

Citizen-based Monitoring

Eva Lewandowski, PhD

Wisconsin Department of Natural Resources



Citizen Science

Public involvement in scientific research



Citizen-based Monitoring

Public involvement in long-term monitoring of natural resources



Wisconsin CBM Firsts

- 1900: Christmas Bird Count
- 1966: Breeding Bird Survey
- 1976: Annual Midwest Crane Count
- 1981: WI Frog & Toad Survey
- 1986: Citizen Lake Monitoring Network
- 1996: Water Action Volunteers and Monarch Larva Monitoring Project



Wisconsin CBM Firsts

- 2004: WCBM Conference, Network, and Partnership Program
- 2008: Wisconsin Bat Program Monitoring
- 2014: Wisconsin Rare Plant Monitoring Program
- 2016: Joint Lakes Partnership Convention and WCBM Conference



Wisconsin Citizen-based Monitoring Network

www.wiatri.net/cbm



- Partnership of 180+ monitoring groups & projects
- Mission: Improve effectiveness of volunteer monitoring efforts
- Resources for project leaders, volunteers, researchers, and land managers

Wisconsin Citizen-based Monitoring Network

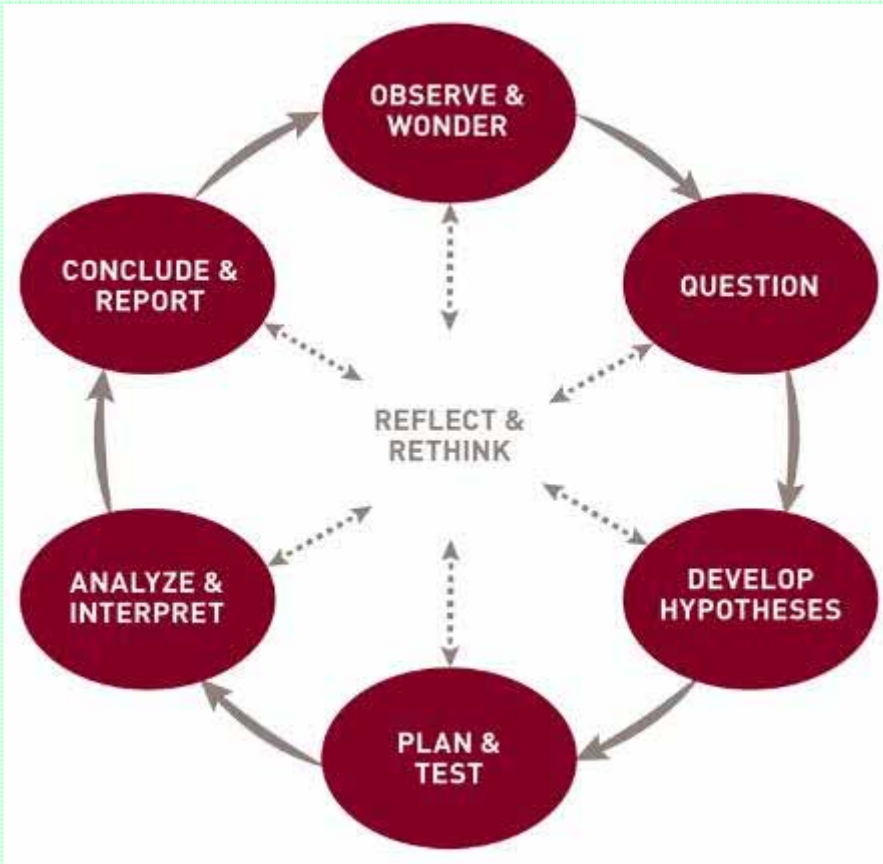
www.wiatri.net/cbm

Resources:

- Conferences
- Trainings
- Funding
- Equipment Lending
- Newsletters
- Event Calendar
- Technical Support



How Are Data Used?



