

Spring: Average departure (7 years) w/range February 16 – May 23 = April 12 Latest departure = May 23, 1976 3 ♂4♀ Rochester Cemetery

These small, chunky finches behaved like small parrots, feeding on cones of pine and hemlock while sometimes hanging upside down. Red Crossbills could usually be found by their loud chip notes. The main areas in which they were found in the county were Oak Ridge Cemetery and Lake Springfield. These birds occasionally attended feeders and sometimes foraged in deciduous trees like sweet gum and apple, besides conifers. In the 37 years of the study, this crossbill invaded the county only 9 times (1972-73, 1973-74, 1975-76, 1981-82, 1984-85, 1986, 1987, 1990, 1999-00). The largest numbers were in 1972 –73 when a total of 173 birds were seen (see Figure 32). Most arrived in **fall** in October (5 years) and November (6 years), but note the very early record above for August. Other early fall arrivals were a female October 5, 1975 and one October 14, 1982. Occasionally, crossbills were not seen until winter such as one, December 16, 1996 and four, January 15, 1998. The crossbills frequently stayed into the spring, but several years the influx ended in December. Other late departures were 5, May 1, 1974 and a female, May 8, 1982. In seven years only a single sighting occurred, these were not considered flight years. The last sighting of the study was a male at a feeder, January 13, 2001 at Lake Springfield. High daily counts were: 50, December 10, 1972 and 37, November 11, 1986. In 1976 two nesting attempts were made in spring at Oak Ridge Cemetery. On March 15 a female was building a nest in a cedar tree, but it was abandon on March 22, at which time another nest was found in an Austrian pine. The female sat on the nest from March 28 until April 9, when she was found dead on the nest. Most Red Crossbills nest in the northern coniferous zone or the western mountains of North America. Other spring departures were 5, May 1, 1974 and a female, May 8, 1982 all at Oak Ridge Cemetery. Since the study ended, one female was seen (in the addendum) along Lake Springfield November 25, 2007. This species had become very rare (only one bird in nine years) like many northern finches. Several subspecies could have occurred here, the one specimen appears to be L. c. bendirei, and I probably saw a male small billed subspecies, maybe L. c. minor at Oak Ridge on October 17, 1999. Plus, other subspecies should be looked for. However, identification could be a problem, but digital cameras might help.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 660158 $\stackrel{\frown}{\circ}$, New Berlin, December 10, 1990, coll. by Huffman, wt. = 36.9 gms, testes = 1 mm.

<u>Highest # Days/Season</u>		Highest # Birds/Season
Spring	9 (1976)	Spring 22 (1976)
Fall	9 (1972)	Fall 70 (1972)
Winter	6 (1981)	Winter 97 (1972)

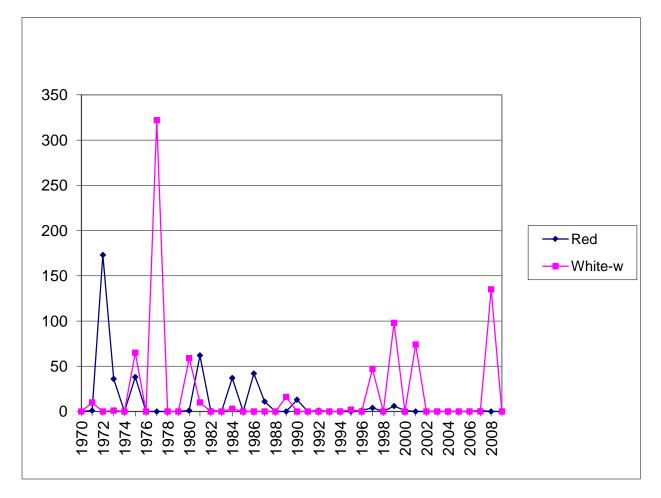


Figure 32. Crossbill Numbers in Sangamon County 1970–2009

White-winged Crossbill

Loxia leucoptera

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	42/10 (6)	0/0	82/14 (8)	583/69 (11)	707/93
Average/day	4.20		5.86	8.45	7.60
Average/season	7.0		10.25	53.0	

Status: Rare and Irregular Migrant and Occasional Winter Resident.

Dates:

- Fall:Earliest arrival = November 6, 1977 ♂♀ Oak Ridge Cemetery
Average arrival (12 years) w/range November 6 February 12 = December 6
[if February dates were excluded average arrival = November 21]
- Spring: Average departure (10 years) w/range December 15 May 7 = April 6 Latest departure = May 7, 1981 ♂♀ Oak Ridge Cemetery

When the White-winged Crossbill did occur, it usually appeared in November, but occasionally it was December or even February before I found them. Other early fall arrivals were females November 8, 1973 and November 9, 1984. The flight years were: 1972 (small flight); 1975 -1976 (moderate flight); 1977 –1978 (largest flight during study); 1980 – 1981 (moderate flight with a small echo flight arriving in February in 1982); 1989 (a small flight); 1997 - 1998 (moderate flight); 1999 – 2000 (fairly large flight); 2001 – 2002 (moderate flight); and in the addendum another large flight in 2009 (see Figure 32). Plus, there were years with only one or two birds (1973, 1984, 1995). There were no crossbills between March 2, 2002 and January 24, 2009. Like other winter finches, they did not appear as often more recently, although the reasons were not clear. High counts for fall/winter were 40, November 25, 1977; 50, December 11&12, 1977; 15, January 20, 1997; 15, December 16, 1999; and 30, February 16, 2009. These crossbills fed mostly in conifers on the cones of Hemlock (the principal tree), spruce and occasionally pine. However, I had seen them in deciduous trees such as maple, sycamore, hickory, and sweet gum. They were at times very noisy, calling and flying about and even landing on the ground and feeding on cones that had fallen. These crossbills were sometimes quite tame, and I had approached within a foot of some birds. Also, they could be almost silent, detectable only by hearing the crunch of conifer cones. They infrequently came to water, and I photographed four males at a puddle at Washington Park January 4, 2002 and saw four taking baths at Oak Ridge Cemetery January 23, 1976. Males in some cases perched in the tip top of a conifer and called or sang. In Sangamon County, the most inhabited area by these birds was Oak Ridge Cemetery because of the variety of conifers, especially the hemlocks; but these trees were dying out and took many years to replace. Other areas included Island Grove Cemetery, Camp Butler and Leland Grove. Most flocks contained the pinkish red adult males, the greenish yellow females, and the streaked younger birds; but all had white wingbars. They were uncommonly seen with Red Crossbills or Pine Siskins. High counts toward spring were low, but there were 8, March 14 & 22, 1981 and 8, March 2, 2002. Some went to feeders making them difficult to find. The late spring date above was unique, others departed in winter or March (three years) and April (two years). The April dates were female, April 7, 1972 and two, April 1, 1978. The White-winged

Crossbill breeds in Canada and Alaska, and the subspecies in North America is the nominate form.

Documentation: Specimens = 2) IL. Sangamon Co., adult 33 = 2, Oak Ridge Cemetery, November 25, 1977, coll. by HDB, wts. = 36.0 - 37.1 gms, testes = 1.5mm.

Highest #Days/Season

 Spring
 4 (1981)

 Fall
 4 (2001)

 Winter
 18 (1977)

Highest # Birds/Season Spring 25 (1981)

 Fall
 47 (1977)

 Winter
 272 (1977)

Common Redpoll

Carduelis flammea

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	215/13 (5)	0/0	13/6 (3)	262/56 (11)	490/75
Average/day	16.54		2.17	4.68	6.53
Average/season	43.0		4.33	23.82	

Status: Occasional and Irregular Migrant and Winter Resident

Dates:

- Fall:Earliest arrival = November 17, 1991 four Lake SpringfieldAverage arrival (12 years) w/range November 17 January 19 = December 20
- Spring: Average departure (7 years) w/range January 19 March 28 = March 2 Latest departure = March 28, 1978 Oak Ridge Cemetery

This small streaked winter finch with a red crown and a black throat patch was usually found in winter in northern Illinois, but Common Redpolls seldom made it as far south as Sangamon County. I recorded it only 13 years and mostly in small numbers. The larger influxes occurred in 1972, 1976, 1977-78 and lesser influxes were 1981-82 and 1991-92. More recently from 1993 to 2006 very few were seen, and there were none in the addendum. Another early fall arrival was four, November 19, 1993 at Lake Springfield, but some arrivals occurred in mid-winter. High counts for winter/ early spring were: 14, January 31, 1972; 20, February 28, 1972; 83, March 23, 1972; 14, January 15, 1976; 13, January 6, 1978; 95, March 19, 1978; and 12, January 19, 1992. Most of the birds found were feeding in birch and hemlock, but they also were in sweet gum, alders, cedars, and on the ground feeding on grasses and weeds (goldenrod). Towards spring, they fed on budding trees such as elm. From March 9 to 17, 1978, I discovered several roosting in small spruce trees covered with snow south of Springfield. Occasionally, they were in the company of Pine Siskins or goldfinches. Frequently redpolls gave chuck notes while in flight. Redpolls also attended feeders, but I seldom heard of these sightings in time to see the birds. Another late spring departure was March 22, 1982 south of Springfield. The last sightings in the study were one at Carpenter Park January 17, 2005 and two birds at Washington Park November 20, 2006 eating honeysuckle berries. Common Redpolls breed in northern Canada and Alaska. The subspecies, based on the two specimens below is the nominate form, but C. f. rostrata could also possibly occur.

Documentation: Specimens = 2) IL. Sangamon Co., ISM# 606325 adult \bigcirc , LSpfld, February 27, 1976, coll. by HDB, wt. = 12.4 gms, ovary = 4 mm; ISM# 606709 adult \bigcirc , 5 mi south Spfld, January 29, 1978, coll. by HDB, wt. = 11.6 gms, ovary 2.5 mm.

Highest # Days/Season		<u>Highest</u>	Highest # Birds/Season		
Spring	6 (1978)	Spring	123 (1978)		
Fall	4 (1991)	Fall	7 (1991)		
Winter	16 (1977)	Winter	74 (1971)		

Pine Siskin

Carduelis pinus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	2517/631 (27)	1/1 (1)	3190/471 (33)	4082/457 (28)	9790/1560
Average/day	3.99	1.0	6.77	8.93	6.28
Average/season	93.22	1.0	96.67	145.79	

Status: Fairly Common and Irregular Migrant and Winter Resident and Very Rare Summer Resident

Dates:

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Fall:Earliest arrival = September 28, 1979 Lincoln Gardens<br/>Average arrival (33 years) w/range September 28 – November 10 = October 15
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Spring: Average departure (28 years) w/range February 9 – June 2 = May 4 Latest departure = June 2, 1978 Oak Ridge Cemetery

This was a small finch with streaks, a pointed bill, and yellow in the wing that was found in conifers and deciduous trees like sweet gum, birch and alders. Pine Siskins usually attended feeders and could be difficult to find if these feeders were not known. The most prevalent month of arrival in **fall** was October (30 years), but there were four other times of arrival with dates, September 28, 1979, September 29, 1993, November 10, 1982, and December 9, 2005. Siskins were missed four years in fall (1970, 1988, 2002, 2005), ten times in winter (1970, 1974, 1976, 1978, 1982, 1994, 1996, 2002, 2006, 2008), and ten times in spring (1971, 1975, 1980, 1983, 1989, 1995, 1997, 1999, 2001, 2003). Years of larger influx were: 1972, 1975, 1977, 1980, 1981, 1983, 1985, 1987, 1989, 1993, 1997, plus 2008 (see Figure 33). Note that after 1997 numbers were lower to the end of the study (2010) with moderate years in 1999, 2001, and 2004. These fluctuations were caused by availability of seed crop to the north, and feeders might play a role in the decision of movement of these birds. Probably some siskins migrated to this county every year, but some years the numbers were so low that I did not detect them. High daily counts for fall were: 100, October 9, 1972; 100, November 6, 1976; 100, November 1, 1981; 80, October 31, 1989; and 70, October 25, 2008. By winter siskins were mostly at feeders, but Oak Ridge Cemetery provided the best spot for observation because of the hemlocks with their small cones. High counts for winter were: 75, December 4, 1980; 92, January 1, 1986; 70, January 2, 1998; and 52, December 31, 2008. Sometimes a portion or most of these birds passed on south and then in early **spring** (March) there was a return flight. High counts for spring were: 30, April 21, 1974; 15, May 1, 1981; 33, April 30, 1984; and 30, March 9, 1990. Spring numbers were lower than fall numbers (1 to 1.3). I noted some potential nesting activities: 1976) April 16 - 22 at Oak Ridge, nest in larch, adults feeding young; 1978) three seen May 27 and one June 2 at Oak Ridge; 1981) March 23 one adult feeding another at Lake Refuge; 1982) April 18 one with nesting material at Oak Ridge; 1985) March 12 – 22 a nest in Austrian Pine at Washington Park and female on nest; 1987) March 19 adult with nest material at Lake Refuge and feeding each other at Oak Ridge; 1992) April 28 probable nesting at Oak Ridge; 1994) February 17 paired and singing at Lake Refuge and February 18 paired and March 24 nest building at Oak Ridge; 1996) May 26 pair built nest and then abandoned it at Oak Ridge; 1998) March 22 nest building at Oak

Ridge and April 10 nest at Washington Park; and 2002) April 7 nest building at Oak Ridge. Only one bird made it into the **summer** period (1978) see above. The Pine Siskin breeds mainly in the coniferous zone in the northern US, Canada, Alaska and the western mountains. The nominate subspecies is the bird found in the county. However, a female listed below is much buffier and the streaks were blurred and brownish (not blackish), and this tv tower kill could be *C. p. vagans* from western North America.

Documentation: Specimens = 3) IL. Sangamon Co., ISM# 605803 adult \Diamond , Oak Ridge Cemetery, January 9, 1991, coll. by HDB, wt. = 13.5 gms, testes = 1 mm; ISM# 605803 adult \Diamond , tv tower, October 29, 1973, coll. by HDB, wt. = 12.7 gms, ovary = 3 mm; ISM# 660752 immature \Diamond , Chatham, no date 2002, coll. by M. Gilreath, wt. = 14.6 gms, testes = 1 mm.

<u>Highest</u>	# Days/Season	Highest	# Birds/Season
Spring	56 (1990)	Spring	279 (1982)
Summer	1 (1978)	Summer	1 (1978)
Fall	37 (1977)	Fall	397 (1977)
Winter	43 (1989)	Winter	409 (1997)

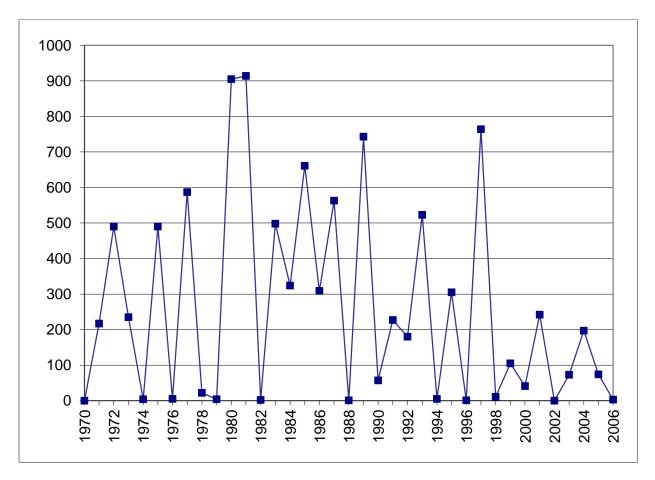


Figure 33. Pine Siskin Numbers by Year (Year = Fall, Winter, and Spring).

American Goldfinch

Carduelis tristis

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	21699/2640 (37)	9641/1578 (37)	48690/3725 (37)	16781/1997(37)	96811/9940
Average/day	8.22	6.11	13.07	8.40	9.74
Average/season	586.46	260.57	1315.95	453.54	

Status: Common Migrant and Permanent Resident

Dates:

- Spring: Earliest arrival = March 25, 2000 Sangamon Co. (arbitrary due to PR) Average arrival (25 years) w/range March 25 – May 5 = April 11
- Fall:Average departure (8 years) w/range November 13 30 = November 21Latest departure = November 30, 2006 Sangamon Co. (arbitrary due to WR)

This small finch was found all year in the county (in all 148 seasons), but much migration occurred and it was difficult to access exact dates and timing in many seasons. Occasionally, migration was obvious such as October 19, 1980 when flocks were moving along the bluff of the Sangamon River northwest of Springfield. Also, American Goldfinches were a common sight in small flocks over Marine Pt., especially when 525 were migrating on November 15, 1991. There were many winters when it was clear that the numbers had diminished due to migration. Goldfinches were over twice (2.2 times) as numerous in fall as spring, but this might have been due to production of young. They were found in most habitats, but in open brushy or grassy weedy areas most often. High counts for spring were: 200, May 1, 1977; 103, March 8, 1986; and 91, April 25, 1992. In spring they fed on dandelions in large numbers. I noticed males started to show bright color (alternate plumage) between February 27 and April 9, with most in late March. The starting of song began February 27 and by early April large flocks were twittering in the trees. As many as 13 were still in a flock on June 4, 2004 at Buckhart. It was seen on all 31 years of the BBS and numbers increased on the Sangamon River Census. The highest summer count was 50, June 18, 2000. Nest building was seen May 13 and July 25, this finch being a notably late nester. I had egg numbers and dates of (4) August 1 and (5) August 27 and September 2. Young were in the nest August 19 to September 28, and fledged young were seen from August 7 to October 7. The late dates of singing were August 24, 1999 and August 27, 2000, but some adults remained in bright coloration even into October. The last three or four years of the study, there was a small decrease in numbers. I saw goldfinches eating algae (or moss?) on two occasions in fall (August 18 and September 19), and this might explain why they were observed on mudflats and near water so often. They also were observed in large flocks at sunflower fields in **fall** and early winter as well as at feeding stations. High fall counts were: 400, October 24, 1981; 350, October 22, 1983; 430, October 28, 1994; and 390, October 12, 2001. In winter they were found, as were other finches, in hemlock, birch, and sweet gum. Nearly all these birds were dull colored in winter, some formed large flocks, and many attended thistle feeders at this season. High counts for winter were: 105, February 9, 1995; 200, February 1, 1996; and 100, January 1, 2002. The subspecies in eastern North America and the county is the nominate form.

Documentation: Specimens = 26) IL. Sangamon Co., $\Im \Im = 17$, adult $\Im \Im = 10$, February 17 – November 25, wts. = 11.6 – 15.2 gms, testes = 1 – 7 mm; immature $\Im \Im$ (including one bob-tail juvenile) = 7, August 15 – January 14, wts. = 10.9 – 14.6 gms; $\Im \Im = 9$, adult $\Im \Im = 5$, May 22 – October 21, wts. = 9.5 – 12.5 gms, ovaries = 2 – 5 mm (ISM# 606667-October 18 still mostly in very worn alternate plumage, but showing some molt); immature $\Im \Im = 4$, September 6 – November 12, wts. = 11.3 – 13.7 gms.

Highest # Days/Season

 Spring
 92 (2000) maxed

 Summer
 61 (2001) maxed

 Fall
 122 (2006) maxed

 Winter
 78 (1997)

Highest # Birds/Season

Spring	1098 (2000)
Summer	681 (2000)
Fall	3047 (2001)
Winter	1311 (1995)

Evening Grosbeak

Coccothraustes vespertinus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	214/84 (7)	0/0	449/44 (8)	268/61 (8)	931/189
Average/day	2.55		10.20	4.39	4.93
Average/season	30.57		56.13	33.50	

Status: Irregular Occasional Migrant and Winter Resident

Dates:

- Fall:Earliest arrival = October 20, 1985 seven east SpringfieldAverage arrival (9 years) w/range October 20 December 11 = November 9
- Spring: Average departure (7 years) w/range April 26 May 22 = May 12 Latest departure = May 22, 1978 ♀ Carpenter Park

This beautiful, large and interesting finch was found in the study from the winter of 1972 to the fall of 1991 (see Figure 34). The plumage of the Evening Grosbeak was unmistakable, and it had distinctive call notes, so the fact that it had not been recorded for the last 18 years was quite mysterious. It could be that these birds stayed further north recently (due to climate change?) or the population was much smaller (maybe there was a population surge that lasted ten years?) or that there was sufficient food further north (especially with increased feeders) and no need for migration. In fall, flocks of these birds would migrate over Marine Pt. especially in 1975 and 1977. This phenomena stopped when the area was built up with houses and the Pt. became a hang out for humans (in fact not only did grosbeaks stop migrating over the Pt. all land birds were affected. So it seemed that what happened on the ground might affect where birds migrate?). Also, it should be noted that this grosbeak became rare over most of its winter range. Other early fall arrivals were: 40, November 2, 1977 at Carpenter Park; one, November 2, 1980 at Lake Springfield; one, November 8, 1981 at Gergens Park; and 8, October 29, 1983 along Mechanicsburg Road. High counts for fall were: 57, October 30, 1975; 51, November 2, 1975; 50, November 5, 1977; and 80, November 12, 1977. Some grosbeaks passed through this area, but others stayed for winter usually associated with feeders. High counts for winter were: 12, December 11, 1977; 11, January 5 & 14, 1981; and 10, January 31, 1984. Many times they would feed on ash seeds and juniper berries. In the winter of 1980-81, a flock stayed at my feeder south of Springfield. In spring some returning birds would be found in bottomland forest such as Carpenter Park, where they tended to stay in the tops of tall trees usually eating the buds. High counts for spring were: 7, April 12, 1981; 6, April 7, 1984; and 6, April 15, 1986. Other late spring departures were May 10, 1981, 1984, & 1986. The last record in the study was a female, November 12, 1991 at Lake Springfield. Evening Grosbeaks breed in the coniferous zone in the northern US and Canada. The subspecies is the eastern nominate form.

Documentation: Specimen = 1) IL. Sangamon Co., ISM# 606717 adult \bigcirc , north side Spfld, March 9, 1978, coll. by B.Steffan, wt. = 46.4 gms, ovary = 6 mm.

<u>Highest</u>	# Days/Season	<u>Highest # Birds/Season</u>	
Spring	41 (1981)	Spring	122 (1981)
Fall	9 (3 years)	Fall	222 (1977)
Winter	32 (1980)	Winter	196 (1980)

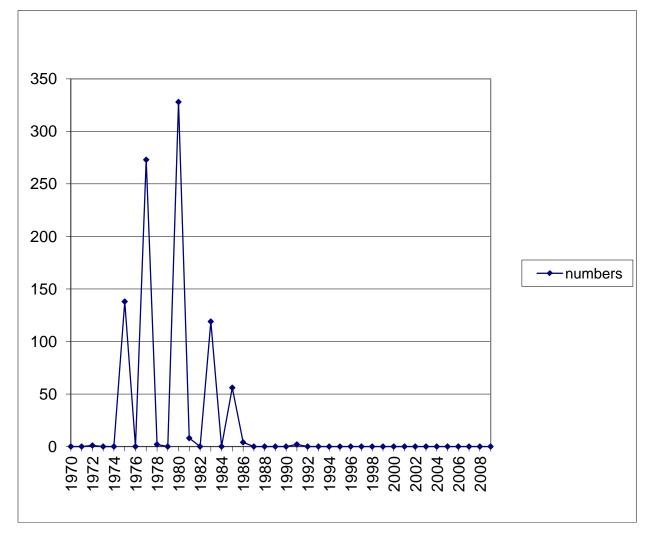


Figure 34. Numbers of Evening Grosbeaks

House Sparrow

Passer domesticus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	Х	Х	Х	Х	thousands
Average/day					
Average/season					

Status: Common Permanent Resident

This was another introduced bird on which I did not keep daily numbers, but it was probably in the top 10 - 15 species in numbers and days observed in this study. The House Sparrow was released in Illinois in 1868 and was established as early as 1886, but as far as I know there was no data on its first occurrence in Sangamon County. A set of eggs was taken by A. D. DuBois in Sangamon County on June 8, 1890 (Cornell University # 47024). House Sparrows compete with native species for nest sites and food and were adapted to humans. The only areas where they did not occur were deep woods such as Carpenter Park, but then they made inroads even there when houses were built on the golf course next to the park. There were 300 feeding on a ball diamond at Center Park September 16, 1980 and a flock of 600 were near Bissell December 11, 1976. In the BBS (a roadside survey), this species was ranked as number one, but some lowering of numbers occurred in 1989, with a slight increase in 1997 – 1999. These weaver finches (they were not really sparrows) broke up into pairs in April to breed though some nested in clusters. Copulation was noted April 25, 2007, and nest building was seen April 12, 2005. They compete with bluebirds. Purple Martins and probably any cavity nesting species including Cliff Swallows under Lindsay Bridge. Many young appeared in early June and July when they began to flock. Migration was not observed, but they probably dispersed when flocking in early fall or when pairing in spring. Some severe winters dead sparrows were found under roost sites. Several leucistic birds were seen: August 2, 1981; August 8, 1982; and November 3, 1982. Plus, there were others not noted, and see specimens below. The subspecies in North America is the nominate form from Europe (England and Germany).

Documentation: Specimens = 22) IL. Sangamon Co., $\Diamond \Diamond = 9$, January 30 – November 13, wts. = 27.9 – 33.2 gms, testes = 1.5 – 9 mm (juvenile albino \Diamond , Spfld, July 30, 1969); $\bigcirc \bigcirc = 13$, Sangamon Co., January 10 – November 10, wts. = 22.2 – 31.5 gms, ovaries = 1.5 – 9 mm (juvenile leucistic, brown eyes, \bigcirc , Spfld, August 13, 1971).

Eurasian Tree Sparrow

Passer montanus

	Spring (yrs)	Summer (yrs)	Fall (yrs)	Winter (yrs)	Totals
# birds / # days	3061/992 (34)	1440/490 (30)	5390/985 (34)	4334/696 (36)	14225/3163
Average/day	3.09	2.94	5.47	6.23	4.50
Average/season	90.03	48.0	158.53	120.39	

Status: Introduced and now Uncommon Permanent Resident

Though I did not keep numbers on most introduced birds, this one was interesting and had an odd distribution. It was introduced at St. Louis, Missouri in 1870 from Germany and by 1957 it was established in Sangamon County. The first Sangamon County record was at New Berlin on May 17, 1953 (W.Robertson). I first encountered two of these birds ten miles west of Springfield on November 12, 1970, and most were seen west of Springfield for the next several years. Numbers were very low until 1976, and by 1978 I saw them at Carpenter Park and Washington Park. In 1979 they were seen east to New City and Sangchris. By the late 1970s, they could be found almost anywhere in the county. From 1977 to 2006 I recorded them in every season, although they remained sporadic and uncommon. In winter, they tended to flock and stayed near feeders or other areas with grain, but in spring they broke up into pairs and apparently wandered to find nest sites. On the BBS it was found on about half of the surveys. High counts for summer were 30: July 25, 1989; July 10, 2000; and July 15, 2004. The main habitat was rural with hedgerows, willow areas, and farmyards. They nested in cavities like holes in fence posts, woodpecker holes especially in willow, and bird boxes. A pair was at a fence post nest site as early as February 15, 2006, and the male was singing. Copulation was noted from March 17 -July 4, and nest building was seen from April 7 to June 28. Young were seen out of the nest between June 13 and August 17. Adults were attending a cowbird August 13, 2004 at Buckhart. This finch probably competed with Prothonotary Warblers for nest sites in willows, considering I observed this at Carpenter Park on May 22, 1996. High counts for all seasons were: 120, January 12, 1980; 100, August 23, 1985; 100, November 28, 1986; 43, March 3, 2001; 90, November 19, 2001; and 80, December 21, 2002. One specimen had both testes and ovary (see below). The subspecies in North America is the nominate form.

