

Finding Opportunities for Habitat in Rights-of-Way

2016 Railroad Environmental Conference

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Bob Toy – Union Pacific Railroad**



November 1, 2016



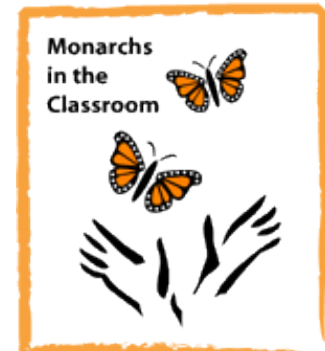
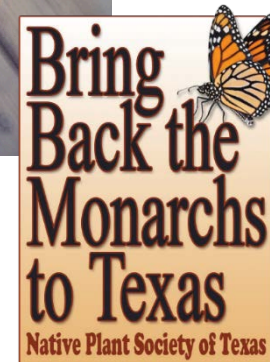
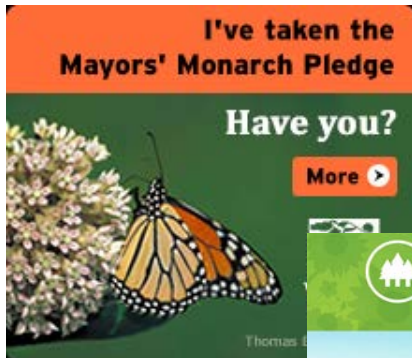


