

Pollinator Programs

Prairie State Conservation Coalition
Annual Meeting & Training Workshop

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THE
UNIVERSITY OF
ILLINOIS
AT
CHICAGO

UIC

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Presentation Outline

- About UIC Energy Resources Center
- Pollinator problem statement
- Federal efforts
- Parallel initiatives
- Work being done at UIC



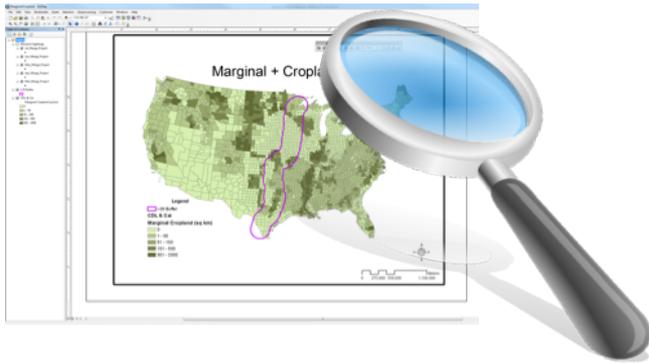
About Energy Resources Center

- Within College of Engineering at the University of Illinois at Chicago (UIC)
- Research center founded in 1973
- Focused research and services related to energy efficiency, distributed generation, utilities billing management, and biofuels and bioenergy
- Engaged with utilities, ag industry, government agencies, and non-profits



About Energy Resources Center

Land use analyses



Monarch Collaborative



Rights-of-Way as Habitat Working Group



Powell Center Monarch Science Partnership



Board Member



Pollinators in Decline

- **Honey bees and other native bee species** have been in serious decline for more than three decades in the U.S.
- **Monarch butterfly** population overwintering in Mexico is 10% of 20-year average
- Multiple causes:
 - Loss of nectar-producing plants and milkweed causes **habitat shortage** for pollinators
 - Extreme weather conditions
 - Natural enemies such as diseases, predators, and parasites
 - Use of increasingly advanced insecticides and pesticides in agricultural, urban, and suburban areas
- 85% of the world's flowering plants depend on pollination by insects and other animals (Ollerton et al. 2011)
- In 2009 crops directly dependent on insect pollination were valued at an estimated **\$15 billion** (Calderone 2012)

Federal Focus

- White House established the ***Pollinator Health Task Force*** in June 2014
- Task Force released their strategy and research action plan in May 2015:
 - Reduce honey bee colony losses
 - Increase monarch population
 - Restore millions of acres of habitat
 - Collaborate across federal/state agencies and through public-private partnerships
 - All hands on deck



Parallel Initiatives

Federal Lands

- USDA and DOI BMPs for federal lands
- Commitments made by most federal agencies

Agriculture

- Keystone Policy Center Monarch Collaborative
- Iowa Monarch Conservation Consortium

