

Writing Urban Nature

Exploring the Natural & Built Environment
in and around Chicago



Professor Mike Bryson, Sustainability Studies
College of Arts and Sciences
SUST 360 Writing Urban Nature, May 2018

Writing Urban Nature

Pre-session Agenda



Photo: AIA

- Quick overview of course theme and format
- Personal introductions
- Logistics:
 - ✓ RU Waiver Forms
 - ✓ Contact Information
 - ✓ Transportation Planning
- Discussion of urban nature: what is it? Where do we find it?
- Looking ahead:
 - ✓ Procure *City Creatures* book
 - ✓ Explore blogs/websites
 - ✓ Stay tuned for updates
- **Next meeting: 5/21 at 9:30am in WB Lobby**

Sustainability Studies Major / Courses



Core Courses

SUST 210	Sustainable Future
SUST 220	Water
SUST 230	Food
SUST 240	Waste
SUST 250	Sustainable University

Advanced Courses

SUST 310	Energy & Climate Change
SUST 320	Sprawl, Transportation, & Planning
SUST 330	Biodiversity
SUST 340	Policy, Law, & Ethics

Special Courses

SUST 350	Service & Sustainability
SUST 360	Writing Urban Nature
SUST 395	Sustainability Internship

Envisioning a Sustainable Future



Hiking Northerly Island, 2011
(photo by L. Bryson)

Environmental resources are conserved for both future human generations as well as non-human biota.

Economic development occurs not at the expense of the natural environment, but in a way to mitigate ecological costs and impacts.

Equity – social, economic, and environmental justice – governs the process of sustainable development.

Sustainability

Humans and Nature in Urban Ecosystems



Mr. Will Allen -- Urban Farmer,
Founder of Growing Power, &
Sustainability Entrepreneur

Climate Change

Biodiversity Loss

Urbanization & Population Growth

Pollution

Clean Energy

Economic Development

Sustainable Agriculture

Social Justice & Equity

Environmental Stewardship

Students Advancing Sustainability

Roosevelt Urban Sustainability Lab (est. 2015)



RU's Chicago Campus c. 2014

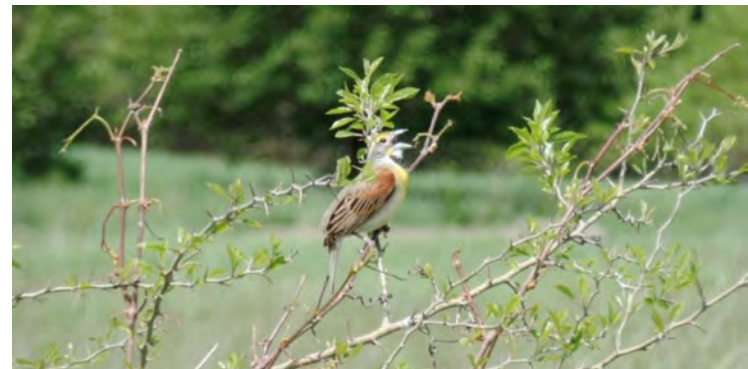
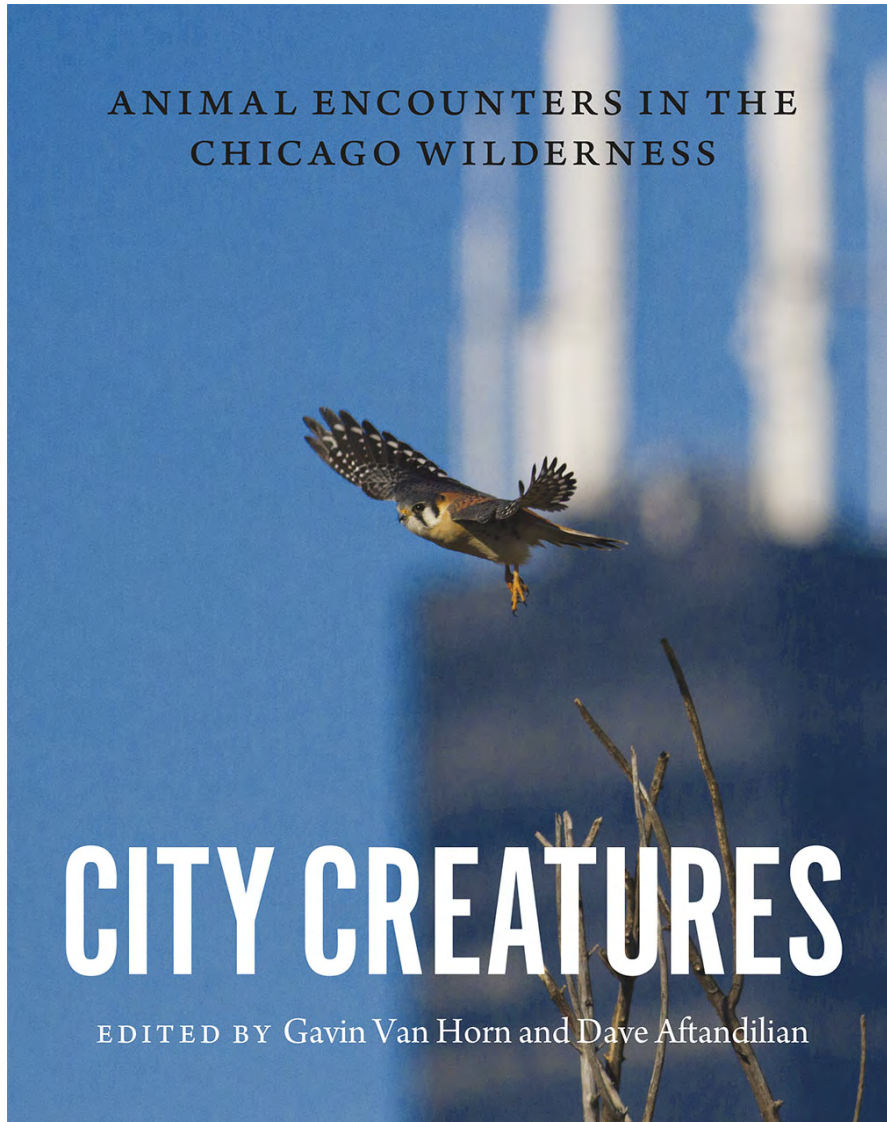