**BUTTERFLY
HEROES**

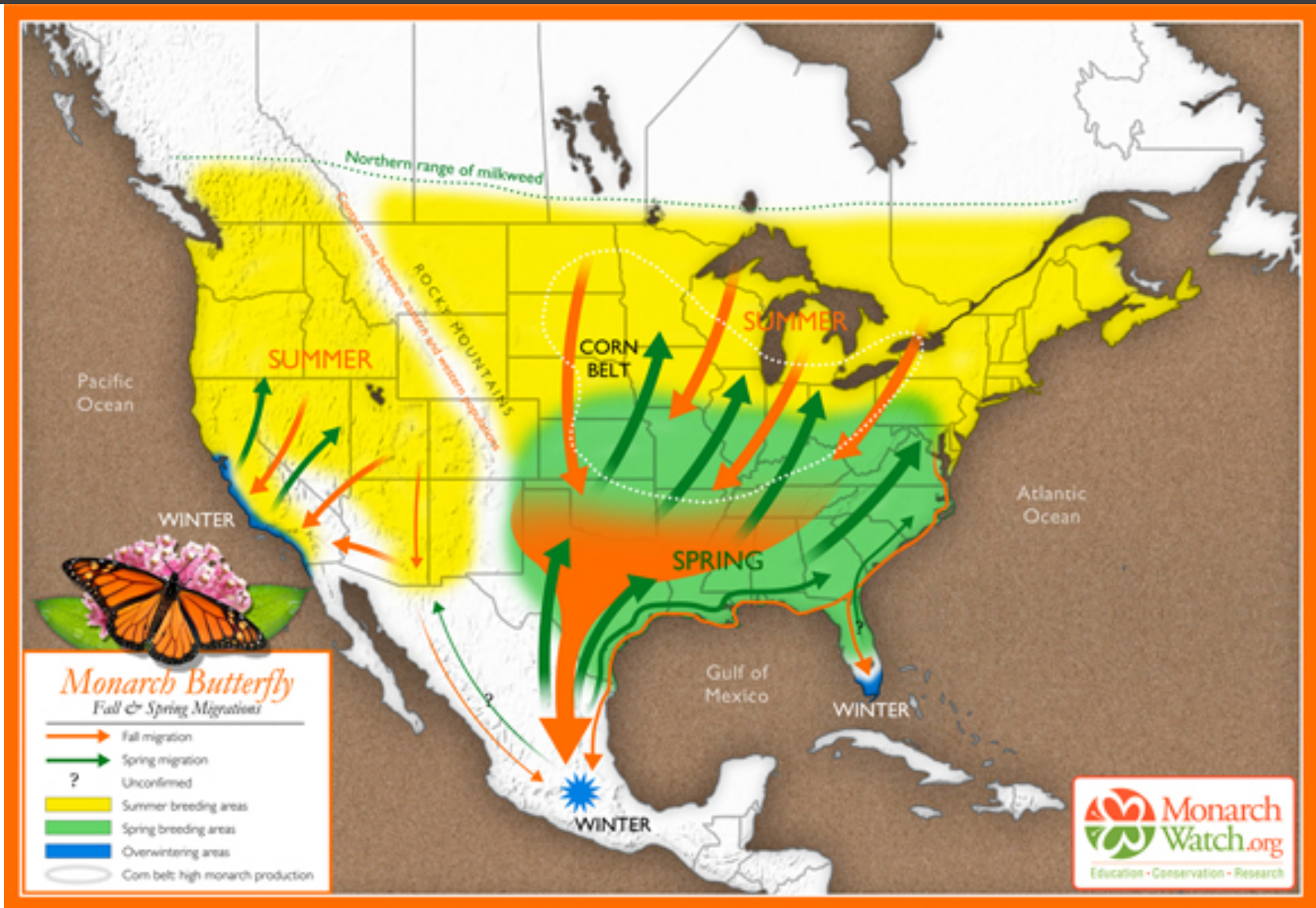
**Ohio Pollinator
Habitat Initiative**



**Monarch
Teacher
Network**



Monarch Butterfly Migration



Industry Hurdles

Landowner
Cooperation

Training/Education

Public Support

Cost/Funding

Invasive Species
Management

Federal Regulations

Scaling Up Practices

Finding Suitable Land

Tracking/Quantifying
Habitat

Mission

To engage diverse stakeholders in a collaborative environment that promotes pollinator habitats and healthy ecosystems along rights-of-way by providing expertise, cost-effective best management practices, and industry-driven tools and resources.

Objectives

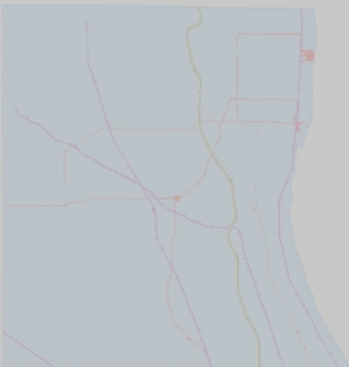
Educate



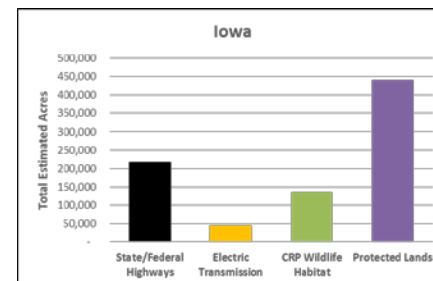
Leverage



Data Clearinghouse



Metrics & Targets



The Working Group

- More than 160 industry, government, and non-profit organizations
 - Electric and gas utilities
 - Highway and transportation agencies
 - Railroads
- Broad geographic representation across U.S.
- Workshops, webinars, online resources library and discussion board, geospatial database

The Working Group

2IM Group, LLC
Ameren
American Electric Power
American Transmission Company
Amtrak
Applied Ecological Services
Associated Electric Cooperative, Inc.
Bayer
BNSF Railway
Canadian National Railway
Cardno
Chicago Department of Transportation
Clean Line Energy Partners
ComEd
Consumers Energy
Cook County Highway Commission
DTE Energy
Duke Energy
DuPage Monarch Project
Edison Electric Institute
Enbridge Energy
Environmental Consulting & Technology, Inc.
Exelon Generation
Federal Highway Administration
First Energy Corp
Florida Department of Transportation
Garfield Park Conservatory Alliance
Hey and Associates, Inc.
Huff & Huff, Inc.

Illinois Corn Growers Association
Illinois Department of Natural Resources
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
(Greater Chicago)
Michigan Department of Transportation
MidAmerican Energy
Miller Engineers & Scientists
Minnesota Department of Transportation
Missouri Department of Transportation
Monarch Joint Venture
Monsanto Company
Morton Arboretum
Municipal Electric Utilities of Wisconsin
National Fish & Wildlife Foundation
National Wildlife Federation
Natural Resources Defense Council
Nicor Gas
NiSource
Noble Energy

Northern Indiana Public Service Company
Northern Natural Gas
Ohio Department of Transportation
Pizzo Group
Pollinator Partnership
Public Service Commission of Wisconsin
Quigg Engineering Inc.
River Bend Wildland Trust
Sand County Foundation
South Dakota Department of Transportation
South Dakota State University
Stantec
The Conservation Foundation
The Field Museum
The Nature Conservancy
Trees Forever
University of Northern Iowa
U.S. Environmental Protection Agency
U.S. Fish and Wildlife Service
U.S. Forest Service
U.S. Geological Survey
U.S. National Park Service
Union Pacific Railroad
We Energies
Wildlife Habitat Council
Wisconsin Department of Natural Resources
Wisconsin Department of Transportation
Xcel Energy
Xerces Society for Invertebrate Conservation

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Illinois Farm Bureau

Illinois Tollway

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Johnson County Secondary Road Department

Kane County Division of Transportation

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Xerces Society for Invertebrate Conservation

What's Happening?

I-35 Monarch Highway

- Memo signed by six states in May 2016
- Loosely follows 1995 Prairie Passage Route
- Encompasses 20 – 50 miles on either side



Photo courtesy of USFWS

What's Happening?