Documentation: Specimens = 12) IL. Sangamon Co., $\bigcirc \bigcirc = 7$, January 11 – November 17, wts. = 16.4 – 22.8 gms, testes = 1 – 7 mm; $\bigcirc \bigcirc = 4$, Sangamon Co., January 23 – December 31, wts. = 19.4 – 23.9 gms, ovaries = 1 – 12 mm; gynandromorph = 1, southwest Spfld, March 19, 1986, wt. = 23.0 gms, testes = 3.5 mm & ovary = 7 mm.

Highest # Days/Season

 Spring
 50 (1995 & 2005)

 Summer
 33 (2005)

 Fall
 65 (1987)

 Winter
 44 (2000)

Highest # Birds/Season

Spring263 (2001)Summer188 (2004)Fall497 (1987)Winter351 (2000)

APPENDIX A.

AComplete List of the Birds of Sangamon County (from old and recent records)

S= specimen P= photograph X= sight record R = regular V = not regular H = hypothetical E = extinct or extirpated [] = old record

Red-throated Loon|Gavia stellata (Pontoppidan)|RP Pacific Loon|Gavia pacifica (Lawrence)|VP Common Loon|Gavia immer (Brünnich)|RS Pied-billed Grebe|Podilymbus podiceps (Linnaeus)|RS Horned Grebe|Podiceps auritus (Linnaeus)|RP Red-necked Grebe|Podiceps grisegena (Boddaert)|VP Eared Grebe|podiceps nigricollis Brehm|RP Western Grebe|Aechmophorus occidentalis (Lawrence)|VP Clark's Grebe|Aechmophorus clarkii (Lawrence)|VX American White Pelican|Pelecanus erythrorhynchos Gmelin|RS Neotropic Cormorant|Phalacrocorax brasilianus (Gmelin)|VP Double-crested Cormorant|Phalacrocorax auritus (Lesson)|RS [Anhinga | Anhinga anhinga (Linnaeus) | HX] American Bittern|Botaurus lentiginosus (Rackett)|RS Least Bittern|Ixobrychus exilis (Gmelin)|RS Great Blue Heron|Ardea herodias Linnaeus|RS Great Egret|Ardea alba (Linnaeus)|RP Snowy Egret|Egretta thula (Molina)|RP Little Blue Heron|Egretta caerulea (Linnaeus)|RP Tricolored Heron|Egretta tricolor (Müller)|VX Cattle Egret|Bubulcus ibis (Linnaeus)|RP Green Heron Butorides virescens (Linnaeus) RS Black-crowned Night- Heron Nycticorax nycticorax (Linnaeus) RS Yellow-crowned Night- Heron Nyctanassa violacea (Linnaeus) RP Glossy Ibis|Plegadis falcinellus (Linnaeus)|VP White-faced Ibis|Plegadis chihi (Vieillot)|VP [Wood Stork|Mycteria Americana Linnaeus|VS?] Black Vulture Coragyps atratus (Bechstein) VP Turkey Vulture|Cathartes aura (Linnaeus)|RS Greater White-fronted Goose Anser albifrons (Scopoli) RS Snow Goose|Chen caerulescens (Linnaeus)|RS Ross's Goose|Chen rossii (Cassin)|RS Cackling Goose|Branta hutchinsii (Richardson)|RP

Canada Goose|Branta canadensis (Linnaeus)|RS Brant/Branta bernicla (Linnaeus)|VX Mute Swan|Cygnus olor (Gmelin)|RS Trumpeter Swan|Cygnus buccinator Richardson|VP Tundra Swan|Cygnus columbianus (Ord)|RP Wood Duck Aix sponsa (Linnaeus) RS Gadwall|Anas strepera Linnaeus|RS Eurasian Wigeon Anas penelope Linnaeus VP American Wigeon Anas americana Gmelin RS American Black Duck Anas rubripes Brewster RP Mallard Anas platyrhynchos Linnaeus RS Mottled Duck Anas fulvigula Ridgway VP Blue-winged Teal|Anas discors Linnaeus|RS Cinnamon Teal|Anas cyanoptera Vieillot|VP Northern Shoveler Anas clypeata Linnaeus RP Northern Pintail Anas acuta Linnaeus RP Green-winged Teal|Anas crecca Linnaeus|RS Canvasback|Aythya valisineria (Wilson)|RS Redhead|Aythya americana (Eyton)|RS Ring-necked Duck|Aythya collaris (Donovan)|RS Tufted Duck|Aythya fuligula (Linnaeus)|VP Greater Scaup|Aythya marila (Linnaeus)|RP Lesser Scaup|Aythya affinis (Eyton)|RS King Eider|Somateria spectabilis (Linnaeus)|VP Harlequin Duck|Histrionicus histrionicus (Linnaeus)|VP Surf Scoter|Melanitta perspicillata (Linnaeus)|RP White-winged Scoter|Melanitta fusca (Linnaeus)|RS Black Scoter|Melanitta nigra (Linnaeus)|RP Long-tailed Duck|Clangula hyemalis (Linnaeus)|RP Bufflehead|Bucephala albeola (Linnaeus)|RS Common Goldeneye|Bucephala clangula (Linnaeus)|RS Barrow's Goldeneye|Bucephala islandica (Gmelin)|VX Hooded Merganser|Lophodytes cucultatus (Linnaeus)|RS Common Merganser Mergus merganser Linnaeus RP Red-breasted Merganser|Mergus serrator Linnaeus|RS Ruddy Duck|Oxyura jamaicensis (Gmelin)|RS Osprey|Pandion haliaetus (Linnaeus)|RS White-tailed Kite|Elanus leucurus (Vieillot)|VX Mississippi Kite|Ictinia mississippiensis (Wilson)|VP Bald Eagle|Haliaeetus leucocephalus (Linnaeus)|RS Northern Harrier|Circus cyaneus (Linnaeus)|RS Sharp-shinned Hawk|Accipiter striatus Vieillot|RS Cooper's Hawk|Accipiter cooperii (Bonaparte)|RS Northern Goshawk Accipiter gentilis (Linnaeus) RS Red-shouldered Hawk|Buteo lineatus (Gmelin)RP Broad-winged Hawk|Buteo platypterus (Vieillot)|RP

Swainson's Hawk Buteo swainsoni Bonaparte RP Red-tailed Hawk|Buteo jamaicensis (Gmelin)|RS Rough-legged Hawk Buteo lagopus (Pontoppidan) RS Golden Eagle|Aquila chrysaetos (Linnaeus)|RS American Kestrel|Falco sparverius Linnaeus|RS Merlin|Falco columbarius Linnaeus|RS Gyrfalcon|Falco rusticolus Linnaeus|VP Peregrine Falcon Falco peregrinus Tunstall RP Prairie Falcon|Falco mexicanus Schlegel|VX Ring-necked Pheasant|Phasianus colchicus Linnaeus|RS [Ruffed Grouse|Bonasa umbellus (Linnaeus)EX] [Greater Prairie-Chicken|Tympanuchus cupido (Linnaeus)| ES] Wild Turkey Meleagris gallopavo Linnaeus RP Northern Bobwhite|Colinus virginianus (Linnaeus)|RS Yellow Rail|Coturnicops noveboracensis (Gmelin)|RS Black Rail|Laterallus jamaicensis (Gmelin)|VX King Rail|Rallus elegans Audubon|RS Virginia Rail|Rallus limicola Vieillot|RS Sora|Porzana carolina (Linnaeus)|RS Purple Gallinule|Porphyrio martinica (Linnaeus)|VP Common Moorhen|Gallinula chloropus (Linnaeus)|RS American Coot|Fulica americana Gmelin|RS Sandhill Crane|Grus canadensis (Linnaeus)|RP Black-bellied Plover|Pluvialis squatarola (Linnaeus)|RP American Golden-Plover|Pluvialis dominicus (Müller)|RS Snowy Plover|Charadrius alexandrinus Linnaeus|VP Semipalmated Plover|Charadrius semipalmatus Bonaparte|RS Piping Plover|Charadrius melodus Ord|RS Killdeer|Charadrius vociferus Linnaeus|RS Black-necked Stilt|Himantopus mexicanus (Müller)|RP American Avocet|Recurvirostra americana Gmelin|RP Greater Yellowlegs|Tringa melanoleuca (Gmelin)|RS Lesser Yellowlegs|Tringa flavipes (Gmelin)|RS Solitary Sandpiper|Tringa solitaria Wilson|RS Willet|Catoptrophorus semipalmatus (Gmelin)|RP Spotted Sandpiper Actitis macularius (Linnaeus) RS Upland Sandpiper|Bartramia longicauda (Bechstein)|RS Whimbrel|Numenius phaeopus (Linnaeus)|VP Hudsonian Godwit|Limosa haemastica (Linnaeus)|RP Marbled Godwit|Limosa fedoa (Linnaeus)|RP Ruddy Turnstone|Arenaria interpres (Linnaeus)|RP Red Knot|Calidris canutus (Linnaeus)|VP Sanderling|Calidris alba (Pallas)|RP Semipalmated Sandpiper|Calidris pusilla (Linnaeus)|RS Western Sandpiper|Calidris mauri (Cabanis)|RP Least Sandpiper|Calidris minutilla (Vieillot)|RS

White-rumped Sandpiper Calidris fuscicollis (Vieillot) RS Baird's Sandpiper|Calidris bairdii (Coues)|RS Pectoral Sandpiper|Calidris melanotos (Vieillot)|RS Dunlin|Calidris alpina (Linnaeus)|RS Stilt Sandpiper|Calidris himantopus (Bonaparte)|RP Buff-breasted Sandpiper|Tryngites subruficollis (Vieillot)|RS Ruff|Philomachus pugnax (Linnaeus)|VX Short-billed Dowitcher|Limnodromus griseus (Gmelin)|RS Long-billed Dowitcher|Limnodromus scolopaceus (Say)|RP Wilson's Snipe|Gallinago delicata (Linnaeus)|RS American Woodcock|Scolopax minor Gmelin|RS Wilson's Phalarope|Phalaropus tricolor (Vieillot)|RP Red-necked Phalarope|Phalaropus lobatus (Linnaeus)|RS Red Phalarope|Phalaropus fulicarius (Linnaeus)|VP Pomarine Jaeger|Stercorarius pomarinus (Temminck)|VP Parasitic Jaeger|Stercorarius parasiticus (Linnaeus)|VX Long-tailed Jaeger|Stercorarius longicaudus Vieillot|HX Laughing Gull|Larus atricilla Linnaeus|RS Franklin's Gull|Larus pipixcan Wagler|RP Little Gull|Larus minutus Pallas|VP Bonaparte's Gull|Larus philadelphia (Ord)|RS Mew Gull|Larus canus Linnaeus|VX Ring-billed Gull|Larus delawarensis Ord|RS California Gull|Larus californicus Lawrence|VP Herring Gull|Larus argentatus Pontoppidan|RS Thaver's Gull|Larus thaveri Brooks|VP Iceland Gull|Larus glaucoides Meyer|VP Lesser Black-backed Gull|Larus fuscus Linnaeus|RP Western Gull|Larus occidentalis Audubon|HX Glaucous-winged Gull|Larus glaucescens Naumann|VP Glaucous Gull|Larus hyperboreus Gummerus|RP Great Black-backed Gull|Larus marinus Linnaeus|VP Sabine's Gull|Xema sabini (Sabine)|RS Black-legged Kittiwake|Rissa tridactyla (Linnaeus)|VS Ivory Gull|Pagophila eburnea (Phipps)|VP Caspian Tern|Sterna caspia Pallas|RS Common Tern|Sterna hirundo Linnaeus|RP Arctic Tern|Sterna paradisaea Pontoppidan|VP Forster's Tern|Sterna forsteri Nuttall|RP Least Tern|Sterna antillarum (Lesson)|RP Black Tern|Chlidonias niger (Linnaeus)|RP Black Skimmer Rynchops niger Linnaeus VP Rock Pigeon|Columba livia Gmelin|RS Band-tailed Pigeon|Columba fasciata Say|VP Eurasian Collared-Dove|Streptopelia decaocto (Frivaldszky)|RP White-winged Dove|Zenaida asiatica(Linnaeus)|VP

Mourning Dove|Zenaida macroura (Linnaeus)|RS [Passenger Pigeon|Ectopistes migratorius (Linnaeus)|ES] Common Ground Dove|Columbina passerina (Linnaeus)|VX Monk Parakeet|Myiopsitta monachus (Boddaert)|VS [Carolina Parakeet|Conuropsis carolinensis (Linnaeus)|EX] Black-billed Cuckoo|Coccyzus erythropthalmus (Wilson)|RS Yellow-billed Cuckoo|Coccyzus americanus (Linnaeus)|RS Barn Owl|Tyto alba (Scopoli)|VS Eastern Screech-Owl|Megascops asio (Linnaeus)RS Great Horned Owl|Bubo virginianus (Gmelin)|RS Snowy Owl|Bubo scandiacus (Linnaeus)|RS Burrowing Owl|Athene cunicularia (Molina)|VX Barred Owl|Strix varia Barton|RS Long-eared Owl|Asio otus (Linnaeus)|RS Short-eared Owl|Asio flammeus (Pontoppidan)|RS Northern Saw-whet Owl|Aegolius acadicus (Gmelin)|RS Common Nighthawk|Chordeiles minor (Forster)|RS Chuck-will's-widow|Caprimulgus carolinensis Gmelin|VS Whip-poor-will|Caprimulgus vociferus Wilson|RS Chimney Swift|Chaetura pelagica (Linnaeus)|RS Ruby-throated Hummingbird|Archilochus colubris (Linnaeus)|RS Rufous Hummingbird|Selasphorus rufus (Gmelin)|VS Belted Kingfisher|Ceryle alcyon (Linnaeus)|RS Red-headed Woodpecker|Melanerpes erythrocephalus (Linnaeus)|RS Red-bellied Woodpecker|Melanerpes carolinus (Linnaeus)|RS Yellow-bellied Sapsucker|Sphyrapicus varius (Linnaeus)|RS Downy Woodpecker|Picoides pubescens (Linnaeus)|RS Hairy Woodpecker|Picoides villosus (Linnaeus)RS Northern Flicker|Colaptes auratus (Linnaeus)|RS Pileated Woodpecker|Dryocopus pileatus (Linnaeus)|RS Olive-sided Flycatcher|Contopus cooperi (Nuttall)|RS Western Wood-Pewee|Contopus sordidulus Sclater|HX Eastern Wood-Pewee|Contopus virens (Linnaeus)|RS Yellow-bellied Flycatcher Empidonax flaviventris (Baird and Baird) RS Acadian Flycatcher|Empidonax virescens (Vieillot)RP Alder Flycatcher|Empidonax alnorum Brewster|RS Willow Flycatcher Empidonax traillii (Audubon) RS Least Flycatcher|Empidonax minimus (Baird and Baird)|RS Eastern Phoebe|Sayornis phoebe (Latham)RS Say's Phoebe|Sayornis saya (Bonaparte)|VP Vermilion Flycatcher|Pyrocephalus rubinus (Boddaert)|VP Ash-throated Flycatcher|Myiarchus cinerascens (Lawrence)|VS Great Crested Flycatcher|Myiarchus crinitus (Linnaeus)|RS Western Kingbird|Tyrannus verticalis Say|VP Eastern Kingbird|Tyrannus tyrannus (Linnaeus)|RS Scissor-tailed Flycatcher|Tyrannus forficatus (Gmelin)|VP

Loggerhead Shrike|Lanius ludovicianus Linnaeus|VS Northern Shrike|Lanius excubitor Linnaeus|VP White-eyed Vireo Vireo griseus (Boddaert) RS Bell's Vireo Vireo bellii Audubon RS Yellow-throated Vireo Vireo flavifrons VieillotRS Cassin's Vireo Vireo cassinii Xantus|VP Blue-headed Vireo Vireo solitarius (Wilson) RS Warbling Vireo Vireo gilvus (Vieillot) RS Philadelphia Vireo Vireo philadelphicus (Cassin) RS Red-eyed Vireo Vireo olivaceus (Linnaeus) RS Blue Jay|Cyanocitta cristata (Linnaeus)|RS American Crow|Corvus brachyrhynchos Brehm|RS Horned Lark Eremophila alpestris (Linnaeus) RS Purple Martin|Progne subis (Linnaeus)|RS Tree Swallow|Tachycineta bicolor (Vieillot)|RS Northern Rough-winged Swallow|Stelgidopteryx serripennis (Audubon)|RS Bank Swallow|Riparia riparia (Linnaeus)|RS Cliff Swallow|Petrochelidon pyrrhonota Vieillot|RS Barn Swallow|Hirundo rustica Linnaeus|RS Black-capped Chickadee|Poecile atricapillus (Linnaeus)|RS Tufted Titmouse|Baeolophus bicolor (Linnaeus)|RS Red-breasted Nuthatch|Sitta canadensis Linnaeus|RS White-breasted Nuthatch|Sitta carolinensis Latham|RS Brown Creeper|Certhia americana Bonaparte|RS Carolina Wren|Thryothorus ludovicianus (Latham)|RS Bewick's Wren/Thryomanes bewickii (Audubon)|RX House Wren|Troglodytes aedon Vieillot|RS Winter Wren|Troglodytes troglodytes (Linnaeus)|RS Sedge Wren|Cistothorus platensis (Latham)|RS Marsh Wren|Cistothorus palustris (Wilson)|RS Golden-crowned Kinglet Regulus satrapa Lichtenstein RS Ruby-crowned Kinglet|Regulus calendula (Linnaeus)|RS Blue-gray Gnatcatcher|Polioptila caerulea (Linnaeus)|RP Eastern Bluebird|Sialia sialis (Linnaeus)RS Mountain Bluebird|Sialia currucoides (Bechstein)|VP Townsend's Solitaire Mvadestes townsendi (Audubon) VS Veery|Catharus fuscescens (Stephens)|RS Gray-cheeked Thrush|Catharus minimus (Lafresnaye)|RS Swainson's Thrush|Catharus ustulatus (Nuttall)|RS Hermit Thrush|Catharus guttatus (Pallas)|RS Wood Thrush|Hylocichla mustelina (Gmelin)|RS American Robin|Turdus migratorius Linnaeus|RS Varied Thrush/Ixoreus naevius (Gmelin)|VS Gray Catbird|Dumetella carolinensis (Linnaeus)|RS Northern Mockingbird|Mimus polyglottos (Linnaeus)|RS Brown Thrasher|Toxostoma rufum (Linnaeus)|RS

European Starling|Sturnus vulgaris Linnaeus|RS American Pipit|Anthus rubescens (Tunstall)|RS Sprague's Pipit|Anthus spragueii (Audubon)|VX Bohemian Waxwing|Bombycilla garrulus (Linnaeus)|VS Cedar Waxwing|Bombycilla cedrorum Vieillot|RS Blue-winged Warbler|Vermivora pinus (Linnaeus)|RS Golden-winged Warbler|Vermivora chrysoptera (Linnaeus)|RS Tennessee Warbler/Vermivora peregrina (Wilson)|RS Orange-crowned Warbler/Vermivora celata (Say)|RS Nashville Warbler|Vermivora ruficapilla (Wilson)|RS Northern Parula|Parula americana (Linnaeus)|RS Yellow Warbler|Dendroica petechia (Linnaeus)|RS Chestnut-sided Warbler|Dendroica pensylvanica (Linnaeus)|RS Magnolia Warbler|Dendroica magnolia (Wilson)|RS Cape May Warbler Dendroica tigrina (Gmelin) RS Black-throated Blue Warbler|Dendroica caerulescens (Gmelin)|RS Yellow-rumped Warbler|Dendroica coronata (Linnaeus)|RS Black-throated Gray Warbler|Dendroica nigrescens (Townsend)|VX Black-throated Green Warbler|Dendroica virens (Gmelin)|RS Hermit Warbler|Dendroica occidentalis (Townsend)|HX Blackburnian Warbler|Dendroica fusca (Müller)|RS Yellow-throated Warbler/Dendroica dominica (Linnaeus)|RS Pine Warbler Dendroica pinus (Wilson) RS [Kirtland's Warbler|Dendroica kirtlandii (Baird)|VX] Prairie Warbler/Dendroica discolor (Vieillot)|RS Palm Warbler|Dendroica palmarum (Gmelin)|RS Bay-breasted Warbler|Dendroica castanea (Wilson)|RS Blackpoll Warbler|Dendroica striata (Forster)|RS Cerulean Warbler|Dendroica cerulea (Wilson)|RS Black-and-white Warbler|Mniotilta varia (Linnaeus)|RS American Redstart|Setophaga ruticilla (Linnaeus)|RS Prothonotary Warbler|Protonotaria citrea (Boddaert)|RS Worm-eating Warbler|Helmitheros vermivorum(Gmelin)|RS Ovenbird|Seiurus aurocapilla(Linnaeus)|RS Northern Waterthrush|Seiurus noveboracensis (Gmelin)|RS Louisiana Waterthrush/Seiurus motacilla (Vieillot)|RS Kentucky Warbler|Oporornis formosus (Wilson)|RS Connecticut Warbler Oporornis agilis (Wilson) RS Mourning Warbler|Oporornis philadelphia (Wilson)|RS Common Yellowthroat|Geothlypis trichas (Linnaeus)|RS Hooded Warbler|Wilsonia citrina (Boddaert)|RS Wilson's Warbler|Wilsonia pusilla (Wilson)|RS Canada Warbler|Wilsonia canadensis (Linnaeus)|RS Yellow-breasted Chat|Icteria virens (Linnaeus)|RS Summer Tanager|Piranga rubra (Linnaeus)|RS Scarlet Tanager|Piranga olivacea (Gmelin)|RS

Western Tanager|Piranga ludoviciana (Wilson)|VX Spotted Towhee|Pipilo maculatus Swainson|RS Eastern Towhee|Pipilo erythrophthalmus (Linnaeus)|RS American Tree Sparrow|Spizella arborea (Wilson)|RS Chipping Sparrow|Spizella passerina (Bechstein)|RS Clay-colored Sparrow/Spizella pallida (Swainson)|RS Field Sparrow|Spizella pusilla (Wilson)|RS Vesper Sparrow Pooecetes gramineus (Gmelin) RS Lark Sparrow Chondestes grammacus (Say) RS Lark Bunting|Calamospiza melanocorys Stejneger|VP Savannah Sparrow|Passerculus sandwichensis (Gmelin)|RS Grasshopper Sparrow|Ammodramus savannarum (Gmelin)|RS Henslow's Sparrow|Ammodramus henslowii (Audubon)|RP Le Conte's Sparrow/Ammodramus leconteii (Audubon)|RS Nelson's Sharp-tailed Sparrow Ammodramus nelsoni Allen RP Fox Sparrow|Passerella iliaca (Merrem)|RS Song Sparrow|Melospiza melodia (Wilson)|RS Lincoln's Sparrow|Melospiza lincolnii (Audubon)|RS Swamp Sparrow/Melospiza georgiana (Latham)|RS White-throated Sparrow|Zonotrichia albicollis (Gmelin)|RS Harris's Sparrow|Zonotrichia querula (Nuttall)|RS White-crowned Sparrow|Zonotrichia leucophrys (Forster)|RS Dark-eyed Junco Junco hyemalis (Linnaeus) RS Lapland Longspur|Calcarius lapponicus (Linnaeus)|RS Smith's Longspur|Calcarius pictus (Swainson)|RS Chestnut-collared Longspur|Calcarius ornatus (Townsend)|VP Snow Bunting|Plectrophenax nivalis (Linnaeus)|RS Northern Cardinal|Cardinalis cardinalis (Linnaeus)|RS Rose-breasted Grosbeak|Pheucticus ludovicianus (Linnaeus)|RS Black-headed Grosbeak|Pheucticus melanocephalus (Swainson)|VX Blue Grosbeak|Passerina caerulea (Linnaeus)|RP Lazuli Bunting|Passerina amoena (Say)|VX Indigo Bunting|Passerina cyanea (Linnaeus)|RS Dickcissel|Spiza americana (Gmelin)|RS Bobolink|Dolichonyx oryzivorus (Linnaeus)|RS Red-winged Blackbird|Agelaius phoeniceus (Linnaeus)|RS Eastern Meadowlark|Sturnella magna (Linnaeus)|RS Western Meadowlark|Sturnella neglecta Audubon|RP Yellow-headed Blackbird|Xanthocephalus xanthocephalus (Bonaparte|RP Rusty Blackbird Euphagus carolinus (Müller) RS Brewer's Blackbird|Euphagus cyanocephalus (Wagler)|RS Common Grackle/Quiscalus quiscula (Linnaeus)|RS Great-tailed Grackle|Quiscalus mexicanus (Gmelin)|VP Brown-headed Cowbird|Molothrus ater (Boddaert)|RS Orchard Oriole|Icterus spurius (Linnaeus)|RS Baltimore Oriole|Icterus galbula (Linnaeus)|RS

Pine Grosbeak|Pinicola enucleator (Linnaeus)|VP Purple Finch|Carpodacus purpureus (Gmelin)|RS House Finch|Carpodacus mexicanus (Müller)|RS Red Crossbill|Loxia curvirostra Linnaeus|VS White-winged Crossbill|Loxia leucoptera Gmelin|VS Common Redpoll|Carduelis flammea (Linnaeus)|VS Pine Siskin|Carduelis pinus (Wilson)|RS American Goldfinch|Carduelis tristis (Linnaeus)|RS Evening Grosbeak|Coccothraustes vespertinus (Cooper)|VS House Sparrow|Passer domesticus (Linnaeus)|RS Eurasian Tree Sparrow|Passer montanus (Linnaeus)|RS

Species = 361 (and five Hypothetical)

Bird species in brackets [] were not seen in present study.

APPENDIX B.