STARS Assessment Report (2015)



Writing Urban Nature Project (est. 2015)

Writing Urban Nature: The Online Project



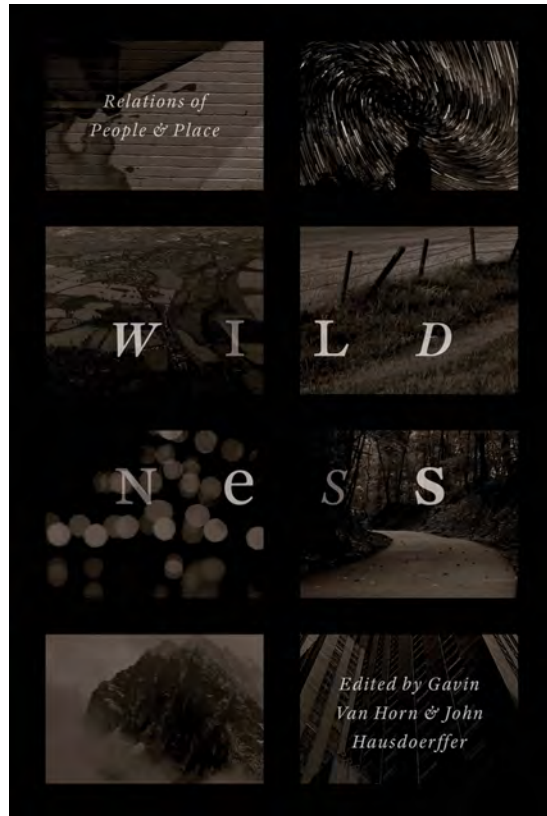
Writing Urban Nature [website](#) launched Fall 2015: M. Bryson and T. Mucci, eds.

Writing Urban Nature: The Class



Writing Models: City Creatures (book & [blog](#));
[The Nature of Cities](#); [Terrain](#); [SUST Blog](#);
[Schaumburg's Sustainable Future](#)

Context: The Environmental Humanities

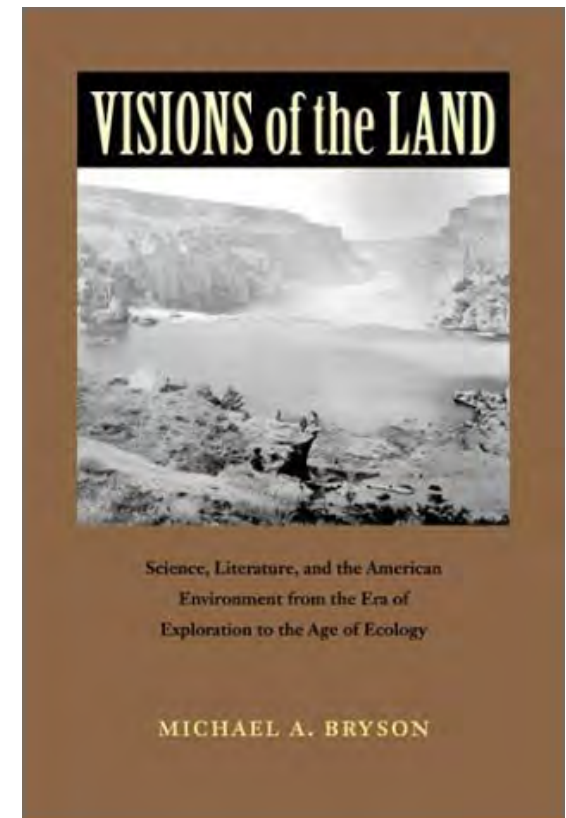


Interdisciplinary method of humanistic inquiry informed by science, esp. ecology

Critical & creative analysis of literature, landscapes, film, technology, science, and environmental discourse

One branch of the multidisciplinary field of environmental studies

Rooted in the engagement of the arts and humanities with ecological problems and environmental issues



Your Turn! Personal Introductions



SUST 360 Writing Urban Nature: visiting the
North Park Village Nature Center, Chicago IL, May 2017 (M. Bryson)

Goals of SUST 360 Writing Urban Nature

Explore and experience different urban and suburban environments first-hand, with an emphasis on **close observation** of and **analytic reflection**

Discover and critically analyze the **diversity and value of nature** in Chicago and its suburbs

Develop appreciation and knowledge of the **interactions between built and natural elements** of the urban environment

Explore the relationship between **nature and culture** in urban ecosystems

Develop your **writing and photographic skills** in the context of reflecting upon your personal experiences within urban nature

Understand the potentials and limitations of written and visual **representations of nature** in an urban context

Connect the practice of **nature writing** to the study of **sustainability**

Requirements of SUST 360

Because this is a one-week intensive field-based class, the basic requirements are relatively simple:

- **Required attendance** at pre-session and all scheduled class meetings
- **Field participation:** attendance, discussion, assorted writing exercises (20 points/day, 100 points total)
- **Urban nature essay:** work of creative writing informed by our readings; 7-10 pages (100 points)

See Course Overview on our Bb site (in Syllabus) for more details.