Scientific
Research



To Inform
Management

Long Term Water Clarity Trends

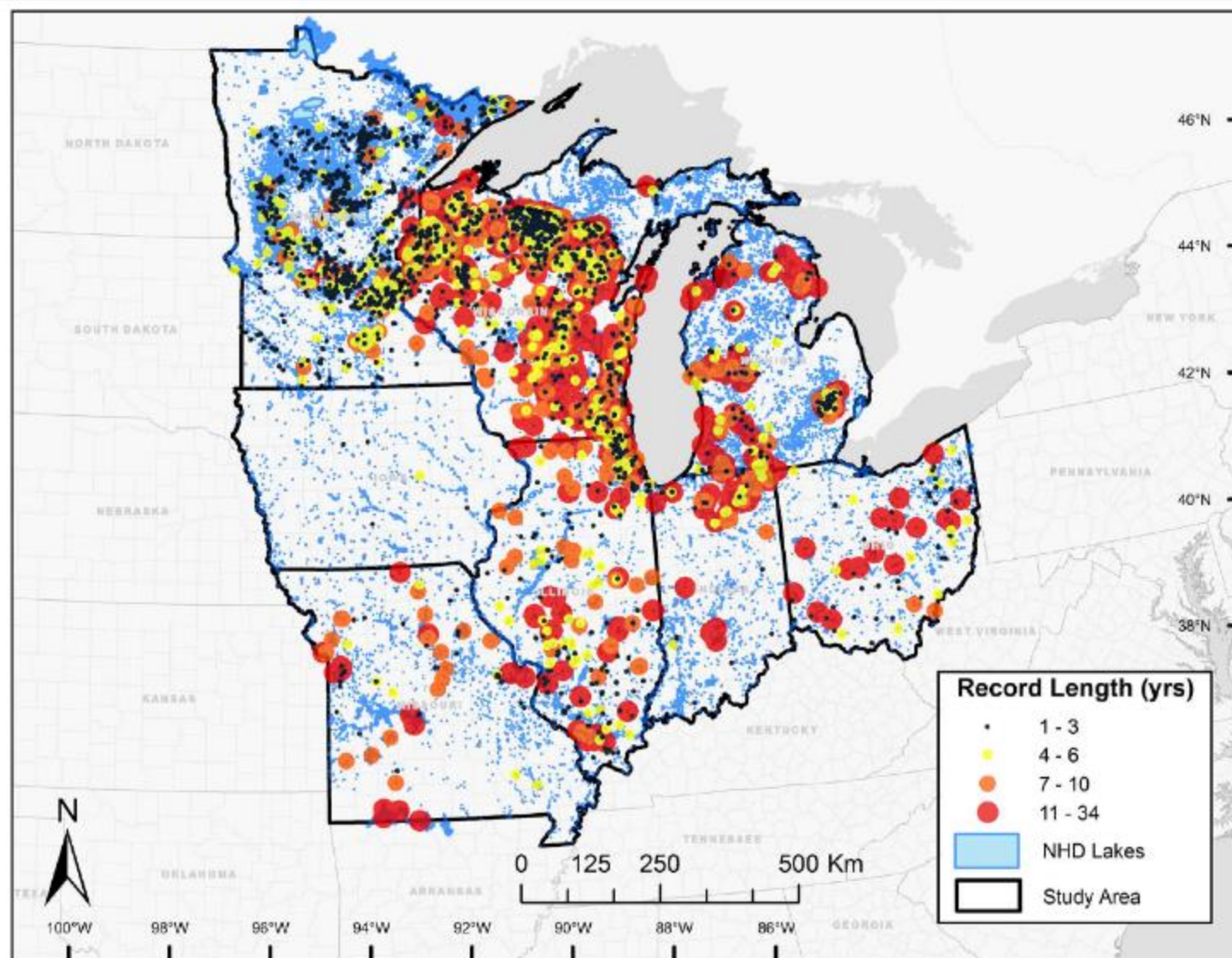


Figure 2. Upper Midwest states in the US and Secchi record lengths (years) for all citizen monitored lakes included in the study. Size and color of symbol designate record lengths. See Table 1 for information on citizen monitoring networks by state.
doi:10.1371/journal.pone.0095769.g002

Water Clarity Results



- 1% per year increase in water clarity across all lakes
- Only 7% of lakes showed pattern of increased clarity
- Lakes in Wisconsin and Minnesota drove overall trend