Sangamon County List Before 1970 (very few rarities have any documentation)
Red-throated Loon – Lake Springfield (?), May 5, 1946 (Eifert)
Common Loon
Pied-billed Grebe
Horned Grebe
Western Grebe – Lake Springfield, two, March 12, 1955 (Phillips); one, May 5 – 7, 1955 (many observers)
Double-crested Cormorant – Specimen ISM, Sangamon River NW, October 14, 1928 (HS Bernet)
[Anhinga – near Lake Springfield, May 23, 1942] hypothetical
American Bittern
Least Bittern – Berlin, June 1, 1943 (Robertson)
Great Blue Heron
Great Egret
Snowy Egret – Lake Springfield, Sept 9, 1944 (O'Brien)
Little Blue Heron
Green Heron
Black-crowned Night-Heron
Wood Stork – Specimen shot by P.A. Dorwin on Sangamon River near Springfield in August (no year) (R. Kennicott, 1854); Lake Springfield, September 27, 1952 (Bonney & Hopwood)
Snow Goose
Brant – Washington Park, September 25, 1928 (O'Brien)
Cackling Goose
Canada Goose
Wood Duck
Gadwall

American Wigeon

[Eurasian Wigeon – two seen Lake Springfield, March 20-27, 1949] hypothetical

American Black Duck

Mallard

Blue-winged Teal

Northern Shoveler

Northern Pintail

Green-winged Teal

Canvasback

Redhead

Ring-necked Duck

Greater Scaup

Lesser Scaup

Oldsquaw – Lake Springfield, December 1964 (CBC)

Bufflehead

Common Goldeneye

[Barrow's Goldeneye – Lake Springfield, March 26 & November12, 1939; January 2, 1942] hypothetical

Hooded Merganser

Common Merganser

Red-breasted Merganser

Ruddy Duck

Turkey Vulture

Osprey

Bald Eagle

Northern Harrier

Sharp-shinned Hawk

Cooper's Hawk

Northern Goshawk – two specimens ISM Collection, ♂ five miles east of Springfield, March 22, 1917 (AT Mitchell); ♀ north of Springfield, Novenber1, 1916 (JA Stark)

Red-shouldered Hawk
Broad-winged Hawk
Swainson's Hawk – Washington Park, October 28, 1942 (Eifert)
Red-tailed Hawk
Rough-legged Hawk
Golden Eagle – Specimen, Springfield, December 22, 1916 (received by K.W.Kahmann)
American Kestrel
Merlin
Peregrine Falcon – Berlin, May 31, 1942 (Robertson)
Ring-neck Pheasant
Turkey – Historical accounts
Ruffed Grouse – Historical accounts
Greater Prairie-Chicken – Specimen, Springfield, January 3, 1889 (Southern Illinois University collection)
Northern Bobwhite
Yellow Rail – Specimen ISM, ♀ Salisbury, October 3, 1899 (JW Nash); Sangamon Co., September 12, 1948
King Rail – nest west of Springfield, May 14, 1908 (DuBois,1921); Chatham Flats, May 1 & 16, 1942 (O'Brien & Hardbarger)
Virginia Rail
Sora
American Coot
Common Moorhen – Specimen (missing) South Springfield (no date1919 RP Taylor)
Black-bellied Plover – Sangamon Co. October 24, 1942
American Golden-Plover
Semipalmated Plover
Killdeer
Spotted Sandpiper
Solitary Sandpiper

Greater Yellowlegs
Willet – 21 observed Lake Springfield, May 3, 1951 (Eifert)
Lesser Yellowlegs
Upland Sandpiper
Hudsonian Godwit
Marbled Godwit – Lake Springfield, May 16, 1954 (O'Brien)
Sanderling – Lake Springfield, September 12, 1954 (O'Brien)
Semipalmated Sandpiper
Western Sandpiper – Lake Springfield, September 17, 1938 (Allyn)
Least Sandpiper
White-rumped Sandpiper
Baird's Sandpiper – Lake Springfield, September 6, 1943 (Robertson)
Pectoral Sandpiper
Dunlin
Stilt Sandpiper
Buff-breasted Sandpiper – Sangamon Co., May 7, 1950 (Eifert); Lake Springfield, September 14, 1952 (O'Brien)
Short-billed Dowitcher – Lake Springfield, May 16, 1942 (O'Brien & Hardbarger)
Wilson's Snipe
American Woodcock
Wilson's Phalarope – Lake Springfield, September 6, 1943 (Robertson)
Red-necked Phalarope – New Berlin, September 1, 1942 (Robertson & Bonney)
Franklin's Gull – Lake Springfield, October 21, 1943 (Bonney)
Bonaparte's Gull
Ring-billed Gull
Herring Gull
Black-legged Kittiwake – Lake Springfield, December 28, 1969 (Allyn)
Least Tern – three, Sangamon Co. September 14, 1947 (O'Brien & Allyn)

Caspian Tern

Black Tern

Common Tern

Forster's Tern

Rock Pigeon

Mourning Dove

Passenger Pigeon – immature specimen, near Buffalo Hart about 1867 (J.Leka)

Carolina Parakeet – Springfield along the Sangamon River in 1833 (Shirreff, 1835)

Yellow-billed Cuckoo

Black-billed Cuckoo

Barn Owl – Springfield, March 5, 1943

Eastern Screech-Owl

Great Horned Owl

Snowy Owl – Specimen ISM, near Sherman, December 24, 1917 (H Walker)

Barred Owl

Long-eared Owl – Washington Park, December 26, 1944 (Eifert), Nest & young, Lake Springfield, April 1946

Short-eared Owl

Northern Saw-whet Owl - Cotton Hill area, October 14, 1930 (Eifert)

Common Nighthawk

Chuck-will's-widow – Sangamon Co., April 29, 1945 (Eifert)

Whip-poor-will

Chimney Swift

Ruby-throated Hummingbird

Belted Kingfisher

Red-headed Woodpecker

Red-bellied Woodpecker

Yellow-bellied Sapsucker

Downy Woodpecker
Hairy Woodpecker
Northern Flicker
Pileated Woodpecker – first seen in 1948, with specific records in the 1950's
Olive-sided Flycatcher – Lake Springfield, May 16, 1954 (O'Brien & Allyn)
Eastern Wood-Pewee
Yellow-bellied Flycatcher
Acadian Flycatcher
Willow Flycatcher
Least Flycatcher
Eastern Phoebe
Great Crested Flycatcher
Western Kingbird – near Berlin, September 1, 1942: also west of Airport, September 10, 1943 (Wares); Lake Springfield, October 9 & 23, 1948 (O'Brien)
Eastern Kingbird
Blue Jay
American Crow
Horned Lark
Purple Martin
Tree Swallow
Northern Rough-winged Swallow
Bank Swallow
Cliff Swallow
Barn Swallow
Black-capped Chickadee
Tufted Titmouse
Red-breasted Nuthatch

Brown Creeper
Carolina Wren
Bewick's Wren – March 24, April, May, August, September 9, 1942; Many other records e.g. September 14, 1947 & May 9, 1948
House Wren
Winter Wren
Sedge Wren
Marsh Wren
Golden-crowned Kinglet
Ruby-crowned Kinglet
Blue-gray Gnatcatcher
Eastern Bluebird
Veery
Gray-cheeked Thrush
Swainson's Thrush
Hermit Thrush
Wood Thrush
American Robin
Varied Thrush - 👌 near Oak Ridge Cemetery, January 1969 (K. Watt)
Gray Catbird
Northern Mockingbird
Brown Thrasher
European Starling
American Pipit
Bohemian Waxwing – Sangamon Co., [July (?) 28, 1945 (Eifert)]; December 1961 (CBC)
Cedar Waxwing
Loggerhead Shrike – from March 2 – October 17, 1942
Northern Shrike – west Washington, December 26, 1944 (Eifert)

- White-eyed Vireo
- Bell's Vireo
- Yellow-throated Vireo
- Blue-headed Vireo
- Warbling Vireo
- Philadelphia Vireo
- Red-eyed Vireo
- Blue-winged Warbler
- Golden-winged Warbler
- Tennessee Warbler
- Orange-crowned Warbler
- Nashville Warbler
- Northern Parula
- Yellow Warbler
- Chestnut-sided Warbler
- Magnolia Warbler
- Cape May Warbler
- Black-throated Blue Warbler Lake Springfield, September 13, 1953 (O'Brien)
- Yellow-rumped Warbler
- Black-throated Green Warbler
- Blackburnian Warbler
- Yellow-throated Warbler
- Pine Warbler
- Kirtland's Warbler Washington Park, September 21, 1957 (O'Brien)
- Prairie Warbler
- Palm Warbler
- Bay-breasted Warbler
- Blackpoll Warbler

- Cerulean Warbler
- Black-and-white Warbler
- American Redstart
- Prothonotary Warbler
- Worm-eating Warbler
- Ovenbird
- Northern Waterthrush
- Louisiana Waterthrush
- Kentucky Warbler
- Connecticut Warbler
- Mourning Warbler
- Common Yellowthroat
- Hooded Warbler Oak Ridge Cemetery, May 13, 1930 (Eifert)
- Wilson's Warbler
- Canada Warbler
- Yellow-breasted Chat
- Summer Tanager Carpenter Park, May 1 14, 1944 (Bonney)
- Scarlet Tanager
- [Western Tanager Washington Park, April 25, 1953] hypothetical
- Northern Cardinal
- Rose-breasted Grosbeak
- Blue Grosbeak Northwest of Springfield 1957 (Allyn)
- Indigo Bunting
- Dickcissel
- Eastern Towhee
- American Tree Sparrow
- Chipping Sparrow
- Clay-colored Sparrow Sangamon Co., April 14 & October 17, 1942

Field Sparrow
Vesper Sparrow
Lark Sparrow
[Lark Bunting – no specific record found?, April & May] hypothetical
Savannah Sparrow
Grasshopper Sparrow
Henslow's Sparrow – Sangamon Co., April 29, 1942 (Eifert)
LeConte's Sparrow – March 22, 1942; Lake Springfield, September 12, 1954 (O'Brien)
Nelson's Sharp-tailed Sparrow
Fox Sparrow
Song Sparrow
Lincoln's Sparrow
Swamp Sparrow
White-throated Sparrow
Harris's Sparrow – October 16 & November 6, 1942; Sangamon Co., May 7, 1950 (Eifert)
White-crowned Sparrow
Dark-eyed Junco
Oregon Junco – Sangamon Co., March 15, 1933 & March 28, 1941 (Eifert) [Race of Dark-eyed Junco]
Lapland Longspur
[Chestnut-collared Longspur – Lake Springfield, July 8 (?), 1938] hypothetical
Snow Bunting – November 10, 1942
Bobolink
Red-winged Blackbird
Eastern Meadowlark
Western Meadowlark – Springfield Airport, May 17, 1952 & April 1953 (Kaszyuski)
Rusty Blackbird
Brewer's Blackbird – December 26, 1960 (CBC)

Common Grackle
Brown-headed Cowbird
Orchard Oriole
Baltimore Oriole
Purple Finch
Red Crossbill - two, Pleasant Plains, November 11, 1950 (O'Brien)
White-winged Crossbill – December 1963 (CBC)
Common Redpoll
Pine Siskin
American Goldfinch
Evening Grosbeak – Old Jacksonville Road, March 17, 1928 (Eifert)
House Sparrow
Eurasian Tree Sparrow – first county record, New Berlin, May 17, 1953 (Robertson)

= **272 species** + 1 race (and six hypothetical species)

Some species in brackets were not accepted because of lack of details, but could be correct. The author would be interested in any additional information for this time period.

APPENDIX C.

Birds Added to the Sangamon County List During the Study (1970-2010)

Pacific Loon Red-necked Grebe Eared Grebe Clark's Grebe American White Pelican Neotropic Cormorant Tricolor Heron Cattle Egret Yellow-crowned Night-Heron **Glossy Ibis** White-faced Ibis **Black Vulture** Greater White-fronted Goose Ross's Goose Mute Swan **Trumpeter Swan** Tundra Swan Eurasian Wigeon Mottled Duck Cinnamon Teal **Tufted Duck** King Eider Harlequin Duck Surf Scoter White-winged Scoter **Black Scoter** Barrow's Goldeneye White-tailed Kite Mississippi Kite Gyrfalcon Prairie Falcon Black Rail Purple Gallinule Sandhill Crane Snowy Plover **Piping Plover** Black-necked Stilt

American Avocet Whimbrel **Ruddy Turnstone** Red Knot Ruff Long-billed Dowitcher **Red Phalarope Pomarine Jaeger** Parasitic Jaeger Laughing Gull Little Gull Mew Gull California Gull Thayer's Gull **Iceland Gull** Lesser Black-backed Gull Glaucous-winged Gull **Glaucous Gull** Great Black-backed Gull Sabine's Gull **Ivory Gull** Arctic Tern **Black Skimmer Band-tailed Pigeon** Eurasian Collared-Dove White-winged Dove **Common Ground-Dove** Monk Parakeet **Burrowing Owl Rufous Hummingbird** Alder Flycatcher Say's Phoebe Vermilion Flycatcher Ash-throated Flycatcher Scissor-tailed Flycatcher Cassin's Vireo Mountain Bluebird

- Townsend's Solitaire Sprague's Pipit Black-throated Gray Warbler Western Tanager Black-headed Grosbeak Lazuli Bunting Spotted Towhee Lark Bunting
- Smith's Longspur Chestnut-collared Longspur Yellow –headed Blackbird Great-tailed Grackle Pine Grosbeak House Finch

Total = 88 Species

APPENDIX D.

Species Status Change in Sangamon County (1970-2006)

Species	Static	Increased	Decreased	Remarks	
Common Loon	Х				
Pied-billed Grebe			Х	Especially as a nesting species	
Horned Grebe	Х				
Am. White Pelican		Х		DDT recovery	
Double cr. Cormorant		Х		DDT recovery	
Am. Bittern			Х	No marsh habitat	
Least Bittern			Х	Last seen April 1995	
Great Blue Heron *		Х		DDT recovery	
Great Egret *		Х		DDT recovery	
Snowy Egret		Х		DDT recovery	
Little Blue Heron *			Х	Near end of study	
Cattle Egret	Х			Invaded, first seen 1972	
Green Heron	Х				
Black –cr.Night-Heron			Х	Near end of study	
Yellow-cr.Night-Heron			Х	Especially as a nesting species	
Turkey Vulture		Х		Formed roost & DDT recovery	
Gr. White Fr. Goose *		Х		1996	
Snow Goose *		Х		1994	
Ross's Goose		Х		From 0 in 1985	
Cackling Goose		Х		Most geese increase	
Canada Goose*		Х		Also introduced, increased as SR	
Wood Duck		Х		Nest boxes & adapted to urbanization	
Gadwall		Х		Adapted to sewer ponds	
Am. Wigeon			Х	Especially after 2001	
Am.Black Duck			Х	Especially after 1980	
Mallard			Х	Lower after 1998?	
Blue-winged Teal			Х	Slight, needs shallow water	
N. Shoveler	Х				
N. Pintail			Х	Near end of study	
Green-winged Teal			Х	Near end of study	
Canvasback		Х		Some, but started with low numbers	
Redhead		Х		But started with low numbers	
Ring-necked Duck		Х		About 1993	
Lesser Scaup			Х	slight	

Species	Static	Increased	Decreased	Remarks	
Long-tailed Duck			Х	About 2000	
Bufflehead			Х	Near end, changed timing	
Common Goldeneye	Х			Maybe drop toward end	
Hooded Merganser		Х		Especially summer residents	
Common Merganser	Х				
Red-br.Merganser	Х				
Ruddy Duck		Х		Especially in winter	
Osprey *		Х		DDT recovery	
Bald Eagle *		Х		DDT recovery	
N. Harrier			Х	Slight	
Sharp-sh.Hawk *			Х	Slight, competition?	
Cooper's Hawk *		Х		DDT recovery	
Red-should.Hawk		Х		DDT recovery especially nesting	
Broad-wing Hawk			Х	Especially in spring	
Red-tailed Hawk		Х		DDT recovery and adapted to urbanization	
Rough-leg Hawk *			Х	Slight after 1990	
Am. Kestrel		Х		Nest boxes & urbanization	
Peregrine Falcon		X		Introduced	
Ring-neck Pheasant			Х	Introduced exotic	
Wild Turkey		Х		Reintroduced	
N. Bobwhite			Х	Increase predation & habitat loss	
Yellow Rail			Х	No marsh	
King Rail			Х	No marsh	
Virginia Rail			Х	No marsh	
Sora			Х	about 2000	
Common Moorhen			Х	No marsh	
Am. Coot	Х			But nesting declined	
Sandhill Crane		Х		Slight	
Black-b Plover			Х	Especially near end	
Am. Golden-Plover			Х	Population decline	
Semipalmated Plover	Х			Numbers depended on habitat	
Killdeer		Х		adapted to urbanization	
Black-neck Stilt		Х		Flood dependent	
Am. Avocet	Х			Depended on flocks	
Spotted Sandpiper		Х		Especially in summer	
Solitary Sandpiper	Х				
Gr. Yellowlegs	Х				

Species	Static	Increased	Decreased	Remarks	
Willet	Х			Depended on flocks	
Lesser Yellowlegs	Х				
Upland Sandpiper			Х	No nesting by 1991	
Ruddy Turnstone	Х				
Sanderling	Х				
Semipalmat Sandpiper	Х				
Least Sandpiper	Х				
White-rump Sandpiper			Х	Habitat dependent	
Baird's Sandpiper			Х	After demise of Sediment Retention	
Pectoral Sandpiper			Х	About 2000	
Dunlin			Х	About 2000	
Stilt Sandpiper			Х	After demise of Sediment Retention	
Buff-br. Sandpiper			Х	About 2000	
Short-bill Dowitcher			Х	About 2000	
Long-bill Dowitcher			Х	About 1999 in fall	
Wilson's Snipe			Х	About 2001 in fall	
Am. Woodcock			Х	After 1994, habitat loss and predation	
Franklin's Gull	Х			Dependent on winds	
Bonaparte's Gull		Х		Most gulls increase	
Ring-billed Gull *		Х		Most gulls increase, also SR	
Herring Gull	Х			Depended on ice conditions	
Lesser Black-back Gull*		Х		From 0 in 1980, invaded	
Black-leg Kittiwake			Х	Population decline	
Caspian Tern		Х		More in summer	
Black Tern	Х			Mainly flybys	
Common Tern	Х			Mainly flybys	
Forster's Tern	Х			Mainly flybys	
Eurasian Coll-Dove		Х		From 0 in 2000, invaded	
Mourning Dove		Х		After 1992	
Black-bill Cuckoo			Х	1983	
Yellow-bill Cuckoo			Х	1985	
E. Screech Owl			Х	Nest sites & road kills	
Great horned Owl			Х	Near end – West Nile	
Barred Owl	Х			Some urban	
Short-ear Owl			Х	1987	
Com. Nighthawk			Х	Especially in summer & fall	
Whip-poor-will			Х	2002, loss of habitat, predators	
Chimney Swift			Х	Slightly	

Species	Static	Increased	Decreased	Remarks	
Ruby-thr. Hummingbird		Х		Feeders	
Belted Kingfisher		Х		Slightly, less shooting?	
Red-headed			Х	1985, needs dead trees	
Woodpecker*		X			
Red-bell. Woodpecker		Х		Adapted to residential areas	
Yellow-b.Sapsucker		Х		Near end	
Downy Woodpecker	X			Hole nesting	
Hairy Woodpecker	Х			Low numbers maintaining	
N. Flicker	Х			Hole nesting	
Pileated Woodpecker		Х		In more areas	
Olive-sided Flycatcher			Х	Predation by Cooper's Hawk?	
E. Wood-Pewee		Х		Slightly	
Yellow-bellied Flycatcher			Х	2000, most empids decline?	
Acadian Flycatcher			Х	Slightly, needs bottomland forest	
Alder Flycatcher	Х				
Willow Flycatcher			Х	As SR, needs willow areas	
Least Flycatcher			Х	1997	
E. Phoebe		Х		About 1992 as summer resident	
Gr. Crested Flycatcher	Х			Because hole nester	
E. Kingbird		Х		Adapted	
Loggerhead Shrike*			Х	Low at start, none at end	
White-eyed Vireo		Х		Early 1990's increased as SR	
Bell's Vireo		Х		Slight	
Blue-headed Vireo	Х				
Yellow-thr. Vireo		Х		Nest high in trees	
Warbling Vireo		Х		Nest high in trees	
Philadelphia Vireo			Х	Population decline?	
Red-eyed Vireo	Х				
Blue Jay*			Х	West Nile, coming back	
Am. Crow *			Х	West Nile, coming back	
Horned Lark			Х	Especially summer residents	
Purple Martin		Х		Houses provided	
Tree Swallow		Х		Hole nesting	
N. Rough-wing Swallow	Х				
Bank Swallow		Х		Increase nesting sites	
Cliff Swallow *		Х		Adapted to new nest sites	
Barn Swallow	Х				

Species	Static	Increased	Decreased	Remarks	
Black-cap.Chickadee*			Х	West Nile	
Tufted Titmouse*	Х			Variable, hole nest	
Red-br. Nuthatch*	Х			Much fluctuation	
White br. Nuthatch*		Х		Slightly, hole nest	
Brown Creeper			Х	Especially summer residents	
Carolina Wren *		Х		But dropped several times	
Bewick's Wren			Х	Rare before study, competition	
House Wren		Х		After 1987, urbanization	
Winter Wren			Х	Slightly at end	
Sedge Wren	Х			Variable	
Marsh Wren			Х	Marsh habitat gone	
Golden-cr. Kinglet			Х	Winter kill	
Ruby-cr Kinglet			Х	2000	
Blue-gray Gnatcatcher	Х			Dropped, then recovered	
E. Bluebird*		Х		About 1993 houses provided	
Veery			Х	Population decline?	
Gray-cheek Thrush			Х	Population decline?	
Swainson's Thrush	Х				
Hermit Thrush	Х			Increase in winter	
Wood Thrush			Х	Habitat loss & cowbirds	
Am. Robin		Х		Habitat created	
Gray Catbird			Х	Especially in fall in last half	
N. Mockingbird *			Х	Decrease 1977, increased 1990	
Brown Thrasher			Х	Near end	
Am. Pipit	Х			Irregular numbers	
Cedar Waxwing		Х		Especially summer residents	
Blue-winged Warbler		Х		Slight, moved north	
Golden-winged Warbler	Х			variable	
Tennessee Warbler			Х	Highest 1979-83	
Orange-cr. Warbler			Х	Slight	
Nashville Warbler			Х	1987	
N. Parula		Х		Near end, using smaller areas	
Yellow Warbler			Х	Near end, needs willow habitat	
Chestnut-side Warbler	Х				
Magnolia Warbler	Х			Variable	
Cape May Warbler		Х		Habitat determined	
Black-thr Blue Warbler	Х			Same low numbers in fall	
Yellow-rump Warbler	Х				

Species	Static	Increased	Decreased	Remarks	
Black-thr.Green Warbler			Х	Near end	
Blackburnian Warbler			Х	Especially in spring by 1998	
Yellow thr.Warbler	Х			Same low numbers	
Pine Warbler	Х			Same low numbers	
Palm Warbler	Х			Variable especially fall	
Bay-br.Warbler			Х	1987	
Blackpoll	Х			Variable	
Cerulean Warbler			Х	1980, extirpated as nesting species	
Black & white Warbler			Х	Near end	
Am. Redstart	Х			Variable, nesting declined	
Prothonotary Warbler			Х	Slight, nest sites destroyed	
Worm-eating Warbler			Х	Extirpated as summer resident	
Ovenbird			Х	1987	
N. Waterthrush			Х	Slight after 1985	
Louisiana Waterthrush	Х			low numbers, nesting habitat	
				disrupted	
Kentucky Warbler	X			Rather low numbers, needs forest	
Connecticut Warbler	Х			Same low numbers in spring	
Mourning Warbler			Х	2003	
Common Yellowthroat	Х			Lower numbers as summer resident	
Hooded Warbler	Х			Same low numbers in spring	
Wilson's Warbler	Х			Variable	
Canada Warbler			Х	1981 spring & 1990 fall	
Yellow-br.Chat			Х	Near end	
Summer Tanager *		Х		Moved north, climate change	
Scarlet Tanager	Х			Adapting to smaller areas of forest?	
N. Cardinal		Х		1979, climate change?	
Rose-br.Grosbeak			Х	1997, cowbirds?	
Blue Grosbeak *		Х		Moved north, climate change	
Indigo Bunting		Х		Slight	
Dickcissel			Х	Numbers drop several times	
E. Towhee			Х	1994	
Am. Tree Sparrow			Х	Slight	
Chipping Sparrow *		Х		1987, habitat created	
Field Sparrow *			Х	1984 & 1994, urbanization	
Vesper Sparrow		Х		Slight	
Lark Sparrow	Х			Needs sand areas	
Savannah Sparrow	Х			Nesting numbers low	

Species	Static	Increased	Decreased	Remarks	
Grasshopper Sparrow			Х	1983, grasslands declined	
LeConte's Sparrow			Х	Winter kill & predation?	
Fox Sparrow			Х	Population decline after 1988	
Song Sparrow			Х	Especially in winter	
Lincoln's Sparrow			Х	Especially in fall	
Swamp Sparrow			Х	Especially in winter	
White cr. Sparrow		Х		Slight	
White-thr. Sparrow			Х	Near end	
Dark-eyed Junco	Х			Variable	
Lapland Longspur			Х	Population decline?	
Smith's Longspur *			Х	Especially near end	
Snow Bunting	Х			Same low numbers in winter	
Bobolink			Х	After 2002, in fall & summer	
Red-wing Blackbird		Х		Recently	
E. Meadowlark			Х	Late 1970's & again 1994	
W. Meadowlark			Х	Extirpated as summer resident	
Rusty Blackbird			Х	Near end, population decline	
Common Grackle		Х		Habitat created	
Brown-head Cowbird		Х		Some due to roost numbers	
Orchard Oriole		Х		Nest high & protected nest	
Baltimore Oriole		Х		Nest high & protected nest	
Purple Finch *			Х	Competition	
House Finch *		Х		From 0 in 1982, introduced	
Red Crossbill *			Х	Most winter finches declined	
White-wing Crossbill *	Х			Too erratic	
Common Redpoll			Х	Less eruptions	
Pine Siskin *			Х	Less eruptions	
Am. Goldfinch	Х				
Evening Grosbeak *			Х	After 1991 not seen at all	
Eurasian Tree Sparrow		Х		variable, introduced	
Total Species=250	64	75	111		
* see graphs					

APPENDIX E.

Invading and Potential Invading Species During the Study (1970–2010)

Invading Species	Mode of Occurrence	Present Abundance
Cattle Egret	Natural	Uncommon
Trumpeter Swan	Introduced	Occasional
Ross's Goose	Natural	Occasional
Wild Turkey	Introduced	Uncommon
Black-necked Stilt	Natural	Very Rare
Laughing Gull	Natural	Rare
Little Gull	Natural	Very Rare
Lesser Black-backed Gull	Natural	Occasional
Eurasian Collared-Dove	Natural	Occasional
Monk Parakeet	Introduced	Very Rare
Rufous Hummingbird	Natural	Very Rare
Western Kingbird	Natural	Rare
Blue Grosbeak	Natural	Occasional
Great-tailed Grackle	Natural	Very Rare
House Finch	Introduced	Common

APPENDIX F.