How To Be Happy in SUST 360

Attend every class session. Allow plenty of time to get to our appointed meeting place each day, starting May 21st.

Dress to be outside in the weather. Be prepared to get dirty, wet, cold, or hot. (This is part of the fun! There is no such thing as "bad weather" – only bad gear.) Wear good walking shoes.

Come to each session prepared to discuss our assigned readings.

Bring your gear (text, notebook, pen, sack lunch, water, sunscreen, camera, binoculars, field guides, etc.) in a comfortable bag.

Check our Bb site and your RU student email account nightly for important updates/announcements.

Be curious. Observe and listen closely to your surroundings. Soak in the experiences. (Insert additional clichés here as needed.)

What Is Nature?

Picture something that comes to mind immediately . . .

What Is Nature?



Dramatic western landscapes evoke the beautiful & sublime:
Rocky Mountains, Crested Butte CO (M. Bryson, 2014)

What Is Nature?



Midwestern agricultural lands epitomize rural America,
but are highly modified natural spaces.
Woodford County, central IL (L. Bryson, ~2010)

What Is Nature?



Remote wilderness areas in extreme environments challenge our assumptions about nature's character.

Canada Glacier, Taylor Valley, Antarctica (M. Bryson, 1991)

What Is Nature?



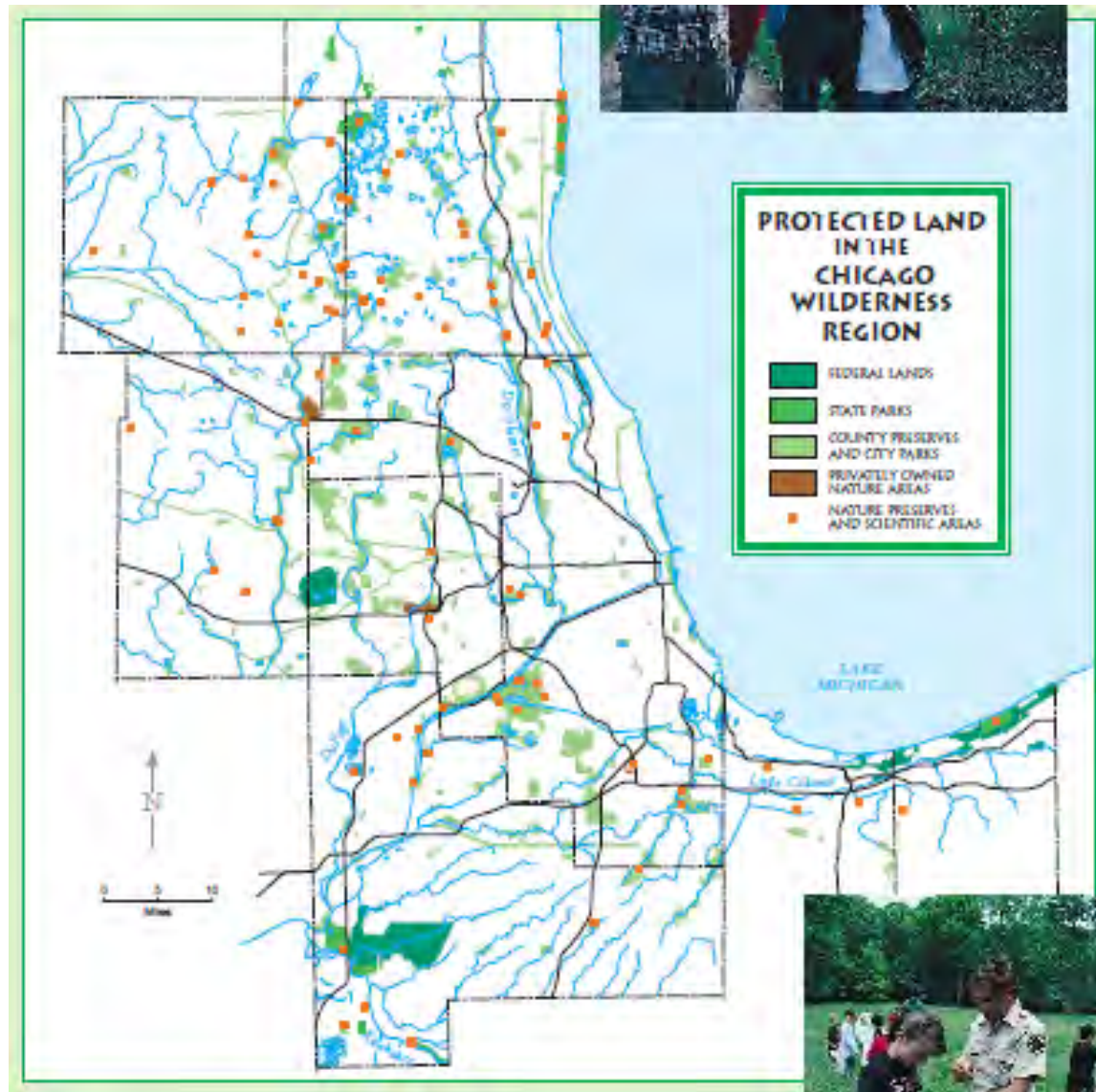
What are we looking at in this photo? Where are we?