Urban

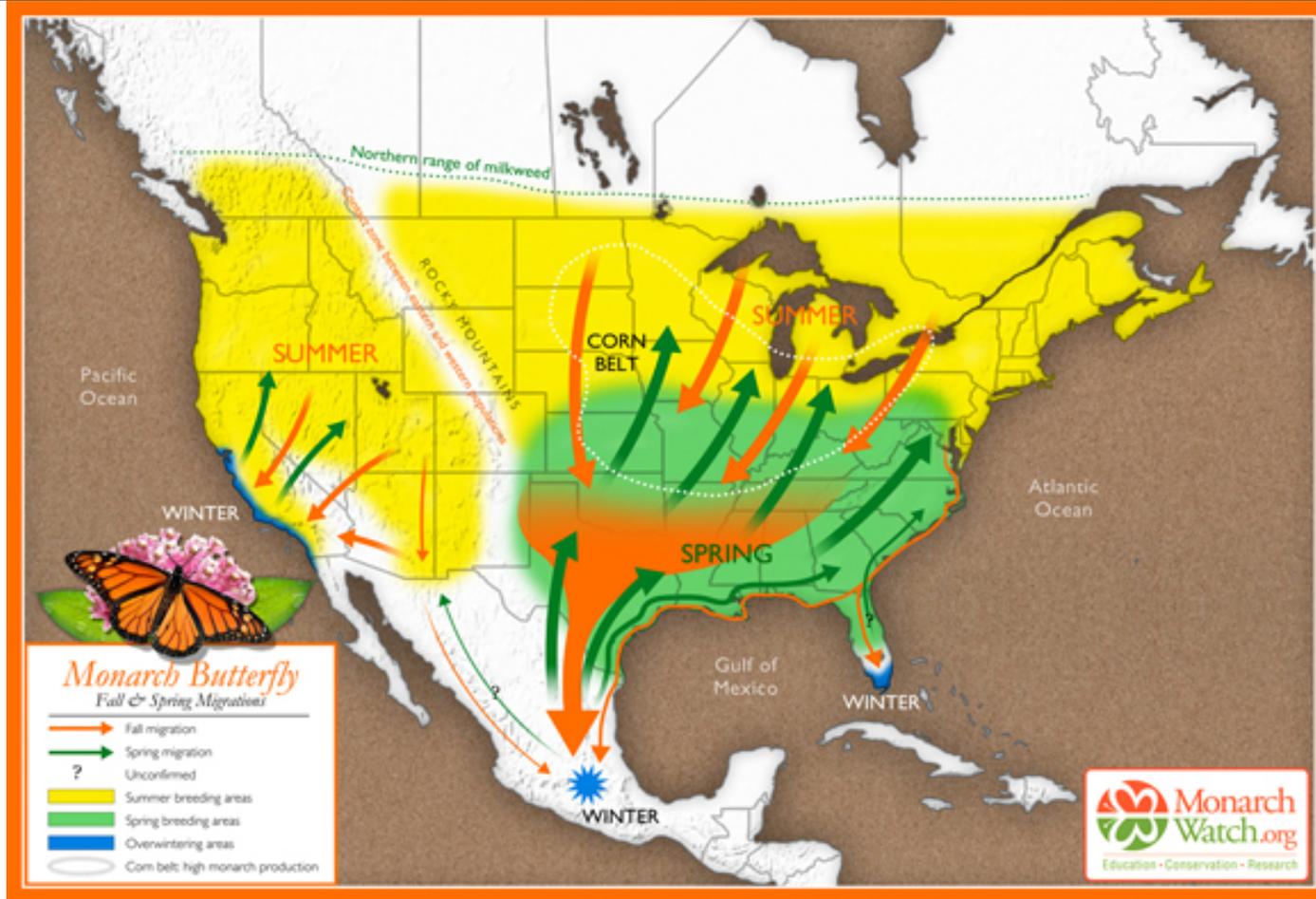
- Mayor's Monarch Pledge
- Urban Monarch Conservation Framework

Rights-of-Way

- Rights-of-Way as Habitat Working Group
- Interstate 35 Monarch Highway
- Right-of-Way Stewardship Council



