Sustainability Studies and the Greening of Roosevelt University

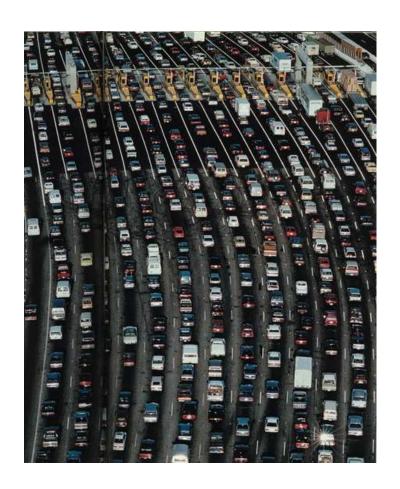


Presentation to the RU Board of Trustees

Mike Bryson 11 March 2010



Sustainability Defined





This is not sustainable...

... but this is.



Sustainability Defined



Ah, much better.

Not so good.



Sustainability Defined



Nope.





In a Sustainable Future:



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.



Academic Contexts

- Association for the Advancement of Sustainability in Higher Education (AASHE), founded 2006
 - American College & University Presidents' Climate Commitment
 - Recent development of sustainability degree programs nationwide



Sustainable Business

Wal-Mart Unveils Plan to Make Supply Chain Greener

February 26, 2010 / The New York Times By Stephanie Rosenbloom

Wal-Mart, the nation's largest retailer, announced on Thursday that **it would cut some 20 million metric tons of greenhouse gas emissions** from its supply chain by the end of 2015 — the equivalent of removing more than 3.8 million cars from the road for a year. . . .

Essentially, suppliers are being asked to examine the carbon lifecycle of their products, from the raw materials used in manufacturing all the way through to the recycling phase. . . .

Wal-Mart's sustainability executives will work with suppliers to help them figure out what measures to take.



Sustainability Studies at RU

The first such program in the Chicago area and one of a few nationwide:

- Engages public policy concerns surrounding consumption, energy usage, and viable economic growth;
- Fosters environmental literacy through interdisciplinary work in the natural sciences, social sciences, and humanities;
- Explores social justice issues on a range of fronts, including environmental justice, resource allocation, urban development, and social equity;
- Positions Roosevelt University as a leader on issues of sustainability, one of the critical issues of the 21st century.



SUST Courses

Core Courses

SUST 210 Sustainable Future

SUST 220 Water

SUST 230 Food

SUST 240 Waste

Advanced Courses

SUST 310 Energy and Climate Change

SUST 320 Sprawl, Transportation, and

Planning

SUST 330 Biodiversity

SUST 340 Policy, Law, and Ethics

Special Options

SUST 350 Service Learning SUST 390 Special Topics



SUST Curriculum

Crosscutting Themes

Science and Environmental Literacy
Environmental and Social Justice
Urban and Suburban Systems

Pedagogical Highlights

Interdisciplinary Learning
Field Trip Experiences
Service Learning Opportunities
F2F, Online, and Hybrid Classes



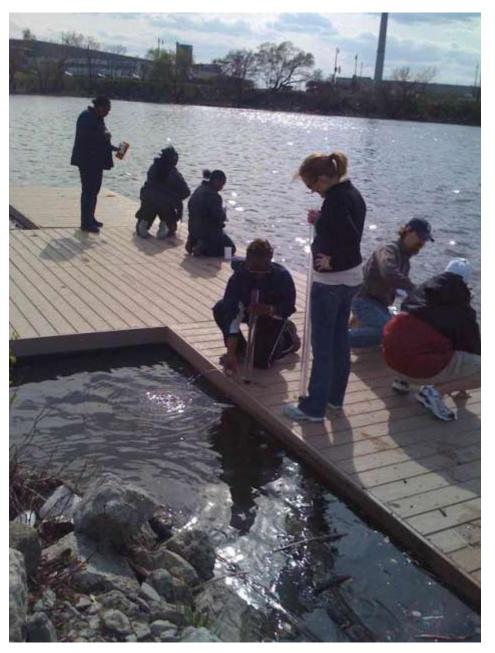
Chicago Center for Green Technology (spring 2009)



Des Plaines River Wetlands Demonstration Project (spring 2009)



Canoe trip down Bubbly Creek, an industrialized tributary of the South Branch of the Chicago River (spring 2009)



Testing the water quality of Bubbly Creek (spring 2009)



Degree Advantages

Unique Content

- Deep knowledge about the pressing environmental issues of the 21st century
- Thorough grounding in the liberal arts and sciences
- Cutting-edge environmental focus