What Is Nature?



Paddling the upper North Branch of the Chicago River, Morton Grove IL
(M. Bryson, Fall 2012)

Geography of Chicago's Wilderness



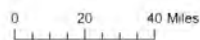
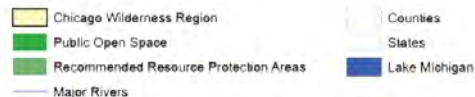
Protected lands of the Chicago region (source: *Atlas of Biodiversity*, 2000)

Geography of Chicago's Wilderness



The Chicago Wilderness Region

Legend



© Chicago Metropolitan Agency for Planning



Left: CMAP [Chicago Wilderness Region](#) (2011)

Right: Chicago Wilderness [Green Infrastructure Vision](#) (2009)

Two Persistent Perceptions of Cities



Chicago Loop, seen from "The Brownlands" (Ryan Hodgson-Rigsbee)

City vs. Nature

Fosters the illusion of technology-mediated independence from the natural world as well as a profound yet often unfulfilled longing for contact with wildness within a polluted and biologically-impooverished cityscape.

City as Living Ecosystem

Recognizes that cities and suburbs comprise a complex urban ecosystem, a dynamic mosaic in which imperiled nature interacts with humans and their built environment, and where the idea of "natural" can be interrogated.

The Stunning Diversity of Urban Nature



Chicago Lakefront at Northerly Island, Oct 2011 (L. Bryson)

Urban Nature



Morton Arboretum, May 2013 (M. Bryson)

Urban Nature



Stearns Quarry Park (est. 2009), South Side of Chicago (M. Bryson)

Urban Nature



Chicago Lights Urban Farm, Near North Side, April 2012 (M. Bryson)

Urban Nature



Detention Basin at Roosevelt University's Schaumburg Campus (M. Bryson)

Urban Nature



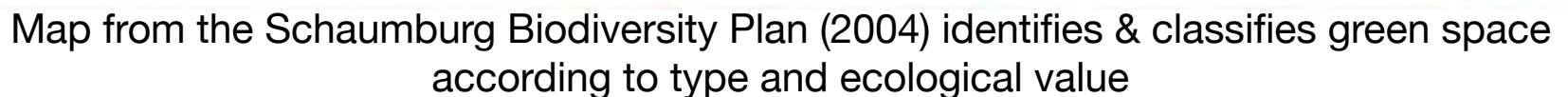
Life on the retaining wall – Bubbly Creek, South Side of Chicago (M. Bryson)

Urban Nature



Hickory Creek by Washington Jr. High, Joliet IL, March 2011 (M. Bryson)

Figure 1a.
Natural Resource Inventory
Village of Schaumburg
Northeast Section



Landscape Sustainable Site Transformation



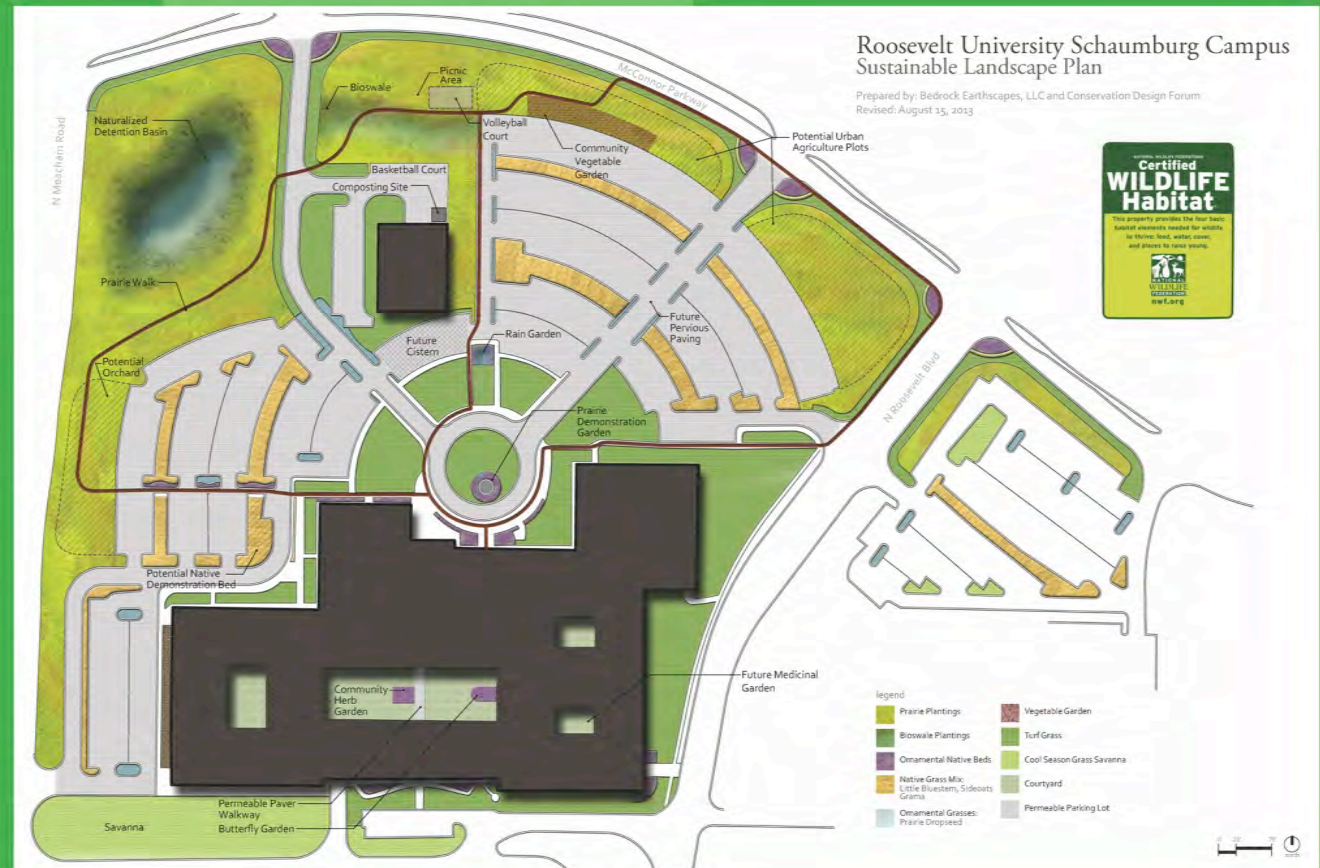
Roosevelt University is committed to transforming the Robin Campus into a truly sustainable site. The landscape plan here is being implemented using native plants and sustainable water conservation methods to transform this campus into an environmentally sustainable, cost-effective earthscape. The result: a beautiful setting which supports biodiversity, uses less water, costs less to maintain and enriches campus lifestyle.