Sangamon County Birds by Season (359 includes four hypothetical) R=(rare)

COMMON NAME	Breeding	Migrant	Permanent Resident	Winter Resident
Red-throated Loon		Х		
Pacific Loon		Х		
Common Loon		Х		Х
Pied-billed Grebe	x - R	Х		Х
Horned Grebe		Х		Х
Red-necked Grebe		Х		
Eared Grebe		Х		
Western Grebe		Х		
Clark's Grebe		Х		
American White Pelican		Х		
Neotropic Cormorant		Х		
Double-crested Cormorant		Х		
American Bittern		Х		
Least Bittern	x - R	Х		
Great Blue Heron	Х	Х		Х
Great Egret	x - R	Х		
Snowy Egret		Х		
Little Blue Heron		Х		
Tricolored Heron		Х		
Cattle Egret		Х		
Green Heron	Х	Х		
Black-crowned Night-Heron	Х	Х		
Yellow-crowned Night-Heron	x - R	Х		
Glossy Ibis		Х		
White-faced Ibis		Х		
Black Vulture		Х		
Turkey Vulture	Х	Х		Х
Greater White-fronted Goose		Х		Х
Snow Goose		Х		Х
Ross's Goose		Х		
Brant		Х		
Cackling Goose		Х		Х
Canada Goose	Х	Х		Х

COMMON NAME	Breeding	Migrant	Permanent Resident	Winter Resident
Mute Swan	Х	Х		Х
Trumpeter Swan		Х		Х
Tundra Swan		Х		Х
Wood Duck	Х	Х		Х
Gadwall		Х		Х
Eurasian Wigeon		Х		
American Wigeon		Х		Х
American Black Duck		Х		Х
Mallard	Х	Х		Х
Mottled Duck		Х		
Blue-winged Teal	Х	Х		
Cinnamon Teal		Х		
Northern Shoveler		Х		Х
Northern Pintail		Х		Х
Green-winged Teal		Х		Х
Canvasback		Х		Х
Redhead		Х		Х
Ring-necked Duck		Х		Х
Tufted Duck		Х		
Greater Scaup		Х		Х
Lesser Scaup		Х		Х
King Eider		Х		Х
Harlequin Duck		Х		Х
Surf Scoter		Х		
White-winged Scoter		Х		Х
Black Scoter		Х		
Long-tailed Duck		Х		Х
Bufflehead		Х		Х
Common Goldeneye		Х		Х
Barrow's Goldeneye		Х		Х
Hooded Merganser	Х	Х		Х
Common Merganser		Х		Х
Red-breasted Merganser		Х		Х
Ruddy Duck	x - R	Х		Х
Osprey		Х		
White-tailed Kite		Х		
Mississippi Kite		Х		

COMMON NAME	Breeding	Migrant	Permanent Resident	Winter Resident
Bald Eagle	Х	Х		Х
Northern Harrier	x - R	Х		Х
Sharp-shinned Hawk		Х		Х
Cooper's Hawk	Х	Х		Х
Northern Goshawk		Х		Х
Red-shouldered Hawk	Х	Х		Х
Broad-winged Hawk	x - R	Х		
Swainson's Hawk		Х		
Red-tailed Hawk	Х	Х		Х
Rough-legged Hawk		Х		Х
Golden Eagle		Х		
American Kestrel	Х	Х		Х
Merlin		Х		Х
Gyrfalcon		Х		
Peregrine Falcon	Х	Х		
Prairie Falcon		Х		Х
Ring-necked Pheasant	Х		Х	Х
Wild Turkey	Х		Х	Х
Northern Bobwhite	Х		Х	Х
Yellow Rail		Х		
Black Rail		Х		
King Rail	x -R	Х		
Virginia Rail	x - R	Х		
Sora	x - R	Х		
Purple Gallinule		Х		
Common Moorhen	x - R	Х		
American Coot	x - R	Х		Х
Sandhill Crane		Х		
Black-bellied Plover		Х		
American Golden-plover		Х		
Snowy Plover		Х		
Semipalmated Plover		Х		
Piping Plover		Х		
Killdeer	Х	Х		Х
Black-necked Stilt	x - R	Х		
American Avocet		Х		
Spotted Sandpiper	Х	Х		

COMMON NAME	Breeding	Migrant	Permanent Resident	Winter Resident
Solitary Sandpiper		Х		
Greater Yellowlegs		Х		
Willet		Х		
Lesser Yellowlegs		Х		
Upland Sandpiper	x - R	Х		
Whimbrel		Х		
Hudsonian Godwit		Х		
Marbled Godwit		Х		
Ruddy Turnstone		Х		
Red Knot		Х		
Sanderling		Х		
Semipalmated Sandpiper		Х		
Western Sandpiper		Х		
Least Sandpiper		Х		
White-rumped Sandpiper		Х		
Baird's Sandpiper		Х		
Pectoral Sandpiper		Х		
Dunlin		Х		
Stilt Sandpiper		Х		
Buff-breasted Sandpiper		Х		
Ruff		Х		
Short-billed Dowitcher		Х		
Long-billed Dowitcher		Х		
Wilson's Snipe	?	Х		Х
American Woodcock	Х	Х		
Wilson's Phalarope		Х		
Red-necked Phalarope		Х		
Red Phalarope		Х		
Pomarine Jaeger		Х		
Parasitic Jaeger		Х		
(Long-tailed Jaeger)		Х		
Laughing Gull		Х		
Franklin's Gull		Х		
Little Gull		Х		Х
Bonaparte's Gull		Х		Х
Mew Gull		Х		
Ring-billed Gull		Х		Х

COMMON NAME	Breeding	Migrant	Permanent Resident	Winter Resident
California Gull		Х		
Herring Gull		Х		Х
Thayer's Gull		Х		Х
Iceland Gull		Х		Х
Lesser Black-backed Gull		Х		Х
(Western Gull)		Х		
Glaucous-winged Gull		Х		
Glaucous Gull		Х		Х
Great Black-backed Gull		Х		Х
Sabine's Gull		Х		
Black-legged Kittiwake		Х		Х
Ivory Gull		Х		Х
Least Tern		Х		
Caspian Tern		Х		
Black Tern		Х		
Common Tern		Х		
Arctic Tern		Х		
Forster's Tern		Х		
Black Skimmer		Х		
Rock Pigeon	Х		Х	Х
Band-tailed Pigeon		Х		Х
Eurasian Collared-Dove	Х		Х	Х
White-winged Dove		Х		
Mourning Dove	Х	Х		Х
Common Ground-Dove		Х		
Monk Parakeet		Х		
Yellow-billed Cuckoo	Х	Х		
Black-billed Cuckoo	x - R	Х		
Barn Owl		Х		
Eastern Screech Owl	Х		Х	Х
Great Horned Owl	Х		Х	Х
Snowy Owl		Х		Х
Burrowing Owl		Х		
Barred Owl	Х		Х	Х
Long-eared Owl		Х		Х
Short-eared Owl		Х		Х
Northern Saw-whet Owl		Х		Х

COMMON NAME	Breeding	Migrant	Permanent Resident	Winter Resident
Common Nighthawk	Х	Х		
Chuck-will's-widow		Х		
Whip-poor-will	x - R	Х		
Chimney Swift	Х	Х		
Ruby-throated Hummingbird	Х	Х		
Rufous Hummingbird		Х		
Belted Kingfisher	Х	Х		Х
Red-headed Woodpecker	Х	Х		Х
Red-bellied Woodpecker	Х		Х	Х
Yellow-bellied Sapsucker		Х		Х
Downy Woodpecker	Х		Х	Х
Hairy Woodpecker	Х		х	Х
Northern Flicker	х	Х		Х
Pileated Woodpecker	х		х	Х
Olive-sided Flycatcher		Х		
(Western Wood-Pewee)		Х		
Eastern Wood-Pewee	Х	Х		
Yellow-bellied Flycatcher		Х		
Acadian Flycatcher	Х	Х		
Alder Flycatcher		Х		
Willow Flycatcher	х	Х		
Least Flycatcher		Х		
Eastern Phoebe	х	Х		
Say's Phoebe		Х		
Vermilion Flycatcher		Х		
Ash-throated Flycatcher		Х		
Great Crested Flycatcher	Х	Х		
Western Kingbird	x - R	Х		
Eastern Kingbird	Х	Х		
Scissor-tailed Flycatcher		Х		
Loggerhead Shrike	x - R	Х		
Northern Shrike		Х		Х
White-eyed Vireo	Х	Х		
Bell's Vireo	х	Х		
Yellow-throated Vireo	х	Х		
Cassin's Vireo		Х		
Blue-headed Vireo		Х		

COMMON NAME	Breeding	Migrant	Permanent Resident	Winter Resident
Warbling Vireo	Х	Х		
Philadelphia Vireo		Х		
Red-eyed Vireo	Х	Х		
Blue Jay	Х	Х		Х
American Crow	Х	Х		Х
Horned Lark	Х	Х		Х
Purple Martin	Х	Х		
Tree Swallow	Х	Х		
Northern Rough-winged Swallow	Х	Х		
Bank Swallow	Х	Х		
Cliff Swallow	Х	Х		
Barn Swallow	Х	Х		
Black-capped Chickadee	Х		Х	Х
Tufted Titmouse	Х		Х	Х
Red-breasted Nuthatch		Х		Х
White-breasted Nuthatch	Х		Х	Х
Brown Creeper	x - R	Х		Х
Carolina Wren	Х		Х	Х
Bewick's Wren	x - R	Х		
House Wren	Х	Х		
Winter Wren		Х		Х
Sedge Wren	Х	Х		
Marsh Wren	?	Х		
Golden-crowned Kinglet		Х		Х
Ruby-crowned Kinglet		Х		Х
Blue-gray Gnatcatcher	Х	Х		
Eastern Bluebird	Х	Х		Х
Mountain Bluebird		Х		
Townsend's Solitaire		Х		Х
Veery		Х		
Gray-cheeked Thrush		Х		
Swainson's Thrush		Х		
Hermit Thrush		Х		Х
Wood Thrush	х	Х		
American Robin	х	Х		Х
Varied Thrush		Х		Х
Gray Catbird	Х	Х		

COMMON NAME	Breeding	Migrant	Permanent Resident	Winter Resident
Northern Mockingbird	Х	Х		Х
Brown Thrasher	Х	Х		Х
European Starling	Х	Х		Х
American Pipit		Х		
Sprague's Pipit		Х		
Bohemian Waxwing		Х		Х
Cedar Waxwing	Х	Х		Х
Blue-winged Warbler		Х		
Golden-winged Warbler		Х		
Tennessee Warbler		Х		
Orange-crowned Warbler		Х		
Nashville Warbler		Х		
Northern Parula	Х	Х		
Yellow Warbler	Х	Х		
Chestnut-sided Warbler	?	Х		
Magnolia Warbler		Х		
Cape May Warbler		Х		
Black-throated Blue Warbler		Х		
Yellow-rumped Warbler		Х		Х
Black-throated Gray Warbler		Х		
Black-throated Green Warbler		Х		
(Hermit Warbler)		Х		
Blackburnian Warbler		Х		
Yellow-throated Warbler	Х	Х		
Pine Warbler		Х		
Prairie Warbler		Х		
Palm Warbler		Х		
Bay-breasted Warbler		Х		
Blackpoll Warbler		Х		
Cerulean Warbler	x - R	Х		
Black-and-white Warbler	x - R	Х		
American Redstart	Х	Х		
Prothonotary Warbler	Х	Х		
Worm-eating Warbler	? - R	Х		
Ovenbird	? - R	Х		
Northern Waterthrush		Х		
Louisiana Waterthrush	Х	Х		

COMMON NAME	Breeding	Migrant	Permanent Resident	Winter Resident
Kentucky Warbler	Х	Х		
Connecticut Warbler		Х		
Mourning Warbler		Х		
Common Yellowthroat	Х	Х		
Hooded Warbler	?	Х		
Wilson's Warbler		Х		
Canada Warbler		Х		
Yellow-breasted Chat	Х	Х		
Summer Tanager	Х	Х		
Scarlet Tanager	Х	Х		
Western Tanager		Х		
Northern Cardinal	Х		Х	Х
Rose-breasted Grosbeak	Х	Х		
Black-headed Grosbeak		Х		
Blue Grosbeak	Х	Х		
Lazuli Bunting		Х		
Indigo Bunting	Х	Х		
Dickcissel	Х	Х		
Spotted Towhee		Х		Х
Eastern Towhee	Х	Х		Х
American Tree Sparrow		Х		Х
Chipping Sparrow	Х	Х		
Clay-colored Sparrow		Х		
Field Sparrow	Х	Х		Х
Vesper Sparrow	Х	Х		
Lark Sparrow	Х	Х		
Lark Bunting		Х		Х
Savannah Sparrow	Х	Х		Х
Grasshopper Sparrow	Х	Х		
Henslow's Sparrow	Х	Х		
LeConte's Sparrow		Х		
Nelson's Sharp-tailed Sparrow		Х		
Fox Sparrow		Х		Х
Song Sparrow	Х	Х		Х
Lincoln's Sparrow		Х		
Swamp Sparrow		Х		Х
White-throated Sparrow		Х		Х

COMMON NAME	Breeding	Migrant	Permanent Resident	Winter Resident
Harris's Sparrow		Х		
White-crowned Sparrow		Х		Х
Dark-eyed Junco		Х		Х
Lapland Longspur		Х		Х
Smith's Longspur		Х		
Chestnut-collared Longspur		Х		
Snow Bunting		Х		Х
Bobolink	Х	Х		
Red-winged Blackbird	Х	Х		Х
Eastern Meadowlark	Х	Х		Х
Western Meadowlark	x - R	Х		Х
Yellow-headed Blackbird		Х		
Rusty Blackbird		Х		Х
Brewer's Blackbird		Х		
Common Grackle	Х	Х		Х
Great-tailed Grackle		Х		
Brown-headed Cowbird	Х	Х		Х
Orchard Oriole	Х	Х		
Baltimore Oriole	Х	Х		
Pine Grosbeak		Х		Х
Purple Finch		Х		Х
House Finch	Х	Х		Х
Red Crossbill	x - R	Х		Х
White-winged Crossbill		Х		Х
Common Redpoll		Х		Х
Pine Siskin	x - R	Х		Х
American Goldfinch	Х	Х		Х
Evening Grosbeak		Х		Х
House Sparrow	Х		Х	Х
Eurasian Tree Sparrow	Х		Х	Х
Totals	135/27R	340	19	138
Percent of Total Species	38%	95%	5%	38%

APPENDIX G.

Breeding Species in Sangamon County. During Study 1970–2010 with Evidence

R = Regular, **NR** = Not Regular, **E** = Extirpated, () = No evidence of breeding

Pied-billed Grebe	NR	water areas with emergent vegetation	nest, eggs, and young
Least Bittern	NR & now E	cattail marshes, last breeding 1994	young
Great Blue Heron	R	in colonies, started 1983, with several colonies now	nests and young
Great Egret	NR	in Great Blue colony, adult on nest 2002	nest
Green Heron	R	lakes and ponds usually in willows	nest, eggs, young
Black-crowned Night- Heron	NR	Lake Springfield area	young
Yellow-crowned Night- Heron	NR	swampy areas along Sangamon River	young
Turkey Vulture	R	hollow trees & old barns	nesting by 1985? young
Canada Goose	R	lakes and ponds, first nest 1976	nest, eggs, and young
Mute Swan	R	introduced, ponds	young
Wood Duck	R	mostly along wooded waterways	nest holes, eggs, and young
Mallard	R	lakes and ponds	nest, eggs, and young
Blue-winged Teal	NR	open water areas	nest, eggs, and young
Hooded Merganser	R	wooded waterways	nest hole and young
Ruddy Duck	NR	open marsh	nest (1995)
Bald Eagle	NR	large trees near water, first nesting 2007	nest and young
Northern Harrier	NR	wet prairie	young (2004)
Cooper's Hawk	R	woodland, first nesting 1994	nest and young
Red-shouldered Hawk	NR was formerly R	bottomland forest	young
Broad-winged Hawk	NR	woodland	young (2003)
Red-tailed Hawk	R	open woodland, first breeding 1974	nest and young
American Kestrel	R	open areas & urban, breeding by at least 1976	nest hole and young
Peregrine Falcon	NR	introduced birds attempted to nest (1994), urban	
Ring-necked Pheasant	R	introduced, grassland	nest, eggs, and young
Wild Turkey	R - reintroduced, original population E	woodland and edge	nest, eggs, young

Northern Bobwhite	R	open grassland with scrubs	nest, eggs, and young
King Rail	NR - formerly R, now E	marsh, last breeding 1996?	young
Virginia Rail	NR - now E	marsh, last breeding 1984	young
Sora	NR	marsh, last breeding 1994?	young
Common Moorhen	NR	marsh, last breeding 1996	young
Am. Coot	NR	marsh, last breeding 1988	nest and young
Killdeer	R	open areas usually near shallow water	nest, eggs, and young
Black-necked Stilt	NR	first attempted nesting 2008 & second attempted nesting 2010 ephemeral ponds	nest & eggs, and other young
Spotted Sandpiper	R	lake edge and river	nest, eggs, and young
Upland Sandpiper	NR - formerly R, now E	last breeding 1990, grassland	young
(Wilson's Snipe	NR	wet grassland, no definite records	winnowing)
Am. Woodcock	R	wood edge	nest, eggs, and young
Rock Pigeon	R	urban	nest, eggs, and young
Eurasian Collared-Dove	R	small towns	nest
Mourning Dove	R	variety of semi-open areas	nest, eggs, and young
Yellow-billed Cuckoo	R	bottomland forest and other woodland	nest, eggs, and young
Black-billed Cuckoo	NR	orchards and hedgerows	young (1986)
Eastern Screech-Owl	R	woodland and residential	young
Great Horned Owl	R	woodland	nest, eggs, and young
Barred Owl	R	bottomland	nest hole and young
Common Nighthawk	R	urban on roofs	eggs and young
Whip-poor-will	NR - formerly R, maybe now E	woodland	nest, eggs, and young
Chimney Swift	R	chimneys and hollow trees	young
Ruby-throated Hummingbird	R	woodland edge	nest and young
Belted Kingfisher	R	in banks near water	young
Red-headed Woodpecker	R	dead trees in parkland and forest	nest hole and young
Red-bellied Woodpecker	R	woodland	nest hole and young
Downy Woodpecker	R	woodland	nest hole and young
Hairy Woodpecker	R	woodland	nest hole and young
Northern Flicker	R	open woodland	nest hole and young
Pileated woodpecker	R	extensive bottomland forest	nest hole and young
Eastern Wood-Pewee	R	woodland	nest and young
Acadian Flycatcher	R	bottomland forest	nest and young
Willow Flycatcher	R	creeks with willow	nest and young

Eastern Phoebe	R	under bridges and eves of buildings	nest, eggs, and young
Great Crested Flycatcher	R	woodland	nest hole and young
Western Kingbird	NR	open parkland	nest and young
Eastern Kingbird	R	open areas with scattered trees	nest and young
Loggerhead Shrike	NR - formerly R, now E	hedgerows and pastures	nest and young
White-eyed Vireo	R	second growth	young
Bell's Vireo	R	hedgerows and willows	young
Yellow-throated Vireo	R	woodland	nest and young
Warbling Vireo	R	tall trees near water	nest and young
Red-eyed Vireo	R	woodland	nest and young
Blue Jay	R	woodland	nest, eggs, and young
Am. Crow	R	woodland	nest and young
Horned Lark	R	open agricultural & grassland	nest, eggs, and young
Purple Martin	R	boxes near water	nest houses and young
Tree Swallow	R	open areas	nest hole and young
N. Rough-winged Swallow	R	along river	nest hole and young
Bank Swallow	R	banks along river and sand & gravel areas	nest hole, eggs, and young
Cliff Swallow	R	under bridges and overpasses	nest globes and young
Barn Swallow	R	eves of buildings & under bridges	nest and young
Black-capped Chickadee	R	woodland	nest hole and young
Tufted Titmouse	R	woodland	nest hole and young
White-breasted Nuthatch	R	woodland	nest knothole and young
Brown Creeper	NR	nest behind loose bark, bottomland forest	nest and young
Carolina wren	R	woodland & residential	nest, eggs, and young
Bewick's Wren	E - formerly R	parks and cemeteries,	probably nested near Irwin Bridge (1994)
House Wren	R	woodland and edge & residential	nest hole and boxes and young
Sedge Wren	R	wet grassland	nest building and young
(Marsh Wren	NR	marsh	males singing)
Blue-gray Gnatcatcher	R	woodland	nest and young
Eastern Bluebird	R	open woodland	nest holes and boxes and young

Wood Thrush	R	woodland	nest, eggs, and young
Am. Robin	R	woodland and residential	nest, eggs, and young
Gray Catbird	R	brushy areas and edge	nest, eggs, and young
Northern Mockingbird	R	rural yards and cemeteries	nest, eggs, and young
Brown Thrasher	R	hedgerows and woodland edge	nest, eggs, and young
European Starling	R	introduced, first nested in late 1920's	nest, eggs, and young
Cedar Waxwing	R	forest edge and parkland	nest and young
Northern Parula	R	bottomland forest in sycamores	young
Yellow Warbler	R	willows	nest and young
(Chestnut-sided Warbler	NR?		nesting not confirmed)
Yellow-throated Warbler	R	bottomland forest in sycamores	young
Cerulean Warbler	NR - formerly R, now maybe E	forest	young
Black-and-white Warbler	NR	woodland	young
Am. Redstart	NR	along Sangamon River	young
Prothonotary Warbler	R	along Sangamon River	nest hole and young
(Worm-eating Warbler	NR - now E?	wooded hillsides	singing 군군)
(Ovenbird	NR	woodland, nesting not confirmed	singing ♂♂)
Louisiana Waterthrush	NR	wooded creeks	nest and young
Kentucky warbler	R	woodland	young
Common Yellowthroat	R	variety of scrub habitats	nest and young
(Hooded Warbler	NR	woodland, nesting not confirmed	singing ♂♂)
Yellow-breasted Chat	R	second growth	nest, eggs, and young
Summer Tanager	R	upland woods	nest and young
Scarlet Tanager	R	woodland	nest and young
N. Cardinal	R	anywhere with trees or bushes	nest, eggs, and young
Rose-breasted Grosbeak	R	late second growth woodland	nest and young
Blue Grosbeak	NR - now R	grassy areas with bushes	young
Indigo Bunting	R	variety of edge and woodland habitats	nest, eggs, and young
Dickcissel	R	open grassland with weeds or low bushes	nest, eggs, and young
Eastern Towhee	R	open brushy forest or edge	nest, eggs, and young
Chipping Sparrow	R	open bushy areas or parkland (residential)	nest, eggs, and young
Field Sparrow	R	brushy pastures and woodland edge	nest, eggs, and young
Vesper Sparrow	R	open field edges	nest, eggs, and young
Lark Sparrow	R	sandy soil areas	nest, eggs, and young

Savannah Sparrow	NR	extensive grasslands	young
Grasshopper Sparrow	R	open grassland	young
Henslow's Sparrow	NR	grassland, not detected until 2002,	young
Song Sparrow	R	brushy second growth and edge	nest, eggs, and young
Bobolink	NR - now E?	low wet grassland, last nested 2008	young
Red-winged Blackbird	R	marsh and grasslands	nest, eggs, and young
Eastern Meadowlark	R	grassland	nest, eggs, and young
Western Meadowlark	NR	grassland, last nested 1999	young
Common Grackle	R	agricultural and residential areas	nest, eggs, and young
Brown-headed Cowbird	R	agricultural and woodland areas	eggs and young
Orchard Oriole	R	second growth and orchards	nest and young
Baltimore Oriole	R	large trees near water	nest and young
House Finch	R	introduced, first nested about 1986, residential	nest, eggs, and young
Red Crossbill	NR	two unsuccessful nest attempts 1976	nest and eggs
Pine Siskin	NR	nesting 1976–2002, mostly unsuccessful, cemeteries and parks	young
Am. Goldfinch	R	second growth and parkland	nest, eggs, and young
House Sparrow	R	introduced early, residential and rural	nest, eggs, and young
Eurasian Tree Sparrow	R	introduced and nesting by 1957, rural farms and hedgerows	nest hole and young

Total = 135 species, (plus six probably bred but were not confirmed by nest or young)

APPENDIX H.

Species	1976	1991
Great Blue Heron	1	11
Green Heron	3	23
Yellow-crowned Night Heron	1	0
Turkey Vulture	0	5
Canada Goose	0	5
Wood Duck	12	36
Mallard	1	19
Hooded Merganser	0	3
Red-tailed Hawk	0	4
American Kestrel	1	0
Ring-necked Pheasant	0	7
Northern Bobwhite	36	10
Killdeer	3	17
Spotted Sandpiper	0	4
Rock Pigeon	3	15
Mourning Dove	36	52
Yellow-billed Cuckoo	54	80
Great Horned Owl	9	19
Barred Owl	0	2
Common Nighthawk	0	3
Chimney Swift	21	26
Ruby-throated Hummingbird	7	7
Belted Kingfisher	4	16
Red-headed Woodpecker	56	37
Red-bellied Woodpecker	40	86
Downy Woodpecker	51	66
Hairy Woodpecker	12	19
Northern Flicker	21	27
Pileated Woodpecker	4	18
Eastern Wood Pewee	60	131
Acadian Flycatcher	37	35
Willow Flycatcher	1	1

Sangamon River Summer Census (1976 and 1991)

Species	1976	1991
Great Crested Flycatcher	43	76
Eastern Phoebe	0	8
Eastern Kingbird	9	11
White-eyed Vireo	1	1
Yellow-throated Vireo	4	14
Warbling Vireo	11	8
Red-eyed Vireo	48	74
Horned Lark	0	1
Purple Martin	1	7
Northern Rough-winged Swallow	5	47
Bank Swallow	9	15
Barn Swallow	8	13
Blue Jay	51	95
American Crow	65	96
Black-capped Chickadee	58	123
Tufted Titmouse	96	168
White-breasted Nuthatch	12	50
Brown Creeper	0	1
Carolina Wren	66	63
House Wren	38	149
Blue-gray Gnatcatcher	15	39
Eastern Bluebird	4	8
Wood Thrush	12	4
American Robin	23	81
Gray Catbird	15	33
Northern Mockingbird	2	1
Brown Thrasher	3	9
Cedar Waxwing	0	18
European Starling	99	177
Northern Parula	15	4
Yellow Warbler	1	0
Chestnut-sided Warbler	0	1
Yellow-throated Warbler	11	17
Cerulean Warbler	2	1
American Redstart	22	12

Species	1976	1991
Prothonotary Warbler	11	8
Worm-eating Warbler	0	1
Louisiana Waterthrush	1	0
Kentucky Warbler	2	0
Mourning Warbler	0	1
Common Yellowthroat	43	43
Yellow-breasted Chat	15	3
Summer Tanager	1	1
Scarlet Tanager	5	5
Northern Cardinal	122	169
Rose-breasted Grosbeak	1	7
Indigo Bunting	208	222
Dickcissel	9	2
Eastern Towhee	1	0
Chipping Sparrow	0	1
Field Sparrow	7	6
Vesper Sparrow	1	11
Song Sparrow	95	151
Eastern Meadowlark	1	0
Red-winged Blackbird	58	182
Common Grackle	276	591
Brown-headed Cowbird	52	128
Baltimore Oriole	10	29
House Finch	0	1
American Goldfinch	60	91
House Sparrow	61	42
TOTALS:		
Individuals:	2263	3904
Species:	76	86
Minutes of Observation:	925	1401

APPENDIX I.