Competitive Edge

• **Professional double-majors**:

- Organizational Leadership
- Hospitality Management
- Commerce and Enterprise
- Sales
- Paralegal studies

• Science minors:

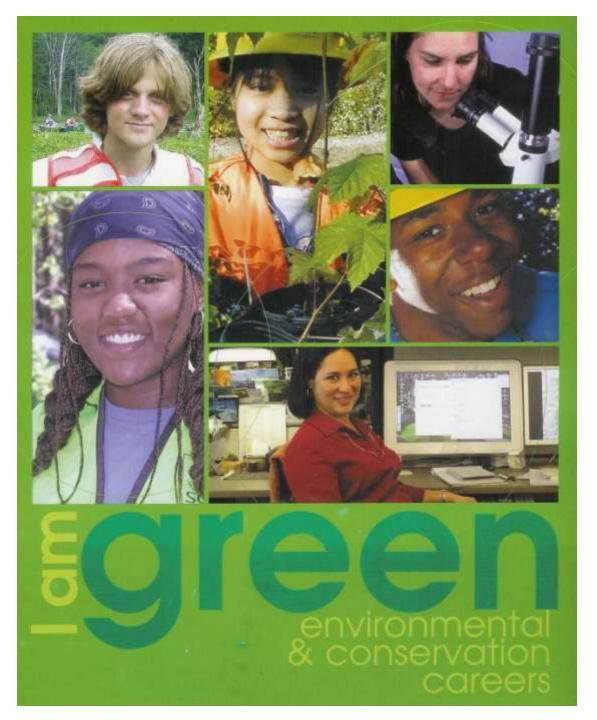
- Biology
- Chemistry
- Global Information Systems
- Environmental science



The Green Economy

A study by the **Pew Charitable Trust** released in June 2009 said that there are already 770,000 "green" jobs in the economy (comparable to the 989,000 jobs in the more mature field of telecommunications) and that the nation's "clean-energy economy is poised for explosive growth."

A U.S. Conference of Mayors report from October 2008 estimated that rapid growth in "green jobs" could make it "the fastest growing segment of the U.S. economy over the next several decades."



Science/Engineering:

- Energy manager/technician
- Hydrologist
- Restoration ecologist
- Toxicologist
- Water/wastewater engineer

Business/Professional:

- Brownfields real estate developer
- Corporate recycling manager
- Environmental quality certification specialist
- GIS specialist
- Risk manager
- Sustainability officer

Social Science:

- Geographer
- Museum curator
- Parks and recreation specialist
- Planner
- Policy analyst

Arts and Humanities:

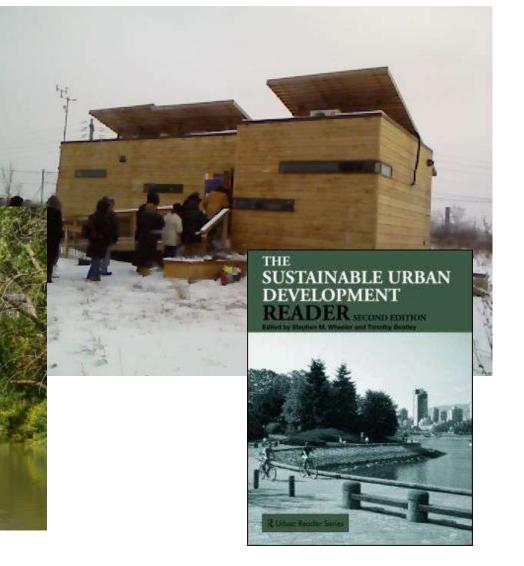
- Environmental communications
- Landscape architect
- Technical environmental writer