Good Stewardship Makes Good Sense

Economic: the conversion to native plants was paid out of savings from funds previously spent on turf maintenance. The University saves 50% annually overall on landscape maintenance, primarily due to the native plantings which save 80% over the cost to maintain turf.

Environmental: Native plants require less fertilizer, herbicides, fuel and labor. They beautify and support biodiversity. Natives have deep roots which absorb water, reduce runoff, thus reducing energy and water use while providing effective bio-regulation of this habitat.

Social: The Robin Campus uses less resources and generates fewer pollutants, demonstrating corporate social responsibility by planting natives and observing sustainable site practices.



RU began its Sustainable Landscape Redevelopment Project in 2011 to enhance its green space, retain water onsite, and provide wildlife habitat. This map is from 2013.



Prescribed burn of detention pond/wetland (April 2011) at SCH Campus to discourage non-native plants and stimulate growth of native wetland/prairie species.



Prairie restoration at detention pond (Fall 2012): though an artificial wetland, RU's humble stormwater pond is an example of biodiverse green infrastructure.

Transforming RU: from concrete slab . . .



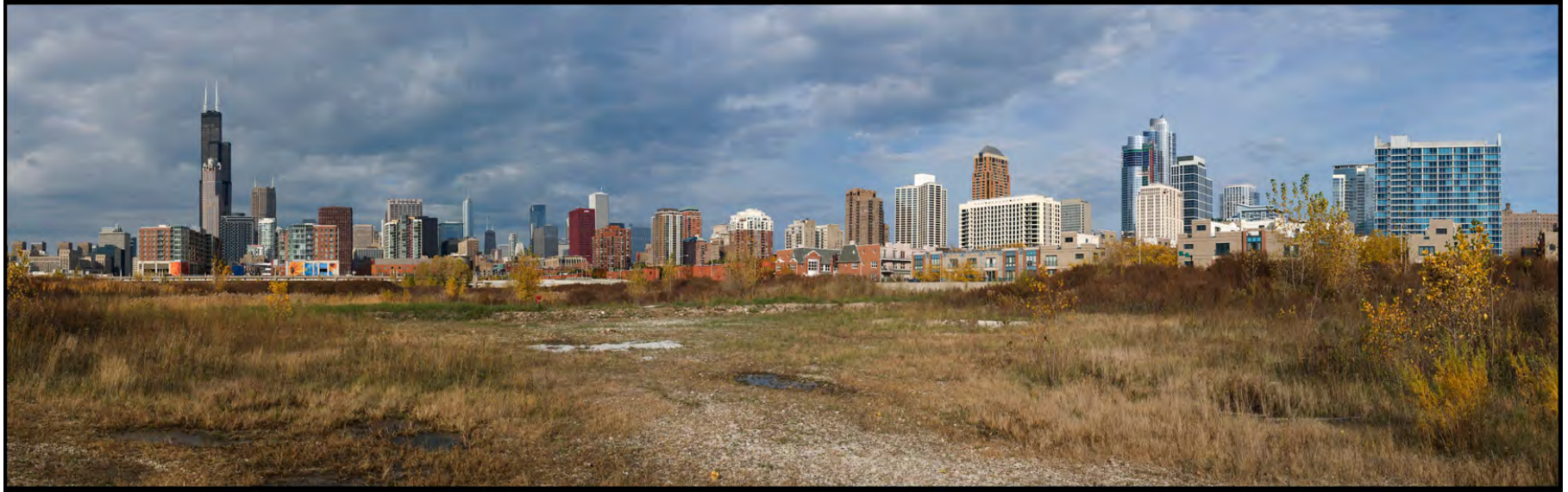
Aerial view of RU Schaumburg Campus, pre-redevelopment (Google Maps)

. . . to living lab*



Schaumburg Campus prairie restoration, Summer 2013
(photo: M. Radeck, a SUST major who also coined this phrase*)

Basic Agenda for 21-25 May 2018



Monday – Lakefront Spaces & Places (Chicago's "front yard")

Tuesday – Chicago River & City Parklands (South Side)

Wednesday – Trails & Nature Preserves (North Side)

Thursday – Campus, Wood, & Farm (Schaumburg)

Friday – Industrial Reclamations & Restorations (Will County)

Case Study: Exploring the Chicago River



Understanding the river as a modified natural ecosystem (natural sciences)

Developing conservation policies (social and natural sciences)

Representing the river as an environmental and cultural resource (arts and humanities)

Restoring the river: water quality, biodiversity, riparian zone integrity, citizen access and recreation (all disciplines)

Understanding the river requires a multi-disciplinary approach; not just science (important as that is), but also policy analysis, environmental history, even literature and art.