Breeding Bird Survey (BBS) Results 1972–2003 in Sangamon County

31 Years (excluding 1988) - 101 Species + 3 Migrants/Non-breeders (HC = High Count, LC = Low Count)

		total # / # of years
Great Blue Heron	First year = 1982, HC = 15 (1999) Trend: number increasing.	61/13
Great Egret	First year = 2000, HC = 3 (2000)	3/1
Cattle Egret	First year = 1980, HC = 1 (1980)	1/1
Green Heron	First year = 1974, HC = 4 (1994, 1996, 2003). Trend: higher number last 10 years.	30/16
Turkey Vulture	First year = 1986, HC = 3 (2002). Trend: higher numbers more recently.	10/7
Canada Goose	First year = 1976, HC = 31 (1996). Trend: higher numbers and more years recently.	133/12
Wood Duck	First year = 1972, HC = 18 (1999). Trend: spread-out - but more recently.	68/13
Mallard	First year = 1972, HC = 41 (1989). Trend: fairly even with a few spikes.	269/30
Blue-winged Teal	First year = 1982, HC = 4 (1985).	9/4
Hooded Merganser	First year = 1994.	2/2
Cooper's Hawk	First year = 1999.	1/1
Red-tailed Hawk	First year = 1975, HC = 3 (2003). Trend: though not high, numbers increasing recently.	15/11
Am. Kestrel	First year = 1975, HC = 4 (2003). Trend: more numbers recently.	24/13
Ring-necked Pheasant	First year = 1972, HC = 15 (1992). Trend: more numbers late 1970's through about 1995 then low- moderate increase about 2001.	262/31

		total # / # of years
N. Bobwhite*	First year 1972, HC = 57 (1976). Trend: severe winters of the late 1970's were evident, lowest numbers in 1979, 1980, and fairly low in 1981- 1984. Also moderately lower numbers recently.	847/31
Am. Coot	First year = 1972.	1/1
Killdeer	First year = 1972, HC = 16 (2000). Trend: higher number recently from 1990 on.	167/27
Spotted Sandpiper	First year = 1991.	1/1
Am. Woodcock	First year = 1989.	1/1
Ring-billed Gull	First year = 1994.	2/1
Rock Pigeon	First year = 1972, HC = 16 (2000). Trend: no real trend - but low number in late 70's and early 80's, and again mid-90's and early 2000's.	108/25
Mourning Dove	First year = 1972, HC = 68 (1997). Trend: High numbers recently, starting especially in 1992.	1025/31
Black-billed Cuckoo	First year = 1993.	1/1
Yellow-billed Cuckoo	First year = 1972, HC = 13 (1976). Trend: Lower numbers from 1985 - 1992.	160/30
E. Screech Owl	First year = 1986, (other 1989).	2/2
Great Horned Owl	First year = 1992, HC = 3 (1994). Trend: All numbers from 1992 to 2001.	7/5
Chimney Swift*	First year = 1972, HC = 57 (1979). Trend: Fairly even numbers- maybe a little higher numbers in early half.	825/31
Ruby-throat Hummingbird	First year = 1977, HC = 2 (1977 & 2000). Trend: Maybe a little more frequent recently.	9/7
Belted Kingfisher	First year = 1976, HC = 5 (1998). Trend: Maybe a little more frequent recently.	13/8

total # / # of years

Red-headed Woodpecker*	First year = 1972, HC = 8 (1976). Trend: After a very significant lowering from the late 60's my data shows they dropped off about 1989. Very low numbers recently.	78/26
Red-bellied Woodpecker	First year = 1973, HC = 14 (2003). Trend: Lower numbers in 70's and 80's with increases from 1989 and again in 2000 - some lower numbers for 1994-1997.	136/30
Downy Woodpecker	First year = 1972, HC = 13 (1986). Trend: Small dips with moderate peaks throughout - peaks - 1976, 1986, and 2003.	149/30
Hairy Woodpecker	First year = 1973, HC = 5 (2000). Trend: Unnoticeable.	25/13
Yellow-shafted Flicker	First year = 1972, HC = 10 (1982). Trend: Fairly even numbers with maybe an increase in the early 80's.	134/31
Pileated Woodpecker	First year = 1987, HC = 2 (1997). Trend: All in later half.	7/6
E. Wood Pewee*	First year = 1972, HC = 8 (1985 & 1986). Trend: Fairly even numbers with increases in the mid- 80's.	120/31
Acadian Flycatcher*	First year = 1978 - 2.	2/1
Willow Flycatcher	First year = 1972, HC = 5 (1974). Trend: More numerous early with numbers continuing to decline.	62/29
E. Phoebe	First year = 1973, HC = 3 (1999 & 2000). Trend: More in recent half, especially 1989 on.	27/18
Great Crested Flycatcher	First year = 1972, HC = 9 (1972). Trend: Fairly even - maybe slight dip in middle years.	102/30
E. Kingbird	First year = 1972, HC = 9 (1985). Trend: Fairly even numbers maybe slight increase in mid-80's.	130/31
Loggerhead Shrike	First year = 1982, HC = 2 (1982 & 1985). Trend: Both in early 80's.	4/2

total # / # of years

White-eyed Vireo*	First year = 1973 , HC = $3 (1979)$. Trend: Sporadic - but much lower considering early years -(different observer).	10/6
Bell's Vireo	First year = 1972, HC = 2 several years. Trend: Fairly regular until 1997 and none to the end 2003.	19/13
Yellow-throated Vireo	First year = 1976, HC = 2 several years. Trend: Small peaks in 1982- 1984 and 2002–2003.	13/9
Warbling Vireo	First year = 1972, HC = 15 (2002). Trend: Becoming more numerous recently.	185/31
Red-eyed Vireo*	First year = 1974, HC = 3 (1977). Trend: More numbers early with few from 1987–2001.	21/16
Blue Jay*	First year = 1972, HC = 21 (1981), and LC = 3 (1972– 1973). Trend: Couple of dips in 1972–1973 and a lesser dip 1993–1996.	363/31
Am Crow*	First year = 1972, HC = 32 (1999), LC = 1 (1972). Trend: Low numbers in 1972 & 1973 with slowly increasing numbers until 2003—then a drop (West Nile Virus).	364/31
Horned Lark*	Observed 31 years. First year = 1972, HC = 48 (1974). LC = 11 (1999) Trend: Couple of one year dips, 1984 and 1999 but higher numbers early and lower numbers more recently.	859/31
Purple Martin	First year = 1972, HC = 7 (1986). Trend: Low numbers early half, none from 1989–1998, then low numbers again.	33/16
Tree Swallow	First year = 2001.	1/1
N. Rough-winged Swallow	First year = 1974, HC = 3 (1982 & 1989, and 1998) Trend: Slightly more numbers in recent half	26/15
Bank Swallow	First year = 1981, HC = 3 (1981).	7/4
Cliff Swallow	First year = 2003.	1/1

		total # / # of years
Barn Swallow*	First year = 1972, HC = 32 (2000), LC = 6 (1983). Trend: Fairly even numbers with peaks in 1986 and 2000.	588/31
Black-capped Chickadee	First year = 1973, HC = 14 (1998 & 2001). Trend: Increasing numbers especially from 1992–2001. The last two years dropped.	158/29
Tufted Titmouse*	First year = 1972, HC = 13 (2001), LC = 1 (1980). Trend: Fairly even numbers with dip 1979 - 1981 (bad winters?). somewhat higher numbers recent half.	194/31
White-breasted Nuthatch	First year = 1979, HC = 3 (1987, 1997, and 2001). Trend: Although low numbers - much more regular in recent half.	31/17
Carolina Wren	First year = 1972, HC = 12 (1998). Trend: Numbers dropped to zero from 1977 - 1982 (bad winters), and very slowly recovered in the late 80's and were recovered by the early 90's. Another dip in 1999.	105/22
House Wren	First year = 1972, HC = 26 (1993 & 1999). LC = 4 (1973). Trend: Even numbers until about 1987 then somewhat higher numbers.	454/31
Blue-gray Gnatcatcher	First year = 1978, HC = 2 (1991 & 1995). Trend: Very low numbers but more in recent half.	10/8
E. Bluebird*	First year = 1972, HC = 6 (2000). Trend: Very low numbers early half. Numbers picked up about 1993 to recent 2003.	34/16
Wood Thrush*	First year 1975, HC = 5 (1982). Trend: Best numbers from 1981 - 1984 also dropped off about 1993, very few recently.	28/18
Am. Robin	First year = 1972, HC = 89 (2001). LC = 26 (1974). Trend: Somewhat higher numbers from 1997 to present.	1743/31
Gray Catbird*	First year = 1973, HC = 13 (1980). Trend: Somewhat more numerous earlier - but most numbers between 1976 - 1983.	227/30

		total # / # of years
N. Mockingbird	First year = 1972, HC = 13 (1974). LC = 1 (1985 & 1998) Trend: Numbers until 1978 - 1981, (lower because of bad winters). Slight increase in 1983 then lower numbers for 1984 - 1987. Then slight increase from 1989 - 1993 then lower numbers. Highest numbers early until bad winters. Numbers not as low as Carolina Wren because some Mockingbirds are migratory.	196/31
Brown Thrasher*	First year = 1972, HC = 10 (1992 & 1999). LC = 2 (1972). Trend: Fairly even numbers although moderate increase by 1979 to the end, but with some dips, especially 1994–1996.	191/31
European Starling*	First year = 1972, HC = 288 (1992). LC = 38 (1972). Trend: Low points were 1972–1975, 1983–1984, 1990, and 1995–1997. Probably a little more numbers in recent half.	3027/31
Cedar Waxwing	First year = 1979, HC = 10 (1998). Trend: More frequent and more numbers recently.	46/13
N. Parula	First year = 1994.	1/1
Yellow Warbler	First year = 1973, HC = 3 (1989 & 1992). Trend: More frequent and more numbers recently.	36/24
Black & White Warbler	First year = 1982.	1/1
Am. Redstart	First year = 1978.	1/1
Prothonotary Warbler	First year = 1979, HC = 2 (1994). Trend: Very low numbers but more recently.	7/6
Kentucky Warbler	First year = 1974.	1/1
Common Yellowthroat	First year = 1972, HC = 17 (1980). LC = 5 (2000). Trend: Best numbers in 70's to mid-80's, with only somewhat lesser numbers in recent times.	351/31
Yellow-breasted Chat	First year = 1975, HC = 4 (1982). Trend: More numbers and frequency early - dropping off about 1989.	26/14
Scarlet Tanager	First year = 1990, also in 2003.	2/2

		total # / # of years
E. Towhee*	First year = 1972, HC = 5 (1982-1983). Trend: More numbers and frequency in early half. Numbers dropped off about 1994.	43/22
Chipping Sparrow	First year = 1972, HC = 25 (2000). Trend: Very few early - but steadily increasing numbers with jumps especially in 1987 and 1993. Maybe leveling off last several years. The rise in yards and residential habitats a boost to this species.	299/28
Field Sparrow*	First year = 1972, HC = 13 (1983). LC = 1 (1999). Trend: This species has gone in the opposite direction of the Chipping Sparrow population. First lowering of numbers was 1984 and the second lowering of numbers was 1994.	210/31
Vesper Sparrow	First year = 1973, HC = 6 (1987). Trend: Except for the peak in 1987, the numbers although low are about even throughout.	52/24
Lark Sparrow	First year = 2003.	1/1
Grasshopper Sparrow*	First year = 1972, HC = 6 (1972). Trend: Declining numbers, more numbers and frequency early with very few recently.	36/15
Song Sparrow*	First year = 1972, HC = 43 (1976). LC = 11(1979 & 2003). Trend: 1972-1976 the best years, then lower numbers starting in 1977 (because of severe winter?). Maybe another lowering of numbers starting in 1999.	716/31
N. Cardinal*	First year = 1972, HC = 32 (1992–1993). LC = 11 (1972–1973). Trend: Lower numbers very early until about 1979 - then a small increase in numbers and fairly even since then.	694/31
Rose-breasted Grosbeak	First year = 1972, HC = 10 (1994). LC = 1 (1972 & 1974). Trend: Low numbers very early, but by 1975 numbers about even except for peak in 1994. Probably a few more numbers in the recent half; (early survey had none??).	151/31
Blue Grosbeak	First year = 1975, also 1994.	2/2

		total # / # of years
Indigo Bunting*	First year = 1972, HC = 39 (1982). LC = 13 (1973). Trend: Started out lower 1972-1975, then best numbers from $1976 - 1984$. The numbers then drop some and remain about level to present.	791/31
Dickcissel*	First year = 1972, HC = 45 (1972). LC = 3 (1991 & 1999). Trend: Definite drop in numbers after 1972, then another in 1975 then another drop in 1989 to present. Fairly steady decline.	328/31
Red-winged Blackbird*	First year = 1972, HC = 141 (2003). LC = 31 (1983). Trend: Population dips in 1983 and 1984, less so in 1989-1990 and 1997-1998 and increasing very recently.	1995/31
E. Meadowlark*	First year = 1972, HC = 32 (1972 & 1974). LC = 5 (1983). Trend: Severe winters of late 70's lowered the population of this species and it never fully recovered. Numbers did come back some in mid-80's but by that time habitat was damaged. Another lowering occurred in 1994 and has remained about the same to present.	541/31
Common Grackle*	First year = 1972, HC = 388 (2003). LC = 46 (1977). Trend: Numbers fairly low from 1972-1980, then small increase from 1981–1986, then decrease from 1987– 1991, then slow build-up with fluctuations to present with highest numbers.	3358/31
Brown-headed Cowbird	First year = 1972, HC = 26 (2002). LC = 3 (1978). Trend: Fairly low, even numbers until 1987 to present with slight increase with a dip in 1995 and 1996.	382/31
Orchard Oriole	First year = 1973, HC = 10 (1987). Trend: Even, fairly low numbers except for the peak in 1987 and a trough with none in 1993 and 1994.	777/28
Baltimore Oriole	First year = 1972, HC = 15 (2001). Trend: Fairly even numbers until 1989 when small increase, then in 1998 another small increase.	128/29
House Finch	First year = 1989, HC = 21 (2001). Trend: None of these introduced birds until 1989 then every year after that and increasing in numbers with fluctuations.	157/15
Am. Goldfinch*	First year = 1972, HC = 17 (1997). LC = 1 (1978). Trend: Fluctuations from year to year, but about equal numbers early and recent.	283/31

		total # / # of years
House Sparrow*	First year = 1972, HC = 251 (1977). LC = 53 (1994). Trend: Number actually dropped in this species. It occurred in 1989 but with a slight increase in 1997- 1999.	3593/31
Eurasian Tree Sparrow	First year = 1981, HC = 6 (1998). Trend: Low numbers, but increasing greatly in frequency in recent half.	31/15

*- indicates earlier (1967-1971) surveyed by another observer, and numbers were higher.

Breeding Bird Survey (BBS) Results 1972–2003 (continued) 31 Years (excluding 1988) - 101 Species + 3 Migrants/Non-breeders

Migrants/Non-breeders:

		total # / # of years
Lesser Scaup	First year = 1972. Late migrant or non-breeder.	1/1
Semipalmated Sandpiper	First year = 2002. Late migrants.	3/1
Double-cr. Cormorant	First year = 2003. Non-breeder?	1/1

Species Other Observer Reported That I Did Not Observe:

		total # / # of years
Upland Sandpiper	(If these numbers are accurate, then this species population in the county must have crashed in the late 1960's and early 1970's. Several grassland species may show this trend.)	20/5
Common Nighthawk	(This species declined during the study)	1/1
Whip-poor-will	(This species was extirpated as a nesting bird in the county during the study)	1/1
Western Meadowlark	(Another grassland species that has declined)	7/3

Breeding Bird Survey (BBS) Results 1972–2003 (continued)

Species I Observed That Earlier Observer Did Not Report:

Great Blue Heron Great Egret Cattle Egret **Turkey Vulture** Canada Goose Wood Duck Blue-winged Teal Hooded Merganser Cooper's Hawk American Coot Spotted Sandpiper American Woodcock **Ring-billed Gull** Black-billed Cuckoo Eastern Screech Owl Great Horned Owl Pileated Woodpecker Bell's Vireo Yellow-throated Vireo Tree Swallow Northern Rough-winged Swallow Northern Parula Black and White Warbler American Redstart Prothonotary Warbler Kentucky Warbler **Rose-breasted Grosbeak** Blue Grosbeak House Finch Eurasian Tree Sparrow

Breeding Bird Survey (BBS) Results 1972–2003 (continued)

Breeding Bird Survey Changes 1972–2003

 \S = from early counts (1967–1971) indicating lower numbers than earlier

 $\mathbf{M} =$ minimal change

Increased (37)

Decreased (24)

Same or no trend (19)

Great Blue Heron Green Heron Turkey Vulture Canada Goose Wood Duck **Red-tailed Hawk** American Kestrel Killdeer Mourning Dove Great Horned Owl (M) Ruby-thr. Hummingbird (M) Belted Kingfisher (M) Red-bellied Woodpecker Pileated Woodpecker (M) Eastern Phoebe Warbling Vireo Am. Crow (§) much lower numbers than earlier. N. Rough-winged Swallow (M) **Black-capped Chickadee** Tufted Titmouse (M), (§) White-breasted Nuthatch (M) Carolina Wren House Wren Blue-gray Gnatcatcher (M) Eastern Bluebird (§) American Robin European Starling (§) Cedar Waxwing Yellow Warbler **Prothonotary Warbler** Chipping Sparrow Rose-breasted Grosbeak (M) Common Grackle (§) Brown-headed Cowbird **Baltimore Oriole** House Finch **Eurasian Tree Sparrow**

N. Bobwhite (§) Ring-necked Pheasant Chimney Swift (§) Red-headed Woodpecker (§) Acadian Flycatcher (§) Willow Flycatcher Loggerhead Shrike (§) White-eyed Vireo (§) Bell's Vireo Red-eyed Vireo (§) Horned Lark (§) Purple Martin Wood Thrush (§) Gray Catbird N. Mockingbird (variable) Common Yellowthroat (M) Yellow-breasted Chat Eastern Towhee (§)

Field Sparrow (§) Grasshopper Sparrow Song Sparrow Dickcissel Eastern Meadowlark (§) House Sparrow (§)

Mallard Rock Pigeon Yellow-billed Cuckoo Downy Woodpecker Hairy Woodpecker Yellow-shafted Flicker Eastern Wood Pewee (§) Great Crested Flycatcher Eastern Kingbird Yellow-throated Vireo Blue Jay (variable) (§) Barn Swallow (§) Brown Thrasher (§) Vesper Sparrow Northern Cardinal Indigo Bunting (§) Red-winged Blackbird (§) Orchard Oriole American Goldfinch (§)

Breeding Bird Survey (BBS) Results 1972–2003 (continued)

BBS Birds in Order of Abundance for the 040 Pawnee Route

Ranking of Species	# of birds / # of years
1. House Sparrow	3593/31
2. Common Grackle	3358/31
3. European Starling	3027/31
4. Red-winged Blackbird	1995/31
5. American Robin	1743/31
6. Mourning Dove	1025/31
7. Horned Lark	859/31
8. Northern Bobwhite	847/31
9. Chimney Swift	825/31
10. Indigo Bunting	791/31
11. Song Sparrow	716/31
12. Northern Cardinal	694/31
13. Barn Swallow	588/31
14. Eastern Meadowlark	541/31
15. House Wren	454/31
16. Brown-headed Cowbird	382/31
17. American Crow	364/31
18. Blue Jay	363/31
19. Common Yellowthroat	351/31
20. Dickcissel	328/31
21. Chipping Sparrow	299/28
22. American Goldfinch	283/31
23. Mallard	269/30
24. Ring-necked Pheasant	262/31
25. Gray Catbird	227/30
26. Field Sparrow	210/31
27. Northern Mockingbird	196/31
28. Tufted Titmouse	194/31
29. Brown Thrasher	191/31
30. Warbling Vireo	185/31
31. Killdeer	167/27
32. Yellow-billed Cuckoo	160/30
33. Black-capped Chickadee	158/29
34. House Finch	157/15
35. Rose-breasted Grosbeak	151/31

36. Downy Woodpecker	149/30
37. Red-bellied Woodpecker	136/30
38. Yellow-shafted Flicker	134/31
39. Canada Goose	133/12
40. Eastern Kingbird	130/31
41. Baltimore Oriole	128/29
42. Eastern Wood Pewee	120/31
43. Rock Pigeon	108/25
44. Carolina Wren	105/22
45. Great-crested Flycatcher	102/30
46. Red-headed Woodpecker	78/26
47. Orchard Oriole	77/28
48. Wood Duck	68/13
49. Willow Flycatcher	62/29
50. Great Blue Heron	61/13
51. Vesper Sparrow	52/24
52. Cedar Waxwing	46/13
53. Eastern Towhee	43/22
54. Yellow Warbler	36/24
55. Grasshopper Sparrow	36/15
56. Eastern Bluebird	34/16
57. Purple Martin	33/16
58. White-breasted Nuthatch	31/17
59. Eurasian Tree Sparrow	31/15
60. Green Heron	30/16
61. Wood Thrush	28/18
62. Eastern Phoebe	27/18
63. N. Rough-winged Swallow	26/15
64. Yellow-breasted Chat	26/14
65. Hairy Woodpecker	25/13
66. American Kestrel	24/13
67. Red-eyed Vireo	21/16
68. Bell's Vireo	19/13
69. Red-tailed Hawk	15/11
70. Yellow-throated Vireo	13/9
71. Belted Kingfisher	13/8
72. Blue-gray Gnatcatcher	10/8
73. Turkey Vulture	10/7
74. White-eyed Vireo	10/6
75. Ruby-throated Hummingbird	9/7

76. Blue-winged Teal	9/4
77. Pileated Woodpecker	7/6
77. Prothonotary Warbler	7/6
78. Great Horned Owl	7/5
79. Bank Swallow	7/4
80. Loggerhead Shrike	4/2
81. Great Egret	3/1
82. Hooded Merganser	2/2
82. Eastern Screech Owl	2/2
82. Scarlet Tanager	2/2
82. Blue Grosbeak	2/2
83. Ring-billed Gull	2/1
83. Acadian Flycatcher	2/1
84. Cattle Egret	1/1
84. Cooper's Hawk	1/1
84. American Coot	1/1
84. Spotted Sandpiper	1/1
84. American Woodcock	1/1
84. Black-billed Cuckoo	1/1
84. Tree Swallow	1/1
84. Cliff Swallow	1/1
84. Northern Parula	1/1
84. Black and White Warbler	1/1
84. American Redstart	1/1
84. Kentucky Warbler	1/1
84. Lark Sparrow	1/1

APPENDIX J.

Birds Recorded in Winter (December 1 to last day of February) in Sangamon County

(Red-throated Loon) (Pacific Loon) Common Loon **Pied-billed Grebe** Horned Grebe (Red-necked Grebe) (Eared Grebe) (Western Grebe) (American White Pelican) (Double-crested Cormorant) (American Bittern) Great Blue Heron (Great Egret) (Black-crowned Night-Heron) **Turkey Vulture** Greater White-fronted Goose Snow Goose (Ross's Goose) **Cackling Goose** Canada Goose Mute Swan Trumpeter Swan* Tundra Swan* Wood Duck Gadwall American Wigeon American Black Duck Mallard (Mottled Duck) (Blue-winged Teal) Northern Shoveler Northern Pintail Green-winged Teal Canvasback Redhead **Ring-necked Duck Greater Scaup**

Lesser Scaup King Eider* Harlequin Duck* (Surf Scoter) White-winged Scoter* (Black Scoter) Long-tailed Duck* Bufflehead Common Goldeneye Barrow's Goldeneye * Hooded Merganser Common Merganser **Red-breasted Merganser** Ruddy Duck **Bald Eagle** Northern Harrier Sharp-shinned Hawk Cooper's Hawk Northern Goshawk * Red-shouldered Hawk Red-tailed Hawk Rough-legged Hawk (Golden Eagle) American Kestrel (Merlin) (Gyrfalcon) (Peregrine Falcon) Prairie Falcon * **Ring-necked Pheasant** Wild Turkey Northern Bobwhite (Virginia Rail) (Sora) American Coot Killdeer (Spotted Sandpiper) (Greater Yellowlegs)

(Lesser Yellowlegs) (Least Sandpiper) (Dunlin) (Long-billed Dowitcher) Wilson's Snipe (American Woodcock) (Laughing Gull) (Franklin's Gull) Little Gull * Bonaparte's Gull **Ring-billed Gull** (California Gull) Herring Gull Thayer's Gull * Iceland Gull * Lesser Black-backed Gull (Glaucous-winged Gull) Glaucous Gull * Great Black-backed Gull * Black-legged Kittiwake * Ivory Gull * **Rock Pigeon** Band-tailed Pigeon * Eurasian Collared Dove Mourning Dove Eastern Screech-Owl Great Horned Owl Snowy Owl * Barred Owl Long-eared Owl Short-eared Owl Northern Saw-whet Owl * (Rufous Hummingbird) **Belted Kingfisher** Red-headed Woodpecker Red-bellied Woodpecker Yellow-bellied Sapsucker Downy Woodpecker Hairy Woodpecker Northern Flicker

Pileated Woodpecker (Eastern Phoebe) (Say's Phoebe) (Western Kingbird) (Loggerhead Shrike) Northern Shrike * (White-eyed Vireo) (Blue-headed Vireo) (Philadelphia Vireo) (Red-eyed Vireo) Blue Jay American Crow Horned Lark (Barn Swallow) Black-capped Chickadee **Tufted Titmouse Red-breasted Nuthatch** White-breasted Nuthatch Brown Creeper Carolina Wren (House Wren) Winter Wren (Sedge Wren) (Marsh Wren) Golden-crowned Kinglet **Ruby-crowned Kinglet** Eastern Bluebird Townsend's Solitaire * Hermit Thrush (Wood Thrush) American Robin Varied Thrush * (Gray Catbird) Northern Mockingbird Brown Thrasher European Starling (American Pipit) Bohemian Waxwing * Cedar Waxwing (Orange-crowned Warbler)

(Cape May Warbler) Yellow-rumped Warbler (Pine Warbler) (Bay-breasted Warbler) (American Redstart) (Ovenbird) (Common Yellowthroat) (Wilson's Warbler) Northern Cardinal (Rose-breasted Grosbeak) (Indigo Bunting) (Dickcissel) Spotted Towhee * Eastern Towhee American Tree Sparrow (Chipping Sparrow) Field Sparrow (Vesper Sparrow) Lark Bunting * Savannah Sparrow (LeConte's Sparrow) Fox Sparrow Song Sparrow (Lincoln's Sparrow) Swamp Sparrow White-throated Sparrow (Harris's Sparrow) White-crowned Sparrow Dark-eyed Junco Lapland Longspur **Snow Bunting** Red-winged Blackbird Eastern Meadowlark Western Meadowlark (Yellow-headed Blackbird) **Rusty Blackbird** (Brewer's Blackbird) **Common Grackle** (Great-tailed Grackle) Brown-headed Cowbird

(Baltimore Oriole) Pine Grosbeak * Purple Finch House Finch Red Crossbill White-winged Crossbill Common Redpoll Pine Siskin American Goldfinch Evening Grosbeak * House Sparrow Eurasian Tree Sparrow Total winter birds = 206 species (138 are considered winter residents, but 68 species in parenthesis even though seen in winter are not considered winter residents/ most were late migrants)

* = rare or even very rare, but winter is the time they principally occurred

(for additional data on winter birds in Springfield, IL consult the Christmas Bird Count historical results section on the National Audubon's website).

APPENDIX K.

Geographic Origin of Selected Species (or Subspecies) of Sangamon County Birds

Western US Pacific Loon Eared Grebe Western Grebe Clark's Grebe White-faced Ibis Ross's Goose Trumpeter Swan\$ **Cinnamon Teal** Swainson's Hawk Western Red-tail* Harlan's Hawk* Krider's Hawk* Prairie Falcon Snowy Plover+ American Avocet Franklin's Gull Mew Gull California Gull Thayer's Gull Glaucous-winged Gull Western Gull? **Band-tailed Pigeon** White-winged Dove Burrowing Owl **Rufous Hummingbird Red-shafted Flicker*** Western Wood-Pewee? Say's Phoebe Vermilion Flycatcher Ash-throated Flycatcher Western Kingbird Scissor-tailed Flycatcher Cassin's Vireo Mountain Bluebird Townsend's Solitaire Varied Thrush Sprague's Pipit Audubon's Warbler* Hermit Warbler ? Black-throated Gray Warbler Western Tanager Black-headed Grosbeak Lazuli Bunting Spotted Towhee

Clay-colored Sparrow Lark Bunting Harris's Sparrow Sooty Fox Sparrow* Oregon Junco* Gray-headed Junco* Chestnut-collared Longspur Western Meadowlark Yellow-headed Blackbird Brewer's Blackbird Great-tailed Grackle House Finch\$

Southern US

Neotropic Cormorant Snowy Egret Little Blue Heron **Tricolored Heron** Glossy Ibis Mottled Duck **Black Vulture** White-tailed Kite Mississippi Kite **Purple Gallinule Black-necked Stilt** Laughing Gull Least Tern Black Skimmer Common Ground-Dove Monk Parakeet\$ -S.AM. Chuck-will's-widow Prairie Warbler Hooded Warbler Summer Tanager Blue Grosbeak

Eastern US

Brant King Eider Harlequin Duck+ Barrow's Goldeneye+ Iceland Gull Great Black-backed Gull Yellow Palm Warbler* Northern North America Gryfalcon Glaucous Gull Snowy Owl Northern Shrike Bohemian Waxwing Snow Bunting Pine Grosbeak Red Crossbill White-winged Crossbill Common Redpoll Pine Siskin Evening Grosbeak

Old World

Cattle Egret Mute Swan\$ Eurasian Wigeon Tufted Duck Ring-necked Pheasant\$ Ruff Little Gull Lesser Black-backed Gull Rock Pigeon\$ Eurasian Collared-Dove European Starling\$ House Sparrow\$ Eurasian Tree Sparrow\$

Pelagic or Coastal

Red-throated Loon Red-necked Grebe Red Phalarope Pomarine Jaeger Parasitic Jaeger Long-tailed Jaeger? Ivory Gull Sabine's Gull Black-legged Kitiwake Arctic Tern

* subspecies + west or east ? Hypothetical \$ introduced

APPENDIX L.