Sustainability in the City



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and in the Suburbs

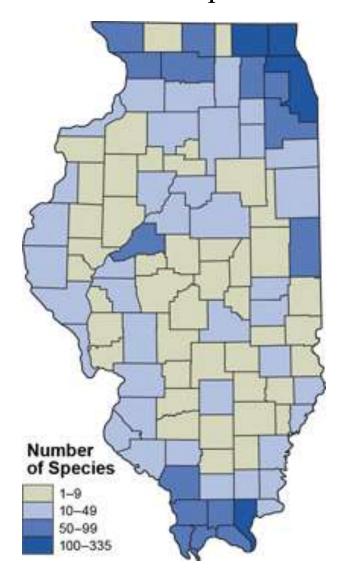


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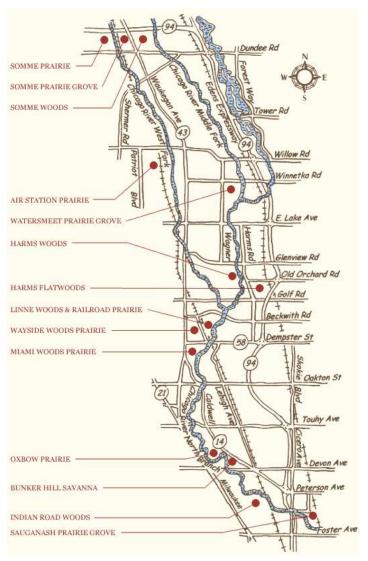
Schaumburg, IL RU students at Volo Bog St Natural Area Prairie Restoration at Fermilab



Endangered and Threatened Species in IL



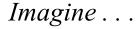
North Branch of Chicago River Active Restoration Sites



Sources: Illinois DNR (1993); North Branch Restoration Project (2009)



A **Green Vision** for the Schaumburg Campus



A model "sustainable campus" in Illinois
An environmental destination in the NW Suburbs



<u>Visionary Possibilities</u>:

Rooftop gardens and native landscaping Prairie plots and experimental wetlands Green parking deck Less asphalt (impermeable surface area)

Sustainability and Social Justice as possible general education themes

The Existing Foundation:

SUST undergraduate major/minor/certificate

Strong science programs: biology, chemistry, pharmacy

Schaumburg's Biodiversity Plan (2004)



Native Landscaping in the Suburbs

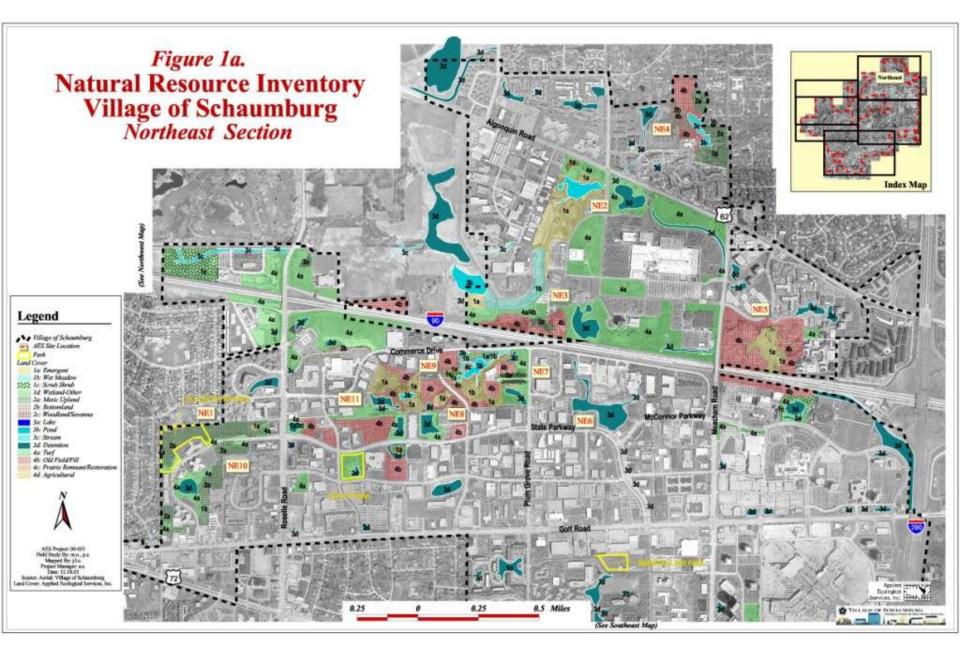


Clockwise from top left:

Lucent Technologies Prairie (Naperville)
ATT Network Software Div Campus (Lisle)
Prairie Stone Business Park (Hoffman Estates)



A shopping mall in the north suburbs of Chicago (2005)



Source: Schaumburg Biodiversity Plan (2004)



Integrating a Green Vision for RU



Breaking Ground on the Wabash Building



Launching Sustainability Studies



Greening the Schaumburg Campus

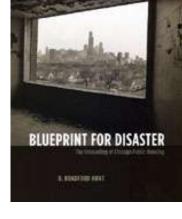


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Dr. Carl ZimringAssistant Professor of Social Science





Dr. Brad HuntChair of Professional and Liberal Studies
Associate Dean of CPS
Associate Professor of Social Science