Monarch Butterfly Migration



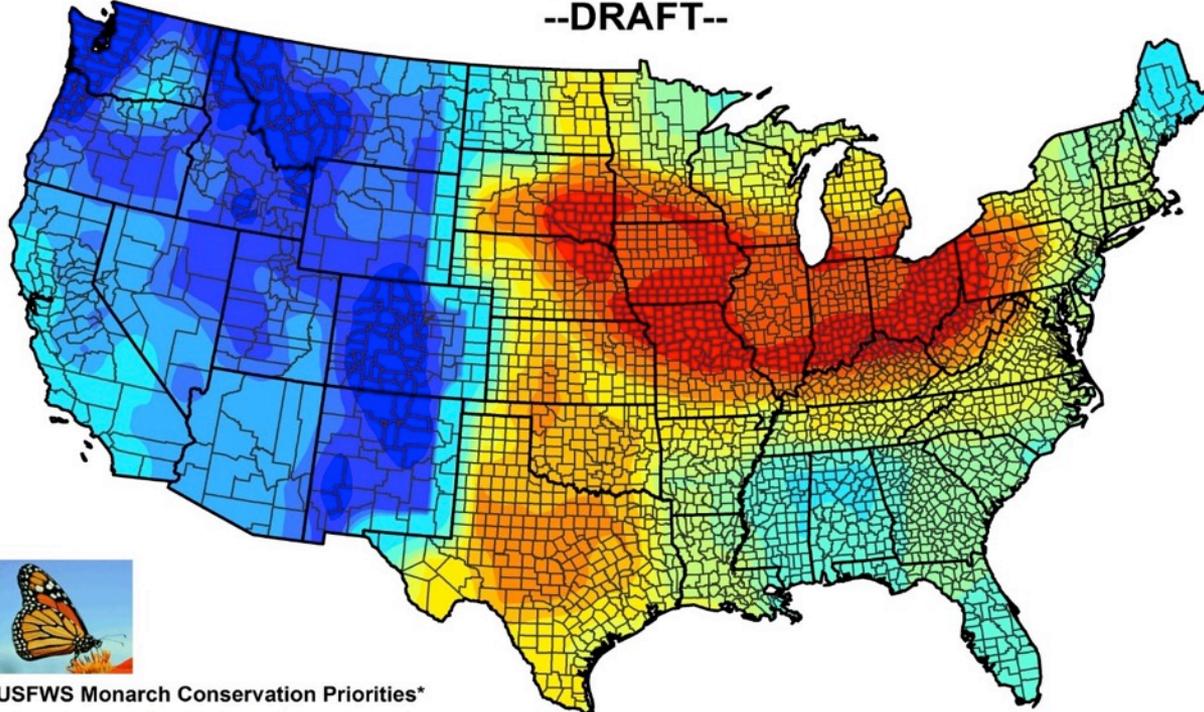
Geographic Priorities



U.S. Fish and Wildlife Service

USFWS Monarch Butterfly National Conservation Priorities

--DRAFT--



USFWS Monarch Conservation Priorities*



**This map is intended to inform U.S. Fish and Wildlife Service national-scale monarch butterfly conservation work. It was created using tools developed by the USGS-led Monarch Science Partnership, in this case highlighting priorities for maximizing over-wintering population-level outcomes through a combination of focusing on geographic priorities, opportunity areas, and threats to be avoided. This is a DRAFT version and can be re-scaled or customized for different decisions and/or scales; updates will be ongoing, using the best available science.*

Current Efforts at UIC

- Convening industry leaders and interested parties
 - Awarded grant by National Fish & Wildlife Foundation to coordinate Rights-of-Way as Habitat Working Group
 - Work with Illinois ag organizations
- Developing white papers and tools
 - Effects of herbicides and pesticides on pollinator health and habitat
 - Creating a business case of habitat
- *Pollinator Habitat in Practice* webinars
- GIS data clearinghouse for habitat projects
- Tracking relevant news and resources for online library

ROW as Habitat Working Group

****NEW**** Working Group Resources Page

Go to: <http://rightofway.erc.uic.edu>

Rights-of-Way as Habitat Working Group

Providing a forum to collaborate and share ideas, best practices, and other information to promote successful habitat projects along rights-of-way

ERC
ENERGY RESOURCES CENTER

UIC

Case Studies | Planning Tools | Best Management Practices | Funding Opportunities | Other Resources | Discussion Board

Search

the Rights-of-Way as Habitat Working Group's resources page. The page is intended to assist working group participants with habitat planning, and subsequent management and maintenance activities as well as communication and engagement. Pulling from a wide range of existing data, we have assembled key resources related to vegetation management, habitat and other best practices that help address some of the unique issues facing projects along rights-of-way.

UIC Energy Resources Center
RIGHTS-OF-WAY AS HABITAT WORKING GROUP

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Hey and Associates, Inc.
Huff & Huff, Inc.
Illinois Corn Growers Association

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Illinois Department of Transportation
Illinois Farm Bureau
Illinois Tollway
Iowa Department of Transportation
IVM Partners, Inc.
Johnson County Secondary Road Department
Kane County Division of Transportation
Kansas City Power & Light
Linn County Secondary Road Department
Metropolitan Mayors Caucus
Metropolitan Water Reclamation District
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Pizzo Group
Pollinator Partnership
Public Service Commission of Wisconsin
Quigg Engineering Inc.
River Bend Wildland Trust
Sand County Foundation
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South Dakota State University
Stantec
The Conservation Foundation
The Field Museum
The Nature Conservancy
Trees Forever
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U.S. Forest Service
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We Energies
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Wisconsin Department of Transportation
Xcel Energy
Xerces Society for Invertebrate Conservation



ROW as Habitat Working Group

Key Objectives

- Organize meetings and workshops
- Assemble expertise and resources
- Communicate best practices
- Provide industry recognition
- Develop a unified message about the importance of habitat
- Encourage collaboration between landowners
- Support collaborative habitat initiatives



Monarch Conservation Fund

National Fish & Wildlife Foundation

- Private and public funds totaling \$3.9 million
- Typical grant \$50,000 - \$250,000
- Priority areas:
 - Increase connectivity in habitat
 - Enhance coordination and capacity of conservation efforts
 - Improve seed supply



Thank you!



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