Banding Data With Net Hours and Catch in Sangamon County, Illinois [CP=Carpenter Park, Sg=Sangchris, Spfld=Springfield]

Year/Season	# of Days	Net Hours	# Birds Caught	Birds/Net Hours	Location
1971	25	50*	50	1.00	3 mi S Spfld
1972	34	80*	126	1.58	3 mi S Spfld, Sg
1973	44	128*	119	0.93	3 mi S Spfld, CP, Sg
1974	91	1326*	1272	0.96	3 mi S Spfld, CP, Sg
1975/Spring	24	879	416	0.47	Carpenter Park
1975/Fall	36	1849	1618	0.88	Carpenter Park
1976/Spring	33	2035	885	0.43	Carpenter Park
1976/Fall	39	2209	1675	0.76	Carpenter Park
1977/Spring	33	1485	760	0.51	3 mi S Spfld & CP
1977/Fall	46	3919	1781	0.45	Lincoln Gardens
1978/Spring	28	1703	1278	0.75	3 mi S Spfld & CP
1978/Fall	46	3312	1583	0.48	Lincoln Gardens
1979/Fall	39	2772	1483	0.53	Lincoln Gardens
1000/5 11	0.1	1010	4050	0.70	
1980/Fall	31	1849	1352	0.73	Lincoln Gardens
1001	10	100*	Γ 4	0.50	2 mi C Cuffel
1981	12	108*	54	0.50	3 mi S Spfld
1982	26	156*	74	0.47	2 mi S Snfld
1702	20	100	14	0.47	3 mi S Spfld
1983	47	282*	124	0.44	3 mi S Spfld
1703	77	202	124	0.44	

Year/Season	# of Days	Net Hours	# Birds Caught	Birds/Net Hours	Location
1984	15	30*	27	0.90	3 mi S Spfld
1985	6	18*	29	1.61	3 mi S Spfld
1987	1	8*	28	3.50	3 mi S Spfld
1990/Fall	23	962	300	0.31	Hunter Lake
1991	10	90*	28	0.31	9 mi S Spfld
1992	9	54*	15	0.28	9 mi S Spfld
1993	9	81*	19	0.23	9 mi S Spfld
TOTALS:	707 Days	35,385 Net Hours	15,096 Birds	0.43 Birds/Net Hours (For all Years Combined)	

* Estimated from days, nets, and hours.

APPENDIX M.

Species	# Killed	# of Kills	Percent of Total Kill
Pied-billed Grebe	4	3	.05%
Least Bittern	3	3	.04%
Yellow Rail	4	3	.05%
Virginia Rail	9	7	.11%
Sora	43	16	.55%
American Coot	2	2	.025%
Mourning Dove	2	2	.025%
Black-billed Cuckoo	7	6	.09%
Yellow-billed Cuckoo	5	5	.06%
Great Horned Owl	1	1	.01%
Common Nighthawk	3	2	.04%
Red-headed Woodpecker	6	4	.08%
Yellow-bellied Sapsucker	24	4	.30%
Northern Flicker	8	6	.10%
E. Wood Pewee	6	5	.08%
Yellow-bellied Flycatcher	11	5	.14%
"Traill's" Flycatcher	33	11	.42%
Least Flycatcher	11	5	.14%
Eastern Phoebe	1	1	.01%
Great Crested Flycatcher	3	3	.04%
Eastern Kingbird	1	1	.01%
Red-breasted Nuthatch	5	4	.06%
Brown Creeper	24	6	.30%
House Wren	13	8	.165%
Winter Wren	11	5	.14%
Sedge Wren	10	6	.13%
Marsh Wren	16	5	.20%
Golden-crowned Kinglet	29	8	.37%
Ruby-crowned Kinglet	63	11	.80%
Veery	193	16	2.45%
Gray-cheeked Thrush	216	17	2.74%

TV Tower Kills in Sangamon County (1959, 1963, & 1970–2002).

Species	# Killed	# of Kills	Percent of Total Kill
Swainson's Thrush	365	20	4.64%
Hermit Thrush	51	5	.65%
Wood Thrush	20	10	.25%
American Robin	2	2	.025%
Gray Catbird	170	19	2.16%
Brown Thrasher	5	1	.06%
Cedar Waxwing	1	1	.01%
White-eyed Vireo	1	1	.01%
Blue-headed Vireo	28	8	.355%
Yellow-throated Vireo	21	13	.27%
Warbling Vireo	3	3	.04%
Philadelphia Vireo	79	15	1.00%
Red-eyed Vireo	646	27	8.21%
Blue-winged Warbler	4	4	.05%
Golden-winged Warbler	33	12	.42%
Tennessee Warbler	940	26	11.94%
Orange-crowned Warbler	45	10	.57%
Nashville Warbler	174	18	2.21%
Northern Parula	17	8	.22%
Yellow Warbler	44	12	.56%
Chestnut-sided Warbler	254	22	3.23%
Magnolia Warbler	258	22	3.28%
Cape May Warbler	5	2	.06%
Black-throated Blue Warbler	7	3	.09%
Yellow-rumped Warbler	415	15	5.27%
Black-throated Green Warbler	100	16	1.27%
Blackburnian Warbler	96	16	1.22%
Pine Warbler	3	2	.04%
Palm Warbler	70	11	.89%
Bay-breasted Warbler	205	19	2.60%
Blackpoll Warbler	30	9	.38%
Black & White Warbler	228	19	2.895%
American Redstart	325	23	4.13%
Prothonotary Warbler	3	3	.04%
Ovenbird	1099	27	13.96%

Species	# Killed	# of Kills	Percent of Total Kill
Northern Waterthrush	270	17	3.41%
Kentucky Warbler	1	1	.01%
Connecticut Warbler	13	8	.165%
Mourning Warbler	27	9	.34%
Common Yellow-throat	290	24	3.68%
Wilson's Warbler	21	10	.27%
Canada Warbler	70	11	.89%
Yellow-breasted Chat	1	1	.01%
Scarlet Tanager	44	16	.56%
Rose-breasted Grosbeak	111	13	1.41%
Indigo Bunting	53	10	.67%
Dickcissel	5	5	.06%
Chipping Sparrow	5	3	.06%
Clay-colored Sparrow	3	1	.04%
Field Sparrow	4	3	.05%
Savannah Sparrow	37	8	.47%
Grasshopper Sparrow	11	6	.14%
LeConte's Sparrow	3	3	.04%
Fox Sparrow	4	3	.05%
Song Sparrow	9	4	.11%
Lincoln's Sparrow	41	7	.52%
Swamp Sparrow	52	12	.66%
White-throated Sparrow	34	6	.43%
White-crowned Sparrow	9	4	.11%
Dark-eyed Junco	5	2	.06%
Bobolink	144	17	1.83%
Red-winged Blackbird	1	1	.01%
Eastern Meadowlark	1	1	.01%
Baltimore Oriole	61	8	.77%
Pine Siskin	1	1	.01%
Thrush sp.?	9	6	.11%
Unidentified or lost specimens	19	_	.24%

Total Number of Birds Killed= 7873 Number of Species= 96

APPENDIX N.

Bird Species That Nest or Typically Perch in Dead Trees or Dead Snags

Double-crested Cormorant **Turkey Vulture** Wood Duck Hooded Merganser Osprey Bald Eagle Red-tailed Hawk Eastern Screech-Owl Great Horned Owl Barred Owl **Chimney Swift Ruby-throated Hummingbird** Red-headed Woodpecker Red-bellied Woodpecker Downy Woodpecker Hairy Woodpecker Northern Flicker Pileated Woodpecker Olive-sided Flycatcher Great Crested Flycatcher Tree Swallow Black-capped Chickadee **Tufted Titmouse** White-breasted Nuthatch Brown Creeper Carolina Wren House Wren Eastern Bluebird **European Starling** Prothonotary Warbler House Sparrow Eurasian Tree Sparrow

APPENDIX O.

Bird Species in Sangamon County Arranged by Numbers of Birds (1970–2006)

COMMON NAME	# BIRDS	# DAYS
Common Grackle	7592582	9734
Red-winged Blackbird	5070990	9186
Ring-billed Gull	3496877	10315
Snow Goose	2027857	2001
Canada Goose	1582623	8145
Mallard	1487758	10658
Brown-headed Cowbird	1036263	7014
American Coot	607650	7938
Lesser Scaup	539541	5043
Bonaparte's Gull	327408	4459
Common Goldeneye	289930	3841
American Robin	278558	10484
Mourning Dove	194589	11094
American Crow	186745	11134
Common Merganser	184624	2993
Ruddy Duck	167508	4261
Tree Swallow	166200	3326
Dark-eyed Junco	162240	6132
Northern Cardinal	143893	11576
Blue Jay	137056	11421
Chimney Swift	115412	5764
Herring Gull	111033	5404
Killdeer	107496	8512
Horned Lark	106806	8276
Double-crested Cormorant	101136	3255
American Goldfinch	96811	9940
Blue-winged Teal	95806	4304
Greater White-fronted Goose	93058	1107
Cedar Waxwing	88489	5191
Ring-necked Duck	85944	3317
Black-capped Chickadee	76971	10713
Barn Swallow	74362	5507
Gadwall	74044	4114
White-throated Sparrow	69879	4838

COMMON NAME	# BIRDS	# DAYS
Pied-billed Grebe	68508	6514
Pectoral Sandpiper	66593	2976
Red-breasted Merganser	65363	2861
Yellow-rumped Warbler	64252	3809
Northern Shoveler	61384	3966
Song Sparrow	59527	9762
Lapland Longspur	59353	1015
Great Blue Heron	57330	6616
Tufted Titmouse	56888	10110
Green-winged Teal	55278	3551
Wood Duck	54873	5795
Bank Swallow	53549	2188
American Tree Sparrow	52001	3146
Northern Flicker	50962	10342
Cliff Swallow	50773	2322
American Wigeon	50257	3793
Indigo Bunting	45048	5045
Red-bellied Woodpecker	42987	10195
Eastern Meadowlark	41286	6768
Downy Woodpecker	41180	10426
Northern Pintail	40316	2786
Canvasback	39663	2423
Turkey Vulture	38588	3211
Hooded Merganser	37757	3310
Redhead	33656	2331
Chipping Sparrow	30943	4808
Least Sandpiper	30831	3113
House Wren	30407	5608
American Black Duck	28811	3797
Horned Grebe	27067	2825
Gray Catbird	26708	4998
Bufflehead	26183	2949
Red-tailed Hawk	25876	6723
Semipalmated Sandpiper	25789	1978
Purple Martin	25557	3135
Swamp Sparrow	23839	3873
Tennessee Warbler	23715	2631
Field Sparrow	23514	5687

COMMON NAME	# BIRDS	# DAYS
Carolina Wren	23164	7206
House Finch	23042	4627
Brown Thrasher	22894	5529
Ruby-crowned Kinglet	22762	3251
Lesser Yellowlegs	21213	2641
White-breasted Nuthatch	20919	7567
Eastern Kingbird	20789	3995
Eastern Bluebird	19822	4441
Rusty Blackbird	19235	1411
Common Yellowthroat	19125	4544
Common Nighthawk	17650	2350
Red-eyed Vireo	17398	3473
Red-headed Woodpecker	16986	5979
Northern Bobwhite	16680	3887
Common Loon	16585	2583
American Kestrel	16041	6207
Eastern Wood-Pewee	15829	4031
Broad-winged Hawk	15098	668
White-crowned Sparrow	15032	2365
Eurasian Tree Sparrow	14225	3163
Cackling Goose	13868	423
Dickcissel	13698	2650
Rose-breasted Grosbeak	13592	3632
Caspian Tern	13502	1999
Baltimore Oriole	13428	3335
Golden-crowned Kinglet	12927	3033
Eastern Towhee	12583	5077
American Redstart	10545	2034
Nashville Warbler	10462	2113
Magnolia Warbler	10362	1986
Warbling Vireo	10268	3456
Great Egret	10231	1827
Great Crested Flycatcher	10027	3332
Savannah Sparrow	9970	2199
Pine Siskin	9790	1560
Swainson's Thrush	9754	1872
Spotted Sandpiper	9441	3447
Ring-necked Pheasant	9379	3459

COMMON NAME	# BIRDS	# DAYS
Yellow-billed Cuckoo	9329	3233
Smith's Longspur	9183	275
Northern Mockingbird	9179	4207
Wilson's Snipe	9100	2035
Franklin's Gull	9013	1609
Belted Kingfisher	8986	5471
Fox Sparrow	8870	2182
Hairy Woodpecker	8733	5519
Ovenbird	8423	1887
Chestnut-sided Warbler	8161	1863
Black-throated Green Warbler	8146	2217
Palm Warbler	8002	1297
Northern Rough-winged Swallow	7944	2285
Black Tern	7749	762
Hermit Thrush	6816	1981
Brown Creeper	6610	3077
Green Heron	6420	3034
Eastern Phoebe	6355	3031
Forster's Tern	6118	1517
Purple Finch	5757	1924
Semipalmated Plover	5600	1182
Greater Yellowlegs	5587	1497
Bay-breasted Warbler	5538	1508
Dunlin	5445	736
Black-and-white Warbler	5227	1762
American Golden-Plover	5008	481
Solitary Sandpiper	4739	1782
Least Flycatcher	4658	1725
Yellow-bellied Sapsucker	4367	2086
Winter Wren	4198	2080
American White Pelican	4191	145
Blue-gray Gnatcatcher	4116	1581
Northern Waterthrush	4096	1333
Ruby-throated Hummingbird	3782	1763
Bobolink	3771	631
American Pipit	3690	531
Scarlet Tanager	3676	1712
Wood Thrush	3598	1905

COMMON NAME	# BIRDS	# DAYS
Blackpoll Warbler	3414	832
Yellow-throated Vireo	3387	1787
Pileated Woodpecker	3363	1944
Vesper Sparrow	3310	1639
Orange-crowned Warbler	3229	1369
Short-billed Dowitcher	3171	607
Stilt Sandpiper	3049	780
Blackburnian Warbler	3036	1315
Lincoln's Sparrow	3030	1284
Sora	2948	1066
Common Tern	2933	484
Mute Swan	2790	1075
Orchard Oriole	2751	1387
Yellow Warbler	2743	1352
Great Horned Owl	2671	1863
Northern Parula	2653	1465
Cooper's Hawk	2635	1850
Red-breasted Nuthatch	2623	1355
Grasshopper Sparrow	2581	1170
Wilson's Warbler	2521	1150
Gray-cheeked Thrush	2398	870
Wild Turkey	2396	514
Canada Warbler	2342	1013
White-eyed Vireo	2228	1440
Golden-winged Warbler	2135	945
Sharp-shinned Hawk	2053	1241
Long-billed Dowitcher	2043	404
Yellow-bellied Flycatcher	1943	1038
Blue-headed Vireo	1940	1089
Bell's Vireo	1883	1192
Barred Owl	1876	1375
Northern Harrier	1874	1263
Black-crowned Night-Heron	1806	738
Philadelphia Vireo	1742	873
Little Blue Heron	1701	590
White-rumped Sandpiper	1621	433
Veery	1565	736
Snow Bunting	1542	130

COMMON NAME	# BIRDS	# DAYS
Cape May Warbler	1395	637
Yellow-breasted Chat	1391	879
Osprey	1280	971
Mourning Warbler	1232	675
Greater Scaup	1227	536
Willow Flycatcher	1207	680
American Woodcock	1167	705
Eastern Screech Owl	1102	710
Kentucky Warbler	1096	633
Alder Flycatcher	1078	625
Brewer's Blackbird	1007	137
Sedge Wren	970	559
Yellow-throated Warbler	948	655
Prothonotary Warbler	946	598
Marsh Wren	934	578
Evening Grosbeak	931	189
Acadian Flycatcher	929	546
Bald Eagle	867	606
Ross's Goose	794	298
Blue-winged Warbler	752	494
White-winged Crossbill	707	93
Summer Tanager	705	533
Olive-sided Flycatcher	653	520
Lark Sparrow	634	379
LeConte's Sparrow	633	366
Black-billed Cuckoo	612	477
Cattle Egret	585	231
Rough-legged Hawk	565	383
Baird's Sandpiper	553	319
Common Redpoll	490	75
Willet	486	114
Oldsquaw	484	306
Sanderling	482	248
Eared Grebe	477	288
Red Crossbill	428	90
Black-bellied Plover	410	221
Western Sandpiper	398	206
Lesser Black-backed Gull	363	322

COMMON NAME	# BIRDS	# DAYS
Upland Sandpiper	347	153
Buff-breasted Sandpiper	337	122
American Avocet	334	75
Surf Scoter	331	192
Trumpeter Swan	307	65
White-winged Scoter	297	148
Cerulean Warbler	289	225
Red-shouldered Hawk	287	227
Loggerhead Shrike	283	204
Wilson's Phalarope	279	185
Whip-poor-will	263	208
Snowy Egret	263	162
Laughing Gull	253	234
Pine Warbler	247	207
Western Meadowlark	241	211
Blue Grosbeak	235	152
Tundra Swan	232	68
Hooded Warbler	226	192
Louisiana Waterthrush	220	186
Virginia Rail	219	173
Black-throated Blue Warbler	214	176
Connecticut Warbler	198	154
Western Kingbird	187	103
Common Moorhen	185	157
Ruddy Turnstone	182	84
Merlin	181	172
Peregrine Falcon	160	151
Black Scoter	139	90
Worm-eating Warbler	138	119
Eurasian Collared-Dove	134	54
Short-eared Owl	117	56
Hudsonian Godwit	115	48
Red-throated Loon	112	104
American Bittern	112	106
Spotted Towhee	104	103
Red-necked Phalarope	104	66
Mottled Duck	90	90
Marbled Godwit	90	31

COMMON NAME	# BIRDS	# DAYS
Least Bittern	85	72
Yellow-crowned Night-Heron	83	73
Pacific Loon	83	79
Northern Goshawk	80	73
Harris's Sparrow	76	72
Glaucous Gull	72	68
Red-necked Grebe	71	66
Western Grebe	70	62
King Eider	70	70
Thayer's Gull	66	62
Sabine's Gull	65	45
Black-legged Kittiwake	62	60
Nelson's Sharp-tailed Sparrow	61	53
Yellow-headed Blackbird	59	48
Clay-colored Sparrow	58	49
Henslow's Sparrow	56	41
Long-eared Owl	52	35
Prairie Warbler	48	46
Least Tern	46	33
Bewick's Wren	42	40
Sandhill Crane	39	12
Pomarine Jaeger	39	30
Golden Eagle	34	34
Yellow Rail	31	29
Piping Plover	31	30
Cinnamon Teal	30	30
California Gull	30	30
Northern Shrike	29	26
Little Gull	29	29
King Rail	27	26
Harlequin Duck	26	25
Brewster's & Lawrence's Hybrids	24	24
Varied Thrush	23	23
Northern Saw-whet Owl	20	20
Red Knot	18	4
Iceland Gull	14	14
Brant	13	12
Sprague's Pipit	12	7

COMMON NAME	# BIRDS	# DAYS
Red Phalarope	12	10
Band-tailed Pigeon	11	11
Say's Phoebe	10	10
Rufous Hummingbird	10	10
Prairie Falcon	10	10
Swainson's Hawk	9	9
Snowy Owl	9	9
Great-tailed Grackle	9	9
Great Black-backed Gull	9	9
Glaucous-winged Gull	9	9
Chuck-will's-widow	9	9
Mississippi Kite	8	8
Barrow's Goldeneye	8	8
Ruff	7	7
Pine Grosbeak	6	6
Monk Parakeet	6	5
Gyrfalcon	6	6
Eurasian Wigeon	6	6
Common Ground-Dove	6	4
Arctic Tern	6	6
Tufted Duck	5	5
Townsend's Solitaire	5	5
Bohemian Waxwing	5	5
Western Wood-Pewee	4	4
Tricolored Heron	4	4
Scissor-tailed Flycatcher	4	4
Parasitic Jaeger	4	4
Mountain Bluebird	4	4
Glossy Ibis	4	3
Black Vulture	4	4
Ash-throated Flycatcher	4	4
Mew Gull	3	3
Chestnut-collared Longspur	3	3
Black-necked Stilt	3	2
Long-tailed Jaeger	2	2
Western Tanager	2	2
Western Gull	2	2
Purple Gallinule	2	2

COMMON NAME	# BIRDS	# DAYS
Lazuli Bunting	2	2
Clark's Grebe	2	2
Cassin's Vireo	2	2
Black-headed Grosbeak	2	2
White-winged Dove	1	1
White-tailed Kite	1	1
White-faced Ibis	1	1
Whimbrel	1	1
Vermilion Flycatcher	1	1
Snowy Plover	1	1
Neotropic Cormorant	1	1
Lark Bunting	1	1
Ivory Gull	1	1
Hermit warbler	1	1
Burrowing Owl	1	1
Black-throated Gray Warbler	1	1
Black Skimmer	1	1
Black Rail	1	1
Barn Owl	1	1
Rock Pigeon		
House Sparrow		
European Starling		
Total numbers of birds counted	29,568,184	

APPENDIX P.

Bird Species in Sangamon County Arranged by Number of Days Observed (1970–2006)

COMMON NAME	# BIRDS	# DAYS	Birds/Day
Northern Cardinal	143893	11576	12.43
Blue Jay	137056	11421	12.00
American Crow	186745	11134	16.77
Mourning Dove	194589	11094	17.54
Black-capped Chickadee	76971	10713	7.18
Mallard	1487758	10658	139.59
American Robin	278558	10484	26.57
Downy Woodpecker	41180	10426	3.95
Northern Flicker	50962	10342	4.93
Ring-billed Gull	3496877	10315	339.01
Red-bellied Woodpecker	42987	10195	4.22
Tufted Titmouse	56888	10110	5.63
American Goldfinch	96811	9940	9.74
Song Sparrow	59527	9762	6.10
Common Grackle	7592582	9734	780.01
Red-winged Blackbird	5070990	9186	552.03
Killdeer	107496	8512	12.63
Horned Lark	106806	8276	12.91
Canada Goose	1582623	8145	194.31
American Coot	607650	7938	76.55
White-breasted Nuthatch	20919	7567	2.76
Carolina Wren	23164	7206	3.21
Brown-headed Cowbird	1036263	7014	147.74
Eastern Meadowlark	41286	6768	6.10
Red-tailed Hawk	25876	6723	3.85
Great Blue Heron	57330	6616	8.67
Pied-billed Grebe	68508	6514	10.52
American Kestrel	16041	6207	2.58
Dark-eyed Junco	162240	6132	26.46
Red-headed Woodpecker	16986	5979	2.84
Wood Duck	54873	5795	9.47
Chimney Swift	115412	5764	20.02
Field Sparrow	23514	5687	4.13
House Wren	30407	5608	5.42

COMMON NAME	# BIRDS	# DAYS	Birds/Day
Brown Thrasher	22894	5529	4.14
Hairy Woodpecker	8733	5519	1.58
Barn Swallow	74362	5507	13.50
Belted Kingfisher	8986	5471	1.64
Herring Gull	111033	5404	20.55
Cedar Waxwing	88489	5191	17.05
Eastern Towhee	12583	5077	2.48
Indigo Bunting	45048	5045	8.93
Lesser Scaup	539541	5043	106.99
Gray Catbird	26708	4998	5.34
White-throated Sparrow	69879	4838	14.44
Chipping Sparrow	30943	4808	6.44
House Finch	23042	4627	4.98
Common Yellowthroat	19125	4544	4.21
Bonaparte's Gull	327408	4459	73.43
Eastern Bluebird	19822	4441	4.46
Blue-winged Teal	95806	4304	22.26
Ruddy Duck	167508	4261	39.31
Northern Mockingbird	9179	4207	2.18
Gadwall	74044	4114	18.00
Eastern Wood-Pewee	15829	4031	3.93
Eastern Kingbird	20789	3995	5.20
Northern Shoveler	61384	3966	15.48
Northern Bobwhite	16680	3887	4.29
Swamp Sparrow	23839	3873	6.16
Common Goldeneye	289930	3841	75.48
Yellow-rumped Warbler	64252	3809	16.87
American Black Duck	28811	3797	7.59
American Wigeon	50257	3793	13.25
Rose-breasted Grosbeak	13592	3632	3.74
Green-winged Teal	55278	3551	15.57
Red-eyed Vireo	17398	3473	5.01
Ring-necked Pheasant	9379	3459	2.71
Warbling Vireo	10268	3456	2.97
Spotted Sandpiper	9441	3447	2.74
Baltimore Oriole	13428	3335	4.03
Great Crested Flycatcher	10027	3332	3.01
Tree Swallow	166200	3326	49.97

COMMON NAME	# BIRDS	# DAYS	Birds/Day
Ring-necked Duck	85944	3317	25.91
Hooded Merganser	37757	3310	11.41
Double-crested Cormorant	101136	3255	31.07
Ruby-crowned Kinglet	22762	3251	7.00
Yellow-billed Cuckoo	9329	3233	2.89
Turkey Vulture	38588	3211	12.02
Eurasian Tree Sparrow	14225	3163	4.50
American Tree Sparrow	52001	3146	16.53
Purple Martin	25557	3135	8.15
Least Sandpiper	30831	3113	9.90
Brown Creeper	6610	3077	2.15
Green Heron	6420	3034	2.12
Golden-crowned Kinglet	12927	3033	4.26
Eastern Phoebe	6355	3031	2.10
Common Merganser	184624	2993	61.69
Pectoral Sandpiper	66593	2976	22.38
Bufflehead	26183	2949	8.88
Red-breasted Merganser	65363	2861	22.85
Horned Grebe	27067	2825	9.58
Northern Pintail	40316	2786	14.47
Dickcissel	13698	2650	5.17
Lesser Yellowlegs	21213	2641	8.03
Tennessee Warbler	23715	2631	9.01
Common Loon	16585	2583	6.42
Canvasback	39663	2423	16.37
White-crowned Sparrow	15032	2365	6.36
Common Nighthawk	17650	2350	7.51
Redhead	33656	2331	14.44
Cliff Swallow	50773	2322	21.87
Northern Rough-winged Swallow	7944	2285	3.48
Black-throated Green Warbler	8146	2217	3.67
Savannah Sparrow	9970	2199	4.53
Bank Swallow	53549	2188	24.47
Fox Sparrow	8870	2182	4.07
Nashville Warbler	10462	2113	4.95
Yellow-bellied Sapsucker	4367	2086	2.09
Winter Wren	4198	2080	2.02
Wilson's Snipe	9100	2035	4.47