The Chicago River



Chicago (c. 1857) has always been defined by its namesake river and Lake Michigan – a place where nature, culture, and commerce intermingle. To know this place, one must have a sense of its environmental history: land ecosystems (prairie, woodland, wetland) and aquatic systems.

The Chicago River



North Branch of the Chicago River, NW Side of Chicago (Spring 2010)

The Chicago River



Heading south into the Loop where the branches meet. Wolf Point in the background (October 2011), Exploring the river in downtown Chicago highlights its value as a civic asset: here it's readily apparent that the river as an aesthetic and economic resource. Riparian zones are critical "green space" within in the urban landscape. Wolf Point as an under-realized resource and important historical spot.

The Chicago River



This pumping station at the headwaters of Bubbly Creek sends stormwater from the South Side of Chicago to the Stickney WTP, and is one of the largest of its kind in the world. In times of significant rainfall, the station releases untreated sewage into Bubbly Creek and raises the river's water level by several feet. This prevents flooding of the sewers, but continues to pollute the river in a stretch with an always-stagnant flow.

The Chicago River



Stickney Wastewater Treatment Plant, SW of Chicago (courtesy MWRD). In the foreground, the Sanitary and Ship Canal, which transports Chicago's (and much of Cook County's) wastewater effluent across an ancient continental divide and thence "downstream" via the Des Plaines, Illinois, and Mississippi Rivers to the Gulf of Mexico.

The Control of Nature

A river reversed, a problem created

The Chicago and Calumet rivers were once tiny waterways that trickled into Lake Michigan. Beginning in 1900 the city dug a series of canals that reversed their flows so they could carry the city's waste into the Mississippi River basin, and away from the lake – the city's drinking water source. A push is now under way to engineer a system to re-establish the natural hydrological divide between Lake Michigan and the Mississippi.



