Native Species in Urban Settings
Prairie Restoration and Management on Beloit College Campus

Native species landscaping is...
Planting an area with species of flowers, grasses, shrubs, trees that are indigenous to that particular geographic region

On Beloit College Campus it looks like:

The Science Center Oak Savanna:
• Designed to mimic land use described in 1836 Public Land Survey
• Seeded in Fall of 2009
• Current ecosystem: wildflowers and grasses

The Center for the Sciences Patio and Rain Gardens:
• Native forbs, grasses, and sedges
• Troughs direct water into drain located by greenhouse

Eloise Marston Schnaitter Wildflower Garden:
• Donated by Schnaitter, 1932 alumna of Beloit College
• Transplanted Spring 1994
• Species such as bloodroot, Virginia bluebell, Virginia waterleaf, wild columbine, Jack in the pulpit

Aldrich Parking Lot Swale
Native species such as wild lupine, yellow-headed coneflower, goldenrods, and sunflowers

A native ecosystem is biologically sustainable
• Hardy prairie plants may prevent the domination of an invasive species
• Intricate root systems draw water from deep within the ground
• Native biota provide habitat for wildlife, including pollinating insects and birds

What does this mean for us?
• Minimal weeding and pesticide use
• No watering
• Minimal yearly planting

Establishing a native planting requires time and assistance.

Questions that guided newly established Oak Savanna Management: Summer 2011
• What species have appeared and how/where are they distributed?
• Are any species potentially invasive. If so, should they be removed? What is the best way to remove them?
• What is the distribution of biomass, and how might it be enhanced in more sparsely covered areas?
• How does the campus/community perceive the plantings?

Native ecosystems provide services for campus
• Prevent soil erosion and storm water runoff
• Purify groundwater
• Sequester carbon from atmosphere
• Provide educational resources and opportunities for student/faculty research
• Represent historical land use

Helped increase biodiversity by
• Transplanting seedlings of native species including lupine, prairie dock, and butterfly-weed
• Germinated variety of species for fall planting

Identified species in plantings and recorded information on plant locations, distributions, and characteristics

Labeled plants, maintained garden boundaries, and created native plantings brochure

Acknowledgements: I would like to thank Dr. Yaffa Grossman for her supervision of and assistance with my work this summer. I am particularly appreciative of her guidance in plant identification and in the nature and background of native ecosystem restoration. I would also like to acknowledge Dr. Sue Swanson for training in Global Information Systems, and Amy Delbecq and Jithanie Gunasena for assistance in the creation of a vegetable and herb garden on campus. Pictures were taken by Amy Delbecq, Marion Fass, and Lucile Tepsa.