COMMON NAME	# BIRDS	# DAYS	Birds/Day
American Redstart	10545	2034	5.18
Snow Goose	2027857	2001	1013.42
Caspian Tern	13502	1999	6.75
Magnolia Warbler	10362	1986	5.22
Hermit Thrush	6816	1981	3.44
Semipalmated Sandpiper	25789	1978	13.04
Pileated Woodpecker	3363	1944	1.73
Purple Finch	5757	1924	2.99
Wood Thrush	3598	1905	1.89
Ovenbird	8423	1887	4.46
Swainson's Thrush	9754	1872	5.21
Chestnut-sided Warbler	8161	1863	4.38
Great Horned Owl	2671	1863	1.43
Cooper's Hawk	2635	1850	1.42
Great Egret	10231	1827	5.60
Yellow-throated Vireo	3387	1787	1.90
Solitary Sandpiper	4739	1782	2.66
Ruby-throated Hummingbird	3782	1763	2.15
Black-and-white Warbler	5227	1762	2.97
Least Flycatcher	4658	1725	2.70
Scarlet Tanager	3676	1712	2.15
Vesper Sparrow	3310	1639	2.02
Franklin's Gull	9013	1609	5.60
Blue-gray Gnatcatcher	4116	1581	2.60
Pine Siskin	9790	1560	6.28
Forster's Tern	6118	1517	4.03
Bay-breasted Warbler	5538	1508	3.67
Greater Yellowlegs	5587	1497	3.73
Northern Parula	2653	1465	1.81
White-eyed Vireo	2228	1440	1.55
Rusty Blackbird	19235	1411	13.63
Orchard Oriole	2751	1387	1.98
Barred Owl	1876	1375	1.36
Orange-crowned Warbler	3229	1369	2.36
Red-breasted Nuthatch	2623	1355	1.94
Yellow Warbler	2743	1352	2.03
Northern Waterthrush	4096	1333	3.07
Blackburnian Warbler	3036	1315	2.31

COMMON NAME	# BIRDS	# DAYS	Birds/Day
Palm Warbler	8002	1297	6.17
Lincoln's Sparrow	3030	1284	2.36
Northern Harrier	1874	1263	1.48
Sharp-shinned Hawk	2053	1241	1.65
Bell's Vireo	1883	1192	1.58
Semipalmated Plover	5600	1182	4.74
Grasshopper Sparrow	2581	1170	2.21
Wilson's Warbler	2521	1150	2.19
Greater White-fronted Goose	93058	1107	84.06
Blue-headed Vireo	1940	1089	1.78
Mute Swan	2790	1075	2.60
Sora	2948	1066	2.77
Yellow-bellied Flycatcher	1943	1038	1.87
Lapland Longspur	59353	1015	58.48
Canada Warbler	2342	1013	2.31
Osprey	1280	971	1.32
Golden-winged Warbler	2135	945	2.26
Yellow-breasted Chat	1391	879	1.58
Philadelphia Vireo	1742	873	2.00
Gray-cheeked Thrush	2398	870	2.76
Blackpoll Warbler	3414	832	4.10
Stilt Sandpiper	3049	780	3.91
Black Tern	7749	762	10.17
Black-crowned Night-Heron	1806	738	2.45
Dunlin	5445	736	7.40
Veery	1565	736	2.13
Eastern Screech Owl	1102	710	1.55
American Woodcock	1167	705	1.66
Willow Flycatcher	1207	680	1.78
Mourning Warbler	1232	675	1.83
Broad-winged Hawk	15098	668	22.60
Yellow-throated Warbler	948	655	1.45
Cape May Warbler	1395	637	2.19
Kentucky Warbler	1096	633	1.73
Bobolink	3771	631	5.98
Alder Flycatcher	1078	625	1.72
Short-billed Dowitcher	3171	607	5.22
Bald Eagle	867	606	1.43

COMMON NAME	# BIRDS	# DAYS	Birds/Day
Prothonotary Warbler	946	598	1.58
Little Blue Heron	1701	590	2.88
Marsh Wren	934	578	1.62
Sedge Wren	970	559	1.74
Acadian Flycatcher	929	546	1.70
Greater Scaup	1227	536	2.29
Summer Tanager	705	533	1.32
American Pipit	3690	531	6.95
Olive-sided Flycatcher	653	520	1.26
Wild Turkey	2396	514	4.66
Blue-winged Warbler	752	494	1.52
Common Tern	2933	484	6.06
American Golden-Plover	5008	481	10.41
Black-billed Cuckoo	612	477	1.28
White-rumped Sandpiper	1621	433	3.74
Cackling Goose	13868	423	32.78
Long-billed Dowitcher	2043	404	5.06
Rough-legged Hawk	565	383	1.48
Lark Sparrow	634	379	1.67
LeConte's Sparrow	633	366	1.73
Lesser Black-backed Gull	363	322	1.13
Baird's Sandpiper	553	319	1.73
Oldsquaw	484	306	1.58
Ross's Goose	794	298	2.66
Eared Grebe	477	288	1.66
Smith's Longspur	9183	275	33.39
Sanderling	482	248	1.94
Laughing Gull	253	234	1.08
Cattle Egret	585	231	2.53
Red-shouldered Hawk	287	227	1.26
Cerulean Warbler	289	225	1.28
Black-bellied Plover	410	221	1.86
Western Meadowlark	241	211	1.14
Whip-poor-will	263	208	1.26
Pine Warbler	247	207	1.19
Western Sandpiper	398	206	1.93
Loggerhead Shrike	283	204	1.39
Surf Scoter	331	192	1.72

COMMON NAME	# BIRDS	# DAYS	Birds/Day
Hooded Warbler	226	192	1.18
Evening Grosbeak	931	189	4.93
Louisiana Waterthrush	220	186	1.18
Wilson's Phalarope	279	185	1.51
Black-throated Blue Warbler	214	176	1.22
Virginia Rail	219	173	1.27
Merlin	181	172	1.05
Snowy Egret	263	162	1.62
Common Moorhen	185	157	1.18
Connecticut Warbler	198	154	1.29
Upland Sandpiper	347	153	2.27
Blue Grosbeak	235	152	1.55
Peregrine Falcon	160	151	1.06
White-winged Scoter	297	148	2.01
American White Pelican	4191	145	28.90
Brewer's Blackbird	1007	137	7.35
Snow Bunting	1542	130	11.86
Buff-breasted Sandpiper	337	122	2.76
Worm-eating Warbler	138	119	1.16
Willet	486	114	4.26
American Bittern	112	106	1.06
Red-throated Loon	112	104	1.08
Western Kingbird	187	103	1.82
Spotted Towhee	104	103	1.01
White-winged Crossbill	707	93	7.60
Red Crossbill	428	90	4.76
Black Scoter	139	90	1.54
Mottled Duck	90	90	1
Ruddy Turnstone	182	84	2.17
Pacific Loon	83	79	1.05
Common Redpoll	490	75	6.53
American Avocet	334	75	4.45
Yellow-crowned Night-Heron	83	73	1.14
Northern Goshawk	80	73	1.10
Least Bittern	85	72	1.18
Harris's Sparrow	76	72	1.06
King Eider	70	70	1
Tundra Swan	232	68	3.41

COMMON NAME	# BIRDS	# DAYS	Birds/Day
Glaucous Gull	72	68	1.06
Red-necked Phalarope	104	66	1.58
Red-necked Grebe	71	66	1.08
Trumpeter Swan	307	65	4.72
Western Grebe	70	62	1.13
Thayer's Gull	66	62	1.06
Black-legged Kittiwake	62	60	1.03
Short-eared Owl	117	56	2.09
Eurasian Collared-Dove	134	54	2.48
Nelson's Sharp-tailed Sparrow	61	53	1.15
Clay-colored Sparrow	58	49	1.18
Hudsonian Godwit	115	48	2.40
Yellow-headed Blackbird	59	48	1.23
Prairie Warbler	48	46	1.04
Sabine's Gull	65	45	1.44
Henslow's Sparrow	56	41	1.37
Bewick's Wren	42	40	1.05
Long-eared Owl	52	35	1.49
Golden Eagle	34	34	1
Least Tern	46	33	1.39
Marbled Godwit	90	31	2.90
Pomarine Jaeger	39	30	1.3
Piping Plover	31	30	1.03
Cinnamon Teal	30	30	1
California Gull	30	30	1
Yellow Rail	31	29	1.07
Little Gull	29	29	1
Northern Shrike	29	26	1.12
King Rail	27	26	1.04
Harlequin Duck	26	25	1.04
Brewster's & Lawrence's Hybrids	24	24	1
Varied Thrush	23	23	1
Northern Saw-whet Owl	20	20	1
Iceland Gull	14	14	1
Sandhill Crane	39	12	3.25
Brant	13	12	1.08
Band-tailed Pigeon	11	11	1
Red Phalarope	12	10	1.2

COMMON NAME	# BIRDS	# DAYS	Birds/Day
Prairie Falcon	10	10	1
Rufous Hummingbird	10	10	1
Say's Phoebe	10	10	1
Swainson's Hawk	9	9	1
Glaucous-winged Gull	9	9	1
Great Black-backed Gull	9	9	1
Snowy Owl	9	9	1
Chuck-will's-widow	9	9	1
Great-tailed Grackle	9	9	1
Barrow's Goldeneye	8	8	1
Mississippi Kite	8	8	1
Sprague's Pipit	12	7	1.71
Ruff	7	7	1
Eurasian Wigeon	6	6	1
Gyrfalcon	6	6	1
Arctic Tern	6	6	1
Pine Grosbeak	6	6	1
Monk Parakeet	6	5	1.2
Tufted Duck	5	5	1
Townsend's Solitaire	5	5	1
Bohemian Waxwing	5	5	1
Red Knot	18	4	4.5
Common Ground-Dove	6	4	1.5
Tricolored Heron	4	4	1
Black Vulture	4	4	1
Parasitic Jaeger	4	4	1
Western Wood-Pewee	4	4	1
Ash-throated Flycatcher	4	4	1
Scissor-tailed Flycatcher	4	4	1
Mountain Bluebird	4	4	1
Glossy Ibis	4	3	1.33
Mew Gull	3	3	1
Chestnut-collared Longspur	3	3	1
Black-necked Stilt	3	2	1.5
Clark's Grebe	2	2	1
Purple Gallinule	2	2	1
Western Gull	2	2	1
Cassin's Vireo	2	2	1

COMMON NAME	# BIRDS	# DAYS	Birds/Day
Western Tanager	2	2	1
Black-headed Grosbeak	2	2	1
Lazuli Bunting	2	2	1
Long-tailed Jaeger	2	2	1
Neotropic Cormorant	1	1	1
White-faced Ibis	1	1	1
White-tailed Kite	1	1	1
Black Rail	1	1	1
Snowy Plover	1	1	1
Whimbrel	1	1	1
Ivory Gull	1	1	1
Black Skimmer	1	1	1
White-winged Dove	1	1	1
Barn Owl	1	1	1
Burrowing Owl	1	1	1
Vermilion Flycatcher	1	1	1
Black-throated Gray Warbler	1	1	1
Hermit warbler	1	1	1
Lark Bunting	1	1	1
Rock Pigeon			
European Starling			
House Sparrow			
Total number of birds counted	29,568,184		

APPENDIX Q.

Gazetteer of Places Observed in Study

(See Appendix R for Maps: CW = County-wide pg. 751, LS = Lake Springfield pg. 752, and N = north Sangamon County pg. 753)

Adams Wildlife Sanctuary- (1 N) In text usually "Adams Sanctuary"

Airport Pond & Swamp- (2 N) Near Abraham Lincoln Capital Airport, includes all airport references (no public access)

Andrew, Illinois- (CW)

Auburn Sewer Pond- (CW) Northeast of Auburn (no public access)

Beach area, Lake Springfield- (3 LS)

Beamington Corner- (4 CW)

Berlin Sewer Pond- (CW) East of New Berlin (no public access)

Berry, Illinois- (CW)

Boy Scout Camp- (5 LS) On southwest area of Lake Springfield

Brunk Cemetery- (6 LS)

Buckhart, Illinois- (CW)

Buckhart Sand & Gravel- (CW) In text usually "Buckhart" (private property)

Buffalo Pasture- (CW) 1 mile east of Buffalo (private property)

Buffalo Sewer Pond- (7 CW) Southwest of Buffalo (no public access)

Bunn Park- (8 LS)

Camp Lincoln Ponds- (9 N) (private property)

Carpenter Park Nature Preserve- (10 N) North of Springfield, in text "Carpenter Park" or "CP"

Centennial Park- (11 CW)

Center Park- (12 LS) At Lake Springfield

Cinder Flats- (13 LS) North end of Lake Springfield near dam (no public access)

Clear Lake Sand and Gravel- (14 CW) South of Riverton (private property)

Conifers by Lake Springfield- (15 LS) West Lake Drive

Cotton Hill Park South- (16 LS)

Curran, Illinois- (CW)

Dam, Lake Springfield- (LS)

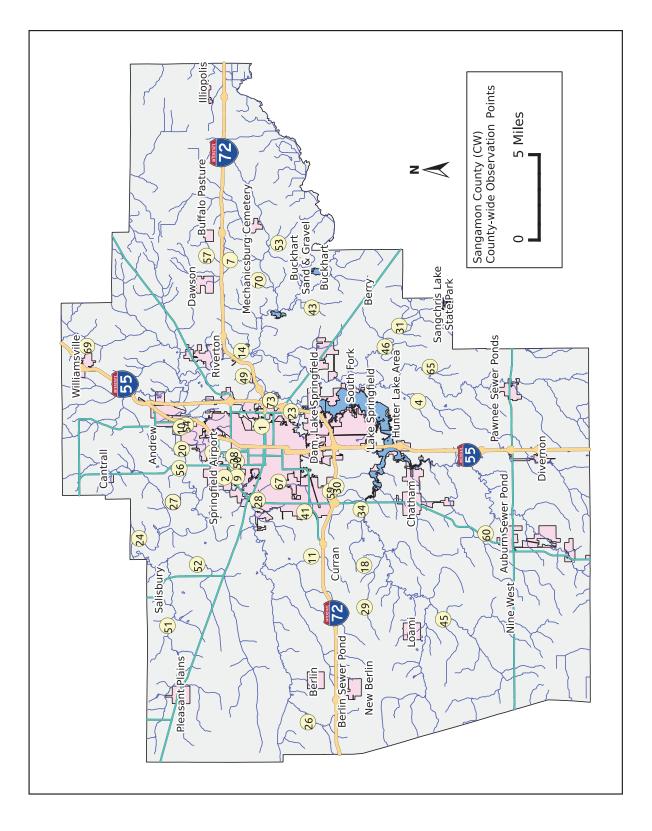
Dam Park (Frank Madonia Parks)- (17 LS) At Lake Springfield

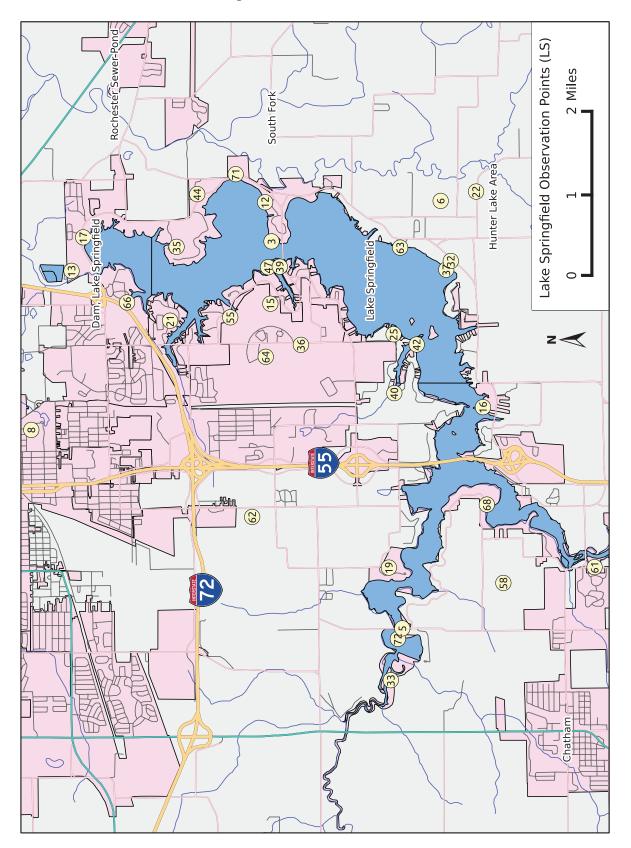
- Dawson, Illinois- (CW)
- East side sewer pond- (73 CW) Sugar Creek Plant off Rt.72 east (no public access)
- Four Corners- (18 CW) South of Curran
- Girl Scout Camp- (19 LS) South off Woodside Road near Lake Springfield
- Gurgens Park- (20 N) West of and part of Carpenter Park Nature Preserve
- Hazel Dell Lane- (21 LS) Near warm-water ditch
- Horse Creek- (22 LS)
- Hunter Lake Area- (CW) Vast area of proposed lake east and south of Lake Springfield
- Illinois Department of Transportation Pond- (23 N) In text usually referred to as "IDOT pond"
- Illiopolis, Illinois- (CW) Agricultural Area north and west of Illiopolis
- Irwin Bridge- (24 CW) 3 miles northeast Salisbury
- Island Bay Yacht Club- (25 LS) Near Marine Point (private property)
- Island Grove Cemetery- (26 CW)
- Jefferies Orchard- (27 CW) Area northwest of Springfield on the bluff of the Sangamon River, in text sometimes "JeffO" (private property)
- Jefferson Park- (28 N) On the west side of Springfield
- Knapp Lake- (29 CW) 3 miles northeast Loami, no longer a lake, mostly brush (private property)
- Knight's Pond- (30 LS) Between Springfield and Chatham
- Kunz Road- (31 CW) 2 miles northeast New City
- Lake Springfield- (LS) Sometimes referred to as "LSpfld"
- Lake Springfield Nursery- (32 LS) East Lake Drive
- Lick Creek Marsh- (33 LS) West end of Lake Springfield and surrounding woods
- Lick Creek West- (34 LS) On the west side of Illinois Route 4
- Lincoln Greens Golf Course- (35 LS) At Lake Springfield
- Lincoln Land College- (36 LS)
- Lincoln Memorial Gardens- (37 LS) In text "Lincoln Gardens" or "Lin Gds"
- Lincoln Park- (38 N)
- Lindsay Bridge- (39 LS) Divides the large bays of Lake Springfield at Center Park
- Loami, Illinois- (CW)
- Long Inlet- (40 LS) Narrow bay west of Marine Pt.
- Mall Ponds- (41 LS) In the sprawl area on the west side of Springfield

- Marine Point- (42 LS) Small peninsula before islands in Lake Springfield, in text "Marine Pt"
- Marsh Road- (43 CW) Valley 2 miles east Rochester
- Mechanicsburg Cemetery- (CW) West of Mechanicsburg
- Muni Opera- (44 LS) East Lake Drive, in text "Muni"
- Nine West- (CW) Flooded field 9 miles west of Springfield and north of Illinois Route 104
- Nipper Prairie- (45 CW) 1.5 miles southeast of Loami
- North of New City- (46 CW) Valley prone to flooding 2 miles north of New City (private property)
- North Point- (47 LS) West side of Lindsay Bridge in text "North PT."
- North Side Sewer Pond- (48 N) Spring Creek Plant, north of State Fair Grounds (no public access)
- Oak Hill Cemetery- (49 N) On Clear Lake Road west
- Oak Ridge Cemetery- (50 N) North side of Springfield, in text sometimes "Oak Ridge"
- Pawnee Sewer Ponds- (CW) North of Pawnee (no public access)
- Pleasant Plains Pasture- (51 CW) 4.5 miles east of Pleasant Plains (private property)
- Pony Farm- (52 CW) 3 miles northwest of Bradfordton (private property)
- Prairie Pond- (53 CW) 3 miles northeast of Buckhart (private property)
- Riverside Park- (54 N) South of Sangamon River from Carpenter Park Nature Preserve, in text sometimes "RSP"
- Riverton, Illinois- (CW)
- Rochester Sewer Ponds- (LS) West & formerly northeast of Rochester
- Round Inlet- (55 LS) West Lake Drive Lake Springfield
- Illinois Route 29 Bridge- (56 N) North at Sangamon River, in text "Route 29 bridge"
- Salisbury, Illinois- (CW)
- Sangchris Lake State Park- (CW) Northwest corner. In text usually "Sangchris" or "Sg"
- Scully Pines (57 CW) 1 mile west Buffalo (private property)
- Sediment Retention Facility- (58 LS) East of Chatham near Lake Refuge, in text "Sediment Retention" or "Sed Ret" (no public access)
- Sod Field off Chatham Road- (59 LS) Not there now, housing area
- Sod Field north of Auburn- (60 CW) (private property)
- South end of Lake Springfield- (61 LS) Bays southeast of Chatham, in text "south end LSpfld"

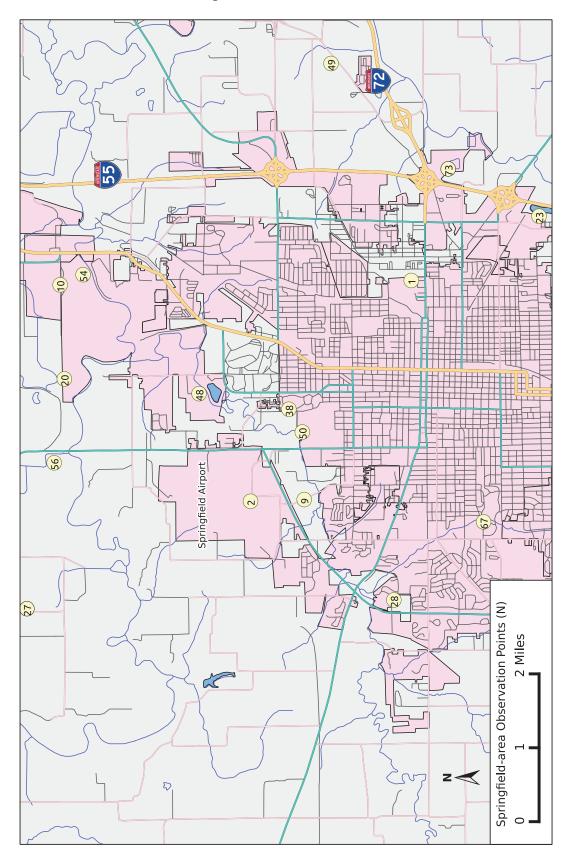
- South Fork Sangamon River- (LS)
- Southwind Park- (62 LS)
- Springfield Airport- (CW) Abraham Lincoln Capitol Airport, in text "airport" or "Capitol Airport"
- Spruce- (63 LS) North of Lincoln Gardens on East lake drive
- UIS- (64 LS) Campus of University of Illinois at Springfield
- Wahl Road- (65 CW) 1 mile east of New City
- Warm Water Ditch- (66 LS) Near power plant at Lake Springfield
- Washington Park- (67 N) Also referred to as "WP"
- Wildlife Refuge- (68 LS) On southwest arm of Lake Springfield, in text Refuge
- Williamsville Refuge- (69 CW) East of Williamsville
- WICS TV Tower- (70 CW) 10 miles east of Springfield (private property)
- Woods by Lake Springfield- (71 LS) Off East Lake Drive
- Woodside Bridge- (72 LS) On west arm of Lake Springfield

APPENDIX R. Maps of Observational Areas





Maps of Observational Areas



Maps of Observational Areas

APPENDIX S.

Literature Used in the Study (not necessarily cited)

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1995a	White-tailed Kite at Springfield, Sangamon County. Meadowlark 4(4): 141.
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2000	Western Kingbird Nests in Sangamon County, Illinois. Meadowlark 9 (1): 10-11.
2001	Cassin's Vireo makes rare stop in Springfield. The Living Museum 63(2): 3.
2004	Mottled Duck at Lake Springfield: first state record. <i>Meadowlark</i> 13(4): 122–123.
2004a	Tufted Duck in Sangamon County; fourth state record. <i>Meadowlark</i> 13(4): 123–124.
2005	Black Skimmer at Lake Springfield: second state record. <i>Meadowlark</i> 14(2): 50.
2005a	Glaucous-winged Gull at Lake Springfield: second Sangamon County record. <i>Meadowlark</i> 14(2): 51.
2005-06	Melanism in the Northern Rough-winged Swallow. The Living Museum 67(4): 3.
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APPENDIX T.

Abbreviations Used in Study

♂male
♀female
BBSBreeding Bird Survey (the Sangamon County route)
CBCChristmas Bird Count
CPCarpenter Park Nature Preserve (see Appendix R)
Cocounty
collcollector
CWLPCity Water Light & Power
DDTDichlorodiphenyltrichloroethane (causes bird eggs to have thin shells)
DODennis Oehmke
FFahrenheit
gmsgrams
HDBH. David Bohlen
IDNRIllinois Department of Natural Resources
IDOT pondIllinois Department of Transportation pond (see Appendix R)
ILIllinois
imimmature
ISMIllinois State Museum
KBKen Bohlen
LSpfldLake Springfield (see Appendix R)
mimile
migmigrants
mmmillimeters
RCCResearch & Collection Center of Illinois State Museum
RSPRiverside Park (see Appendix R)
SangchrisSangchris State Park, Sangamon County portion (see Appendix R)
Sed RetSediment Retention Facility (see Appendix R)
s. psewer pond
sp?species ?
sp migspring migrants
SpfldSpringfield
SRsummer resident
tv towerWICS transmitting tower ten miles east of Springfield (see Appendix R)
USUnited States of America
VKVernon Kleen
WPWashington Park (see Appendix R)
WRwinter resident
wtweight
ybpyears before present
yrsyears

APPENDIX U.

Additional 2010 Records from March 1 to December 31.

- **Red-throated Loon** immature at Lake Springfield, November 6.
- **Common Loon** two in non-breeding plumage into summer at Buckhart, from June 6 July 6 and one until July 31. High fall count 68 November 20.
- **Horned Grebe** one in alternate plumage, uncharacteristically at a shallow pond on the west side of Sangchris, from May 9 12 (photographed). High count 68 November 23.
- Eared Grebe one at Lake Springfield, April 3 and juvenile at Lake Springfield, October 21.

Great Blue Heron – high count of 160 on July 25.

- **Snowy Egret** juvenile at Cinder Flats on July 28 and north of New City, July 31.
- Cattle Egret 5 in Valley of the South Fork, June 24 and one at Lake Springfield, October 30.

Black-crowned Night-Heron – immature at Lake Springfield, December 24.

Yellow-crowned Night-Heron – juvenile at Riverside Park, July 30 – August 11.

Greater White-fronted Goose – one at Washington Park on June 5 (photographed).

- **Ross's Goose** estimated 1 –2000 at Lake Springfield, March 4 most ever.
- **Snow Goose** estimated 133,000 at Lake Springfield, March 4 and non-breeding flock (50 to 16) staying at Lake Springfield from April to May 31 and 10 14 all summer.
- **Trumpeter Swan** 8 adults & 2 immatures at Lake Springfield, November 27.
- Tundra Swan 4 adults & 4 immatures at Lake Springfield, March 5 (photographed).
- **Blue-winged Teal** one at Sangchris, November 10.
- **Blue-winged X Cinnamon Teal hybrid** one on west side of Sangchris, April 5,7, & 14 (photographed).
- **Redhead** non-breeding \circ at Lake Springfield, July 16 31.
- **Lesser Scaup** \eth at Lake Springfield, June 2 & 12.
- **Black Scoter** $-2 \heartsuit \diamondsuit$ at Sangchris, March 31 only the sixth spring record and one at Lake Springfield November 14.

Oldsquaw - \mathcal{O} Lake Springfield, December10.

Bufflehead X Goldeneye Hybrid - $\stackrel{\frown}{\bigcirc}$ at Lake Springfield, December 15 – 19 (photographed).

- Hooded Merganser high count 260 December 8.
- Mississippi Kite two adults at Washington Park, July 20 eating cicadas (photographed).
- **N. Harrier** \bigcirc at Sangchris, June 4.
- **Bald Eagle** adults seen in four areas, with fledged juveniles: one at Buckhart, June 27; two at Marine Pt., July 19; two at Rt.29 Bridge, August 1, and adult at Sangchris, June16.
- **Broad-winged Hawk** adult at WP, July 20 (photographed), plus two adults August 22 and two immatures August 26 nesting?
- Swainson's Hawk adult light phase south of Lake Springfield, May 4 (photographed).