Illinois Tollway

- New seed mix implemented on a trial basis
 - No additional cost in construction/rehab areas
- Training maintenance staff
 - Reduced mowing
 - Spot chemical treatments
- IRVM plans under development



Tollway working with environmentalists to boost population of monarch butterflies



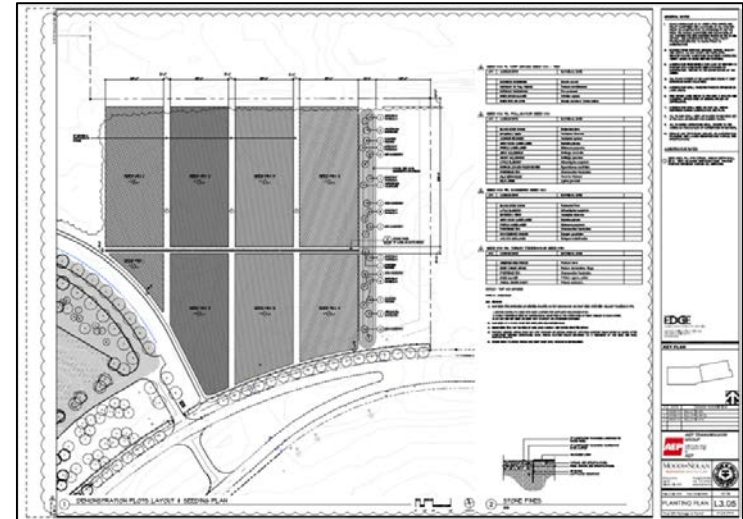
The number of monarch butterflies that reached on-record levels, according to a formal census by



What's Happening?

American Electric Power

- “We can do better without compromising reliability”
- Demonstration projects
 - Showcase options
 - Collect operational data
- Working with multiple partners on rights-of-way and other sites
- Pursuing certification with Wildlife Habitat Council



What's Happening?

Union Pacific Railroad

- A no-brainer...
 - Concept fits company's fabric
 - 1 million acres
 - "Ribbons" of land in the right locations
 - Generally native soils
- ...except
 - Public safety calls for less vegetation, not more
 - Employee safety calls for thoughtful plan
 - Restricting access fosters safe corridors
 - Objective to minimize maintenance
 - Cost

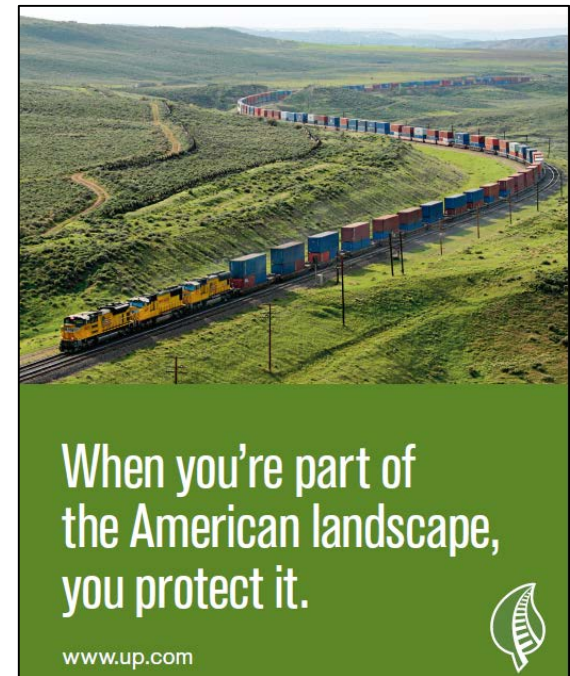


Photo courtesy of Union Pacific Railroad

What's Happening?

Union Pacific Railroad

- Pilot locations with few upfront limitations
 - Non-operating properties
 - Site Remediation sites
 - Projects already requiring planting
- Find what works (and what doesn't)
 - Multiple geographies
 - Multiple seeding and maintenance approaches
 - Tap into expertise to test “lighter touch” applications
- Use lessons to define next steps
 - Quality before / over quantity
 - What's a “win”?



Photo courtesy of Union Pacific Railroad

How?

Start Small, Build from There

- Demonstration projects
- Find partners
- Habitat certifications
- Rights-of-Way as Habitat Working Group
- Integrated Vegetation Management



Photo courtesy of Union Pacific Railroad



Photo courtesy of ComEd

How?

Creating the Business Case

Long-term
Cost Savings

Ecosystem
Benefits

Carbon
Sequestration

Stormwater
Management

Erosion /
Snow Control

Public
Relations

Partnership
Building

Regulatory

Thank you

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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

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

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ERC

ENERGY RESOURCES CENTER



[Case Studies](#) [Planning Tools](#) [Best Management Practices](#) [Funding Opportunities](#) [Other Resources](#) [Discussion Board](#)

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.

Contact

If you have information or resources to contribute to this page, please contact