Sources: Great Lakes Fishery Commission

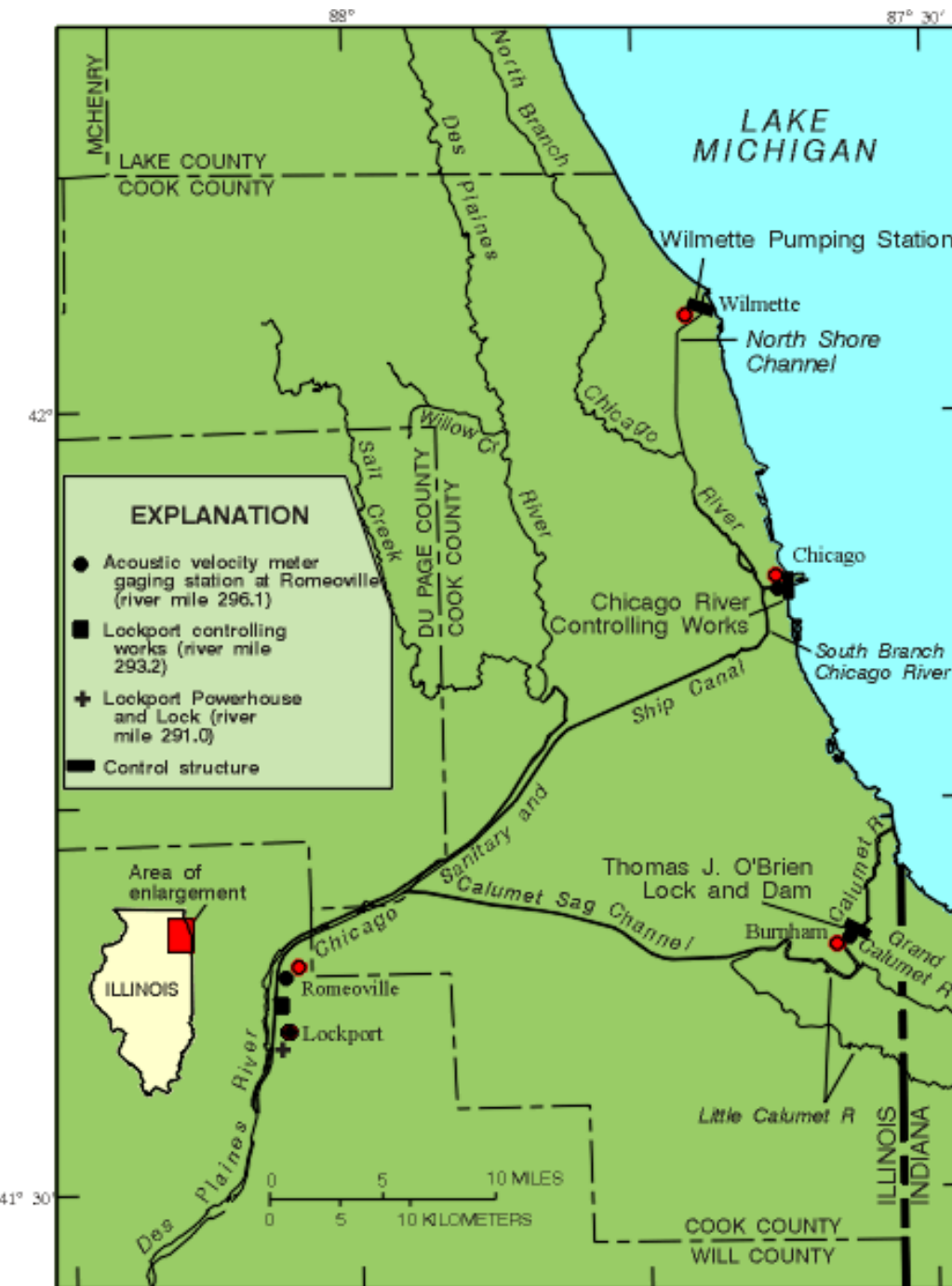


Journal Sentinel

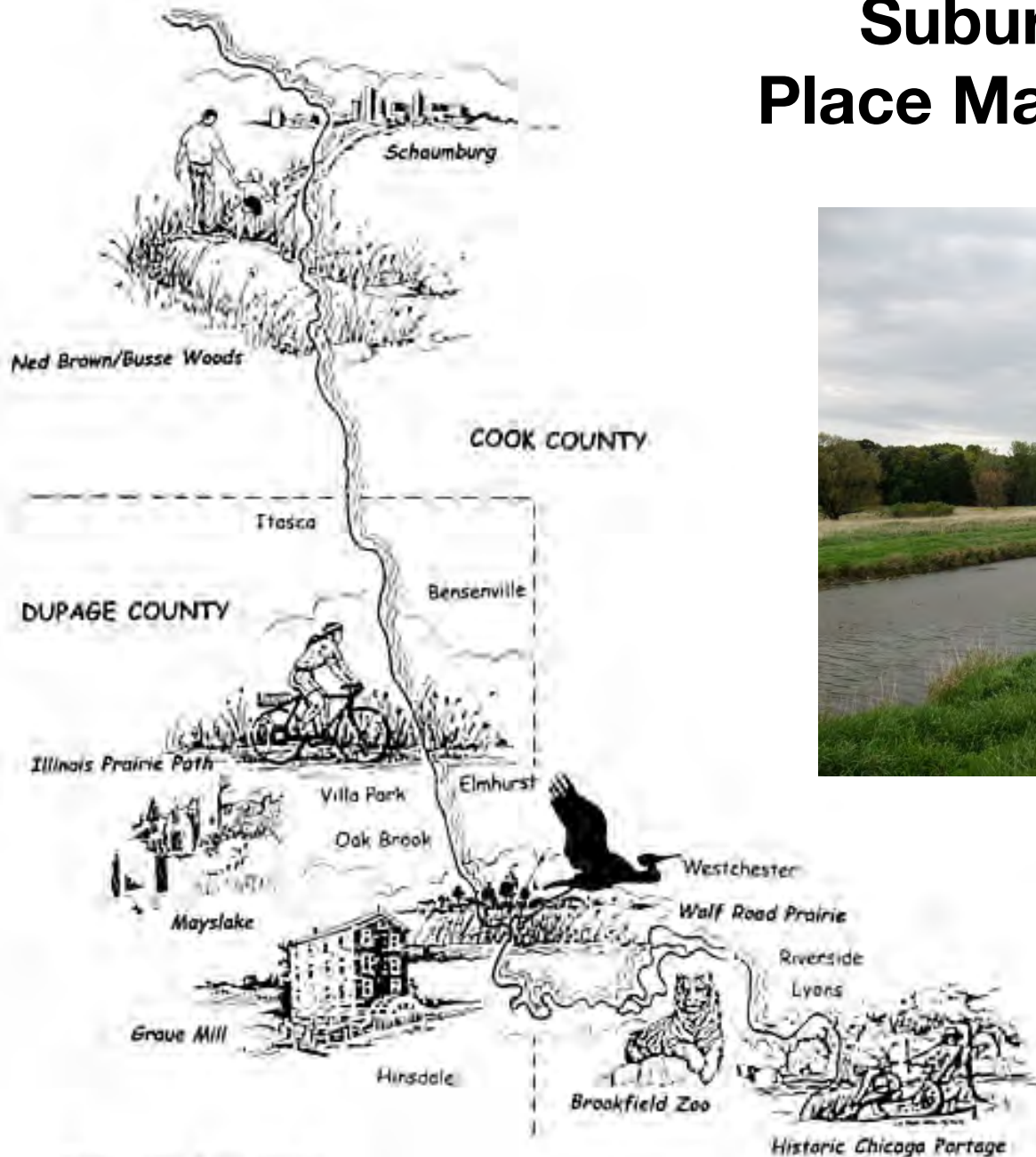
River-based Geography

Chicago Area Waterway System:
rivers, canals, locks, and
controlling structures

Note the relation of the **CAWS** to
the Des Plaines River
and Salt Creek



Suburban Nature: Place Map of Salt Creek



A major river in the western suburbs, Salt Creek flows through Busse Woods, east of Schaumburg IL.

Salt Creek Watershed



Covering roughly 150 square miles, the Salt Creek watershed incorporates more than 30 municipalities that are home to nearly 500,000 people.