Sandhill Crane – 9 west of Loami, March 19.

- **Black-bellied Plover** 6 in alternate plumage at Sangchris, May 13; and at Berry, 3, May 21 and 2, May 25. Another adult at the Cinder Flats, August 4.
- American Golden Plover high count of 230, April 14 highest count for spring. One adult in non-breeding plumage at Nine West June 25. Two juveniles near Sangchris, November 10.

Semipalmated Plover – high count of 35 on May 11.

- Black-necked Stilt ♀ on west side of Sangchris, April 5 earliest ever for county (photographed); plus 3, at Sangchris, May 3 and 3, at Cinder Flats, May 24. Two pair in flooded bean field at Nine West on June 20, one pair nest building June 22 and on nest June 23. There were 12 adults (highest count ever) present at Nine West June 23. Noted the pair on nest and another pair copulating June 25. Pair sat on nest at Nine West until July 7, then not seen again the area dried.
- American Avocet 12 at Sangchris, April 25 (photographed).
- **Marbled Godwit** one in alternate plumage, Nine West, June 22 28, first June record (photographed).
- Solitary Sandpiper one at Sangchris, June 9 latest ever for spring.
- **Ruddy Turnstone** 3 at Sangchris, May 13.
- White-rumped Sandpiper one at Sangchris, November 1 & 10.
- Dunlin one in alternate plumage Cinder Flats, June 4 (photographed).
- Long-billed Dowitcher one in basic plumage north New City, April 2 fairly early record.
- Wilson's Phalarope From May 1 May 13 more than usual with 9, May 4, mostly at Sangchris and Cinder Flats highest spring count. (photographed).
- **Red-necked Phalarope** juvenile at Cinder Flats, September 15.
- Laughing Gull adult at Cinder Flats, April 15 (photographed). Also adult Lake Springfield, May 20 & 26. One adult at Lake Springfield, June 21.
- Franklin's Gull high count 90 at Lake Springfield, Oct 28.

Little Gull – first winter bird at Buffalo sewer pond, November 19 & 21 (photographed).

Iceland (kumlien's) Gull – adult at Lake Springfield, December 21 & 22 (photographed).

Glaucous Gull – second year at Lake Springfield, December 18.

- California Gull one second year at Cinder Flats, September 25.
- **Barn Owl** one roosting in pines at Sangchris, March 10 only second record.
- Whip-poor-will dead on road (specimen ISM) at Lake Springfield Dam, September 25. Also, one along the lake edge at Lake Springfield, October 9 latest ever.
- Yellow-bellied Sapsucker juvenile at Lincoln Gardens, September 9.
- Acadian Flycatcher adult & 3 fledged young at Washington Park, August 20 highest fall count.
- Blue-headed Vireo one at Washington Park, April 9 earliest ever (photographed).
- Warbling Vireo one west of Springfield, April 14 earliest ever.
- **Tree Swallow** one at Sangchris, November 12.

Barn Swallow – one under Lindsay Bridge, November $28 - 2^{nd}$ latest.

Brown Creeper – pair building nest at Lick Creek west, April 14.

Sedge Wren – singing \eth north of New City, June 16.

American Robin – high count 2480 going to roost northeast of Springfield, December 26.

Gray Catbird – one at Hazel Dell, January 1 and one at Cotton Hill Park, December 1.

American Pipit – 6 at Sangchris, May 11 and one at Cinder Flats, December 11 & 12.

Golden-winged Warbler - \eth at RSP, August 6 – second earliest fall record.

Brewster's Hybrid – one at Muni, September 11.

- **Orange-crowned Warbler** immature at Lake Springfield Dam, December 4 and adult returning for second year at warm water ditch (also at Watt's feeder), December 13 26.
- **Nashville Warbler** \bigcirc at WP, August 7 second earliest. Also one at Dreamland Park, November 6.
- Yellow Warbler high count of 21 on May 15 highest spring count.
- **Cape May Warbler** adult $\stackrel{\bigcirc}{\rightarrow}$ at RSP, August 16 earliest ever for fall.
- Black-throated Blue Warbler ♂ May 8, ♂ May 20, & ♀ May 21 all at Carpenter Park (with KB).
- **Prairie Warbler** ♂ at Carpenter Park (with KB), April 15 second earliest arrival date.
- **Blackpoll** high count of 22, May 15. One juvenile at CP (with KB), August 25 tied earliest fall record.
- American Redstart high count of 47, May 15.
- **Black-and-white Warbler** adult \mathcal{Q} at Washington Park, July 20.
- Canada Warbler \eth at Washington Park, April 29 second ever in April.
- Scarlet Tanager ♂ at Washington Park, April 16 tied earliest spring date, and an orange variant ♂ at Washington Park, May 12.
- **Blue Grosbeak** one \bigcirc north of Sangchris, October 26 latest ever by almost one month (photographed).
- Clay-colored Sparrow one north of Sangchris, May 1 and one at Cinder Flats, September 26.
- Savannah Sparrow 33 east of Cinder Flats, December 24 highest winter count.
- Henslow's Sparrow singing ♂ at Marsh Road, August 29 (photographed).
- Nelson's Sharp-tailed Sparrow one at Sangchris, May 11 earliest spring arrival (photographed).
- Swamp Sparrow one at Carpenter Park, September 13 fairly early fall arrival.
- Dark-eyed Junco one at Sangchris, May 11 latest ever (photographed).
- Yellow-headed Blackbird ♀ at Cinder Flats, May 9 first record since spring of 2005. One juvenile ♂ at Cinder Flats, August 27 (photographed).

APPENDIX V.

Additional 2011 Records from January 1 to December 31.

- Red-throated Loon immature LSpfld, November 5 22 and another immature, December 8 25.
- Common Loon one non-breeding at LSpfld June 2 July 13.
- Horned Grebe 116 high count, November 24.
- **Eared Grebe** one LSpfld, April 17 & 18, 8 at Sangchris, April 22 and one LSpfld, December 12 16.
- White Pelican 23 at LSpfld, February 14. Non-breeding at LSpfld, June 4 15 w/ high number 22 on June 6. Also one at LSpfld, July 11 and 6 –7, July 13 –31.
- Least Bittern adult Cinder Flats, July 26 & 29 first record in 16 years.
- Great Blue Heron 171 LSpfld, July 2 highest summer count.
- Snowy Egret 4 below dam at LSpfld, May 12 14 highest count for spring.
- **Cattle Egret** one south of airport, April 3 and 45 Marsh Road, May 4 highest count for spring. One in breeding plumage at LSpfld, June 1 and another at Cinder Flats, June 30.
- Green Heron nest w/ 4 young at Hunter Lake Area, June 30.
- Black-crowned Night-Heron an immature at the Warm Water Ditch, January 1.
- Yellow-crowned Night-Heron adult Marsh Road, May 2.
- Black Vulture one at Sangchris, April 18.
- Greater White-fronted Goose 590 high count, December 18.
- **Trumpeter Swan** 17 (10 adults & 7 immatures) north of New City February 21 w/ 5 on February 22. Also 18 (16 adults & 2 immatures) LSpfld, December 31.
- Tundra Swan one adult LSpfld, December 31.
- Blue-winged Teal ♂ at Sangchris, February 17 earliest arrival for spring. One east sewer pond, December 16.
- Green-winged Teal 500 at Sangchris, February 24 highest winter count.
- **Lesser Scaup** $-3 \stackrel{?}{\bigcirc} \stackrel{?}{\ominus}$ at Cinder Flats, June 11 -19 and a $\stackrel{?}{\bigcirc}$ to July 4.
- Surf Scoter one LSpfld, October 26, then 2 Cinder Flats, October 29 November 29, w/ as many as 6 November 8. More for a longer period than ever before.
- **White-winged Scoter** \bigcirc LSpfld, April 26 May 4.
- Black Scoter 2 LSpfld, November 17 and December 3.
- Osprey one at Sangchris, March 22 earliest ever for spring.
- **Mississippi Kite** one over LSpfld, April 18. Due to emergence of 13- year cicadas, two at Lincoln Gardens, May 30.
- Bald Eagle pair at Marine Pt. had two young in nest May 8, which fledged June 21.
- **Broad-winged Hawk** building nest at WP, April 8 (DO). Adult on nest June 16 and adult and two fledged young in flight August 3. Only second nesting in county.

Rough-legged Hawk – 4 light phase and one dark phase northeast of Pleasant Plains, January 30.

Golden Eagle – subadult LSpfld, October 30.

- Merlin ♀ at Sangchris, February 17. ♂ wintered at UIS, from November 3, 2011 March 1, 2012 (photographed).
- **Peregrine Falcon** pair at LSpfld, all winter 2011 2012.
- American Golden-Plover adult at Sangchris, July 24.
- **Black-necked Stilt** pair at Sangchris, May 6 31. One pair nesting at Sangchris, but 5 seen there June 9. Two young at Sangchris, July 10 and 4 young w/ 3 adults, July 18. All 4 young could fly by July 23 and some photographed. Last seen 6 at Sangchris, August 2.
- Marbled Godwit 10 at Sangchris, April 17. Adult at beach LSpfld, June 18 (photographed).
- **White-rumped Sandpiper** one at Cinder Flats, June 17 (photographed). One Cinder Flats October 1 10.
- Long-billed Dowitcher adult Cinder Flats, July 23.
- Wilson's Phalarope 6 at Sangchris, April 28 and May 12.
- **Red-necked Phalarope** 2 south of Rochester, May 20. Three juveniles Cinder Flats, September 15.
- Red Phalarope one LSpfld, September 27.
- Laughing Gull juvenile LSpfld, May 25 29 (photographed). Adult and immature June 7 and non-breeding adult June 17 at LSpfld. Two juveniles LSpfld, October 7.
- Franklin's Gull non-breeding adult at LSpfld, June 17 25 (photographed).
- Bonaparte's Gull juvenile Cinder Flats, August 16 and two juveniles, August 17 21.
- California Gull first summer LSpfld, April 4.
- Thayer's Gull adult at LSpfld, February 5 and first winter bird LSpfld, December 16.
- Sabine's Gull 2 juveniles LSpfld, September 29 October 2.
- Iceland Gull adult at LSpfld, February 11.
- **Caspian Tern** 3 at LSpfld, March 29 earliest ever for spring.
- Black Tern flock of 8 at LSpfld, June 16 ties latest spring departure date.
- Long-eared Owl one at Sangchris, March 11 (photographed).
- **Short-eared Owl** 10 roosting in farm yard west of Chatham (M.Vanover) February 9, and one killed by vehicle now in ISM collection.
- Whip-poor-will two at CP, April 26. One LSpfld, September 23.
- Great Crested Flycatcher one at Washington Park, April 16 earliest spring arrival.
- Loggerhead Shrike one west of Sangchris, March 16 May 7 first one in four years.
- **Warbling Vireo** ♂ Hunter Lake area, April 14.
- Tree Swallow one at Sangchris, March 4 earliest ever for spring.
- N. Rough-winged Swallow 60 at Riverside Park, September 2 highest fall count.
- **Bewick's Wren** \bigcirc RSP, March 23 (photographed).

Sedge Wren – mid-summer arrival ♂ Marsh Road, June 25.

- Swainson's Thrush one WP, October 24.
- Brewster's Hybrid one at CP, April 30.
- **Orange-crowned Warbler** adult (Watt) feeder and warm water ditch, January 19 February 2. Adult at Dam Park, May 27 – latest ever for spring by 3 days. Another different immature at warm water ditch, December 18.
- Yellow Warbler ♂ Washington Park, April 11 earliest spring arrival. Two LSpfld, September 24.
- **Black-throated Blue Warbler** \mathcal{O} at WP, May 2 earliest ever for spring by one day.
- **Black-throated Green Warbler** \bigcirc Lincoln Gardens, August 14.
- Yellow-throated Warbler one at Lincoln Gardens, October 1.
- **Prairie Warbler** immature $\stackrel{\frown}{\bigcirc}$ Cinder Flats, August 21 only third fall record (photographed).
- **Cerulean Warbler** one at CP, August 17.
- **Black-and-white Warbler** $\stackrel{\sim}{\bigcirc}$ WP, July 1 & 25; $\stackrel{\bigcirc}{\hookrightarrow}$ Sangchris, August 18; $\stackrel{\bigcirc}{\hookrightarrow}$ WP, August 14.
- **Mourning Warbler** \bigcirc WP, April 30 earliest ever spring arrival.
- **Blue Grosbeak** 4 east of Spfld, June 16 & 24. Nest w/ 3 eggs plus one cowbird egg north of Cinder Flats, June 12. One Sangchris, October 4.
- **Spotted Towhee** $\circ \circ$ at CP January 6 (KB) and $\circ \circ \circ$ at feeder south of Chatham (N. Roscetti) February 3 (photographed).
- Chipping Sparrow one at Marine Pt., February 3 (photographed). Two at Muni, December 23.
- Clay-colored Sparrow one at Cinder Flats, April 11 earliest ever in spring.
- Savannah Sparrow 20 east of Cinder Flats, January 22. 110 highest fall count, October 17.
- **Henslow's Sparrow** \Im Marsh Road, June 25. \Im Sangchris, July 31 August 18.
- **LeConte's Sparrow** one near Sangchris, December 22 & 27 first winter records in many years.
- Nelson's Sharp-tailed Sparrow one Sangchris, September 27 and one Cinder Flats October 23.
- Lincoln's Sparrow one east of Cinder Flats, January 22.
- **Bobolink** -3 \bigcirc northeast of Pleasant Plaines, June 26.
- Western Meadowlark ♂ southwest of Spfld, April 9. ♂ west of Spfld, June 26.
- **Yellow-headed Blackbird** \eth at Cinder Flats, April 24.

APPENDIX W.

Additional 2012 Records from January 1 to December 31

- **Red-throated Loon** one juvenile at LSpfld, October 10 25 earliest fall arrival.
- **Common Loon** one wintered LSpfld, December 16,2011 February 7,2012. One nonbreeding plumage at LSpfld, June 2.
- Pied-billed Grebe 165 at LSpfld, September 20.
- Horned Grebe three wintered Sangchris, January 6 February 1.
- **Red-necked Grebe** first winter plumage LSpfld, October 10 27 earliest fall arrival.
- Eared Grebe one LSpfld, April 8 and another May 4. Two juveniles LSpfld, August 22. One LSpfld, September 20. One LSpfld October 14 21(photographed). One at LSpfld, November 15 22 (photographed). one at LSpfld, December 6.
- White Pelican ten at LSpfld, February 18. One at the west end of LSpfld, Aug 18. Fall high count of 530, October 6. One at LSpfld, December 3.
- Great Egret high fall count of 177 going to roost on the East Island at Marine Pt., August 19

Snowy Egret – juveniles at LSpfld, July 25 – 30 and three at LSpfld, August 8 – 24.

Little Blue Heron – adult LSpfld, March 22 – earliest spring arrival.

- **Black-bellied Whistling-Duck** one adult on west side of Springfield, July 26 29 (photographed) NEW SPECIES for the study. (first seen by Wayne & Cathy Belcher about a week earlier).
- Turkey Vulture fall high count of 220 at LSpfld, October 25.
- Greater White-fronted Goose one adult at Buckhart, July 8 & August 21.
- Trumpeter Swan two adults LSpfld, January 3. Also 2 adults at LSpfld, December 5.
- Tundra Swan one at LSpfld, December 21.
- Wood Duck high winter count of 27 at WP, December 5.
- Eurasian Wigeon 🖒 Sangchris, April 6 third county record (photographed).

Blue-winged Teal – highest fall count 717, October 5. One at Sangchris, November 28.

- Canvasback 340 at LSpfld, December 23.
- **Lesser Scaup** $\mathcal{A} \ \mathcal{Q}$ at Cinder Flats from spring until June 13 and \mathcal{Q} until June 24.

White-winged Scoter $- \bigcirc$ at LSpfld, March 25 and four at LSpfld, October 26.

- Black Scoter one at LSpfld, November 2 and 3, November 17.
- **Long-tailed Duck** \bigcirc LSpfld, March 28.
- **Common Merganser** \eth LSpfld, June 15 July 11.
- Ruddy Duck 550 LSpfld, February 28 highest winter count. 2 ♂ at Cinder Flats from spring until June 19, and one ♂ until June 27.
- **Osprey** one Sangchris, March 26 earliest spring arrival. One second year at LSpfld, June 2 July 11.
- Mississippi Kite one near Beamington, September 14.

- **Bald Eagle** two young in nest Marine Pt., May 2. Only one juvenile at Marine Pt. by June 12. Also an adult at Sangchris, June 2.
- Cooper's Hawk winter high count of 5, December 23.
- **Red-shouldered Hawk** two adults at Riverside Park, June 9 and juveniles west of Sangchris July 17, Marsh Road, August 21 and RSP, August 22 27.
- Swainson's Hawk one light phase adult west of Rochester, September 21 (photographed).
- **Broad-winged Hawk** adult at Washington Park, June 23 and July 14. Also juveniles at WP, August 2 and at RSP, August 8 20.
- Golden Eagle a second year north of New City, December 25.
- **Merlin** \circlearrowleft at RSP, August 12 (photographed) earliest fall record. Also \bigcirc at WP, November 26 and another \bigcirc at Sangchris, December 25.
- Peregrine Falcon pair copulating and apparently nesting near LSpfld Dam, April 19 and observed into late May, June, and July. Also seen from August October and again in December.
- Black-bellied Plover juvenile at Lick Creek, September 25 (photographed).
- American Golden Plover one at Cinder Flats, March 14.
- **Black-necked Stilt** 2 \bigcirc 2 \bigcirc Cinder Flats, April 18 (photographed) and \bigcirc Cinder Flats, May 19.
- American Avocet four in alternate plumage at Cinder Flats, April 14.
- Willet one at south end LSpfld, August 31.
- Spotted Sandpiper one Cinder Flats, April 1. Adult with downy chick Cinder Flats, July 5.
- Solitary Sandpiper one Rochester sewer pond, March 20 earliest spring arrival.
- Whimbrel three at the beach at LSpfld, June 3 maximum count & first June record (photographed).
- Ruddy Turnstone juvenile at dam LSpfld, August 27.
- Least Sandpiper one at Lick Creek, December 20.
- Baird's Sandpiper one at Lick Creek, November 11.
- **Pectoral Sandpiper** one at the south end of LSpfld, November 19 latest ever.
- Dunlin one each east of Spfld and Cinder Flats, March 26. Also one at Sangchris, December 4.
- Long-billed Dowitcher juvenile? south end LSpfld, August 26 very early for juvenile.
- **Red-necked Phalarope** juvenile at south end LSpfld, September 8.
- Laughing Gull adults LSpfld, May 1 & 17 and immature LSpfld, May 9. Adult at LSpfld, June 23 & 3 adults at LSpfld, June 24 maximum count for summer. Juvenile at LSpfld, September 2. One immature at Cinder Flats, October 4.
- Little Gull immature LSpfld, March 28 earliest spring arrival. One adult at LSpfld, November 23.
- Bonaparte's Gull two in juvenile plumage at LSpfld, September 28.
- Thayer's Gull a second year at LSpfld, December 31.
- Glaucous Gull first year bird LSpfld, January 10.

- Great Black-backed Gull adult LSpfld, March 30 & 31 (photographed).
- Sabine's Gull juvenile at Marine Pt., September 13 (photographed).
- **Least Tern** adults at Cinder Flats, June 3 & 10.
- Forster's Tern adult Sangchris, April 2 earliest spring arrival.
- Black-billed Cuckoo one immature at RSP, October 15 (photographed).
- **Short-eared Owl** one Sangchris, January 3 6.
- Northern Saw-whet Owl one Sangchris, January 10 March 12 (photographed). Owl pellets (26) collected at this roost site February 3 & March 9 contained nearly all mice
 - *Peromyscus*, except one shrew *Blarina* (identifications by Dr. Mahoney).
- Chimney Swift 200 estimated killed LSpfld Dam, May 31 June 2.
- Red-bellied Woodpecker fledged young Lincoln Gardens, May 23 earliest noted.
- Pileated Woodpecker well feathered young at nest hole CP, May 19.
- Olive-sided Flycatcher one Lincoln Gardens, May 5 fairly early arrival.
- Acadian Flycatcher one WP, April 30.
- Willow Flycatcher adult & fledged young at Cinder Flats, July 21.
- Eastern Phoebe fledged young Lincoln Gardens, May 6 earliest noted.
- Great Crested Flycatcher one north of Sangchris, April 18 earliest by one day.
- Eastern Kingbird one Marine Pt., April 14.
- Loggerhead Shrike one adult valley of the South Fork, August 1 (photographed).
- White-eyed Vireo one at WP, October 22.
- **Purple Martin** 400 at roost LSpfld, July 21 and 412 LSpfld, August 7.
- **Fish Crow** one seen and heard calling along Sangamon River at CP (w/KB), April 24 NEW SPECIES for the Study. Also two heard and seen interacting with Am.Crows at Marsh Road, October 1.
- Red-breasted Nuthatch one at CP, August 30.
- **Bewick's Wren** one at Lick Creek, October 12 (photographed) & 27 and November 19 latest date ever.
- **House Wren** \circlearrowleft CP, March 30 earliest spring arrival date.
- Sedge Wren none detected this summer or fall, the severe drought likely the cause.
- Blue-gray Gnatcatcher juvenile Cinder Flats, July 1.
- Gray-cheeked Thrush one at Oak Ridge Cemetery, October 9.
- Swainson's Thrush one Oak Ridge Cemetery, April 15. Fairly early fall arrival at Lin Gds, August 14.
- Gray Catbird one at WP, December 10.
- American Pipit five west of Sangchris, January 3. One south end of LSpfld, October 27. Also 25 at Pleasant Plaines, November 10 & 25 west of Sangchris, November 12.
- **Blue-winged Warbler** Fairly early fall arrival at Lin Gds, August 2. Record fall high count of 7 at RSP, September 6.

- **Golden-winged Warbler** early arrival \bigcirc at RSP, August 11. Record fall high count of 15 at RSP, September 6.
- Orange-crowned Warbler immature at RSP, September 15 tied earliest fall arrival.
- **Nashville Warbler** fairly early fall arrival \bigcirc at RSP, August 17.
- **Northern Parula** \bigcirc CP, April 1. Adult feeding fledged young at CP, August 20.
- Yellow Warbler fledged young out of the nest being fed by adults at IDOT pond, June 16 earliest fledged young. This fall season had two times more numbers than any preceding fall.
- Chestnut-sided Warbler early arrival immature at RSP, August 11.
- Magnolia Warbler one at RSP, August 12 tied earliest fall arrival.
- **Cape May Warbler** juvenile \bigcirc at RSP, August 17 tied earliest fall arrival.
- Yellow-rumped Warbler juvenile at RSP, August 11 earliest fall arrival (& first ever in juvenile plumage).
- Blackburnian Warbler one early fall arrival at Marine Pt., August 7.
- **Yellow-throated Warbler** \bigcirc CP, April 1 earliest spring arrival by one day.
- Pine Warbler ♂ Oak Ridge Cemetery, March 4 (photographed) earliest spring arrival. One adult still in molt at Refuge in pines, August 5, and again still with some molt September 9 (may indicate breeding).
- **Prairie Warbler** \Im South Fork, May 23 singing on territory?
- Black-and-white Warbler ♂ WP, March 21 (photographed) earliest spring arrival. ♀ at WP, June 1 and adult ♂ in basic plumage at Sangchris, July 23. Two ♀ at Lin Gds, August 2. Tied high count of 26 at RSP, September 6.
- **Ovenbird** two fairly early fall arrivals at RSP, August 11.
- **Louisiana Waterthrush** four δ in Irwin Bridge area, June 6.
- Kentucky Warbler juveniles at Sangchris, August 1 & at RSP August 11.
- **Connecticut Warbler** immature at RSP, August 20 earliest ever fall arrival.
- Mourning Warbler adult ♂ at RSP, August 10 earliest ever fall arrival. One fairly late at Lick Creek, October 10.
- **Canada Warbler** immature \bigcirc at RSP, August 12 fairly early fall arrival..
- **Yellow-breasted Chat** fledged young with adults at Hunter Lake, June 27 earliest fledged young.
- Summer Tanager fall high count of 5, September 7.
- Blue Grosbeak three ♂ northwest of Spfld, May 2. Fall high count of 8 on September 16. One at Marsh Road, October 8.
- **Spotted Towhee** $-a \stackrel{\bigcirc}{\rightarrow} at$ Oak Ridge Cemetery, October 14 & 21.
- Chipping Sparrow two Muni, January 7.
- **Clay-colored Sparrow** one at Sangchris, April 28 and May 10. One at CP, September 26 and one at Marsh Road, October 8.
- **Vesper Sparrow** one at the Cinder Flats, November 28 (photographed).

Grasshopper Sparrow – one East side sewer pond, January 4 – first winter record.

- Henslow's Sparrow ♂ at Carpenter Park, April 9. ♂ north of Sangchris, June 2 and 2 ♂ at Marsh Road, June 11. Also two ♂ and ♂ ♀ at Marsh Road, July 1 & 10, and a ♂ north of Sangchris, July 17 & 23. Two at Marsh Road, October 1 (photographed).
- LeConte's Sparrow one Sangchris, January 10.
- Nelson's Sharp-tailed Sparrow one at Cinder Flats, October 13 & 15 (photographed).
- Harris's Sparrow immature at Cinder Flats, October 23 (photographed). One adult at Marsh Road, November 1 (photographed).
- White-crowned Sparrow good count of 95 at Marsh Road, October 21, also *gambelii* seen there October 16 & 21 (photographed).
- **Snow Bunting** one at Centennial Park, November 4.
- **Bobolink** two \circlearrowleft & \bigcirc near Pleasant Plaines, June 17. There were 3 \circlearrowright at Marsh Road, July 1 (non-breeding?).
- Red Crossbill all at Oak Ridge Cemetery, 14 on November 5, 22 on November 6, 6 on November 8 and 11 on December 23.
- White-winged Crossbill all at Oak Ridge Cemetery, ♂ on November 5, 2 on November 6, 2 on November 8, 6 on November 25, 9 on November 27, 2 on December 11, 10 on December 23, and 6 on December 26.

Common Redpoll – three at Sangchris, January 6.

Pine Siskin – arrived at Oak Ridge Cemetery, October 6 and 50 seen there, October 9.

(Neither American Pipit or Smith's Longspur recorded in spring of 2012 and continue their decline in this county for unknown reasons)

NOTE – due to climate change many other early arrivals and late departures will probably occur.

PHOTOGRAPHS

The photographs presented in Part 2 are a small number of the total on file at the Illinois State Museum taken in Sangamon County. Most were taken by Dennis Oehmke and me to support identifications in the text. Originally, I had the use of a camera with a small lens, but it was stolen. Therefore, the modus operandi became that during my daily monitoring if I should find an unusual or rare bird I would call Dennis and he would come out and photograph the bird. It was not until 2001 that I started to digiscope (shooting a digital camera through a telescope). This allowed me to document not only unusual birds, but odd plumages or sometimes behavior. Digiscoping did not always produce clear photographs especially with the pixels available then. As you can see some (especially mine) of the photographs are not that good, but they were taken for the record. Poor lighting and weather conditions, long distances and the fact that many birds disappear very quickly leaves one wishing for better shots. Later (late 2007) I was able to purchase a digital camera with a fairly large lens. It should be noted that not all unusual sightings were backed up with photographs, sometimes obtaining a photograph was not possible or I did not have the camera with me. Plus it should be pointed out that during most of this study digital cameras were not yet available.

H. David Bohlen