"Development"



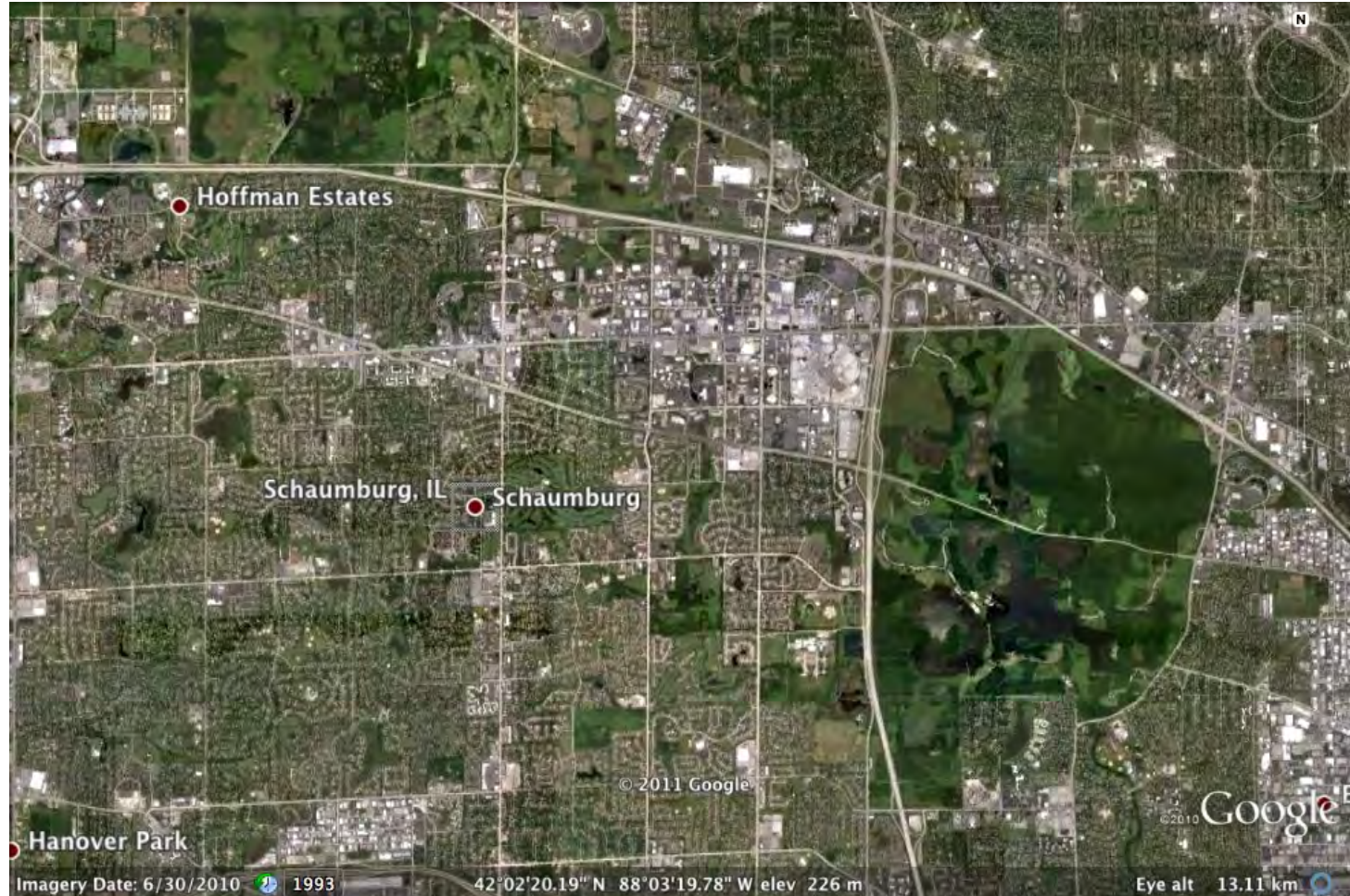
Much of suburbia, as with larger cities, is "developed." That means a transformed land surface characterized by "hardscape," which results in water runoff that has to be managed, rather than normal groundwater replenishment.

Wastewater Treatment



Here's an extraordinary view of the connection between "hard path" technology and "soft path" green infrastructure. The West Branch of Salt Creek winds around the John Egan wastewater treatment plant, which cleans sewage and then releases it into the creek; from there, the West Branch flows west into the South Pool of Busse Lake.

Green Infrastructure



That's why green infrastructure is so important. Here we see Schaumburg in the larger context of Chicago's NW suburbs and a couple of large Cook County Forest Preserve units: the Paul Douglas (partial view, upper left) and the Ned Brown / Busse Woods (lower right) forest preserves. Besides recreation and wildlife habitat, these green oases absorb tremendous amounts of precipitation as well as run-off from the surrounding hardscape, and thus act as giant sponges – taking in water and holding it, then releasing it slowly over time.

Vital and Incredibly Interesting Online Resources

[Sustainability Studies @ RU](#)

Blog (e-subscribe!)

[RU Green Campus](#)

Comprehensive info about all things
sustainable at Roosevelt

[Schaumburg's Sustainable Future](#)

Website/blog (e-subscribe!)

SUST on [Facebook](#) and [Twitter](#)
(Follow us! and post your photos)

Prof. Bryson's [Faculty Website/Blog](#)
(lots of key resources)



It's all about the journey . . .

Canoeing Bubbly Creek, May 2017 (J. Merwin)

Writing Urban Nature

Post-session Agenda



Climbing a bunker at Midewin
National Tallgrass Prairie, Will County
IL, 27 May 2016 (photo: M. Bryson)

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