**What CBM Projects
are in Wisconsin?**

Citizen Lake Monitoring Network



Water Action Volunteers





Wisconsin Mussel Monitoring Program

Michael Kienitz

Importance of Native Mussels



Improve water quality
and clarity



Improve substrate
habitat



Food source

Threats to Native Mussels

- Water Pollution

- Excess nutrients
- Sedimentation
- Heavy metals



- Dams

- Limits connectivity for host fish



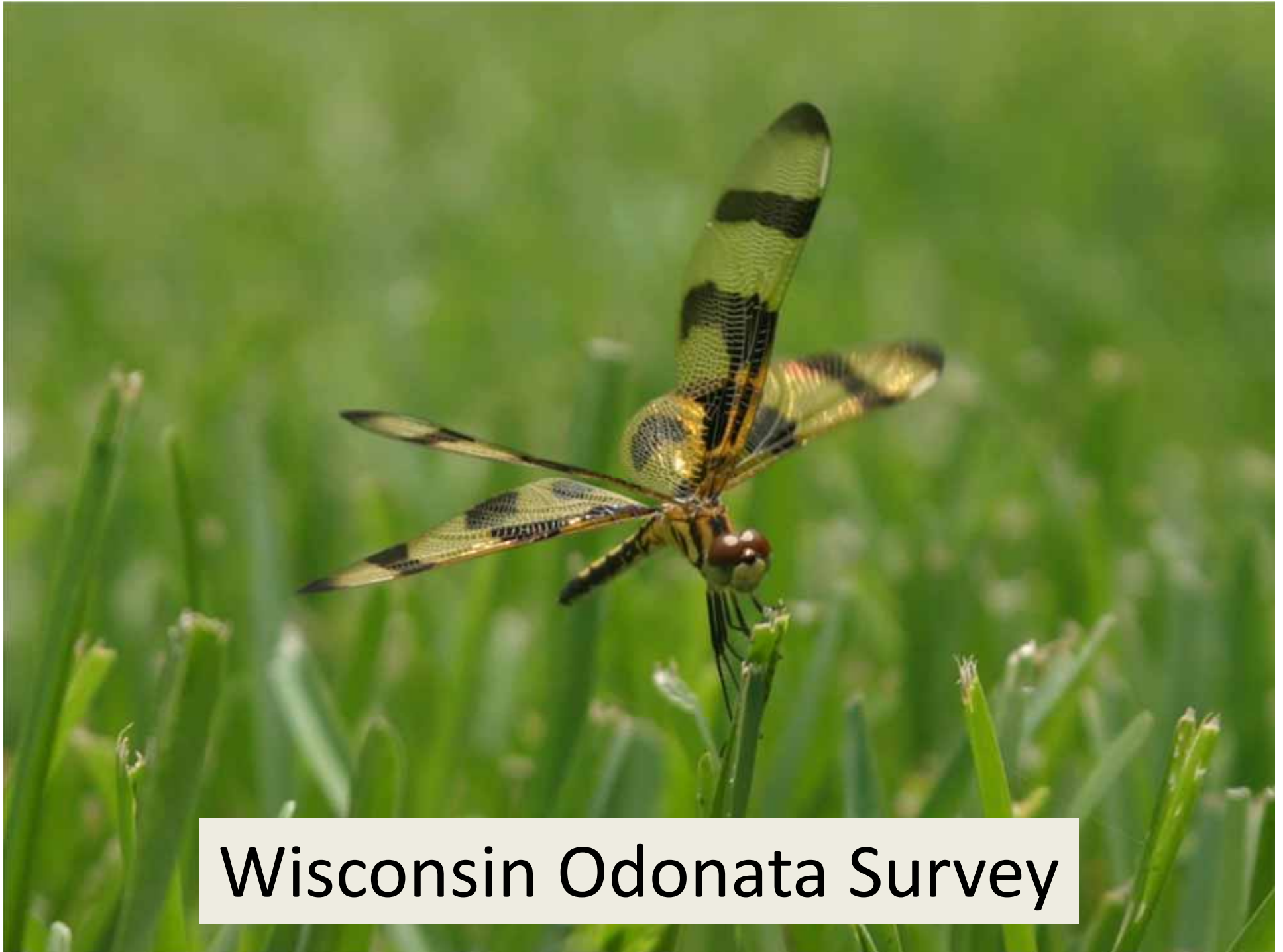
- Invasive species



How Can I Monitor Mussels?

- Take photos
- Share on iNaturalist
- Collect shells
- Attend a WMMP event





Wisconsin Odonata Survey

Odonates- Getting Started



*Are you interested
in Damselflies and
Dragonflies?*

*Are you fascinated by them
and want to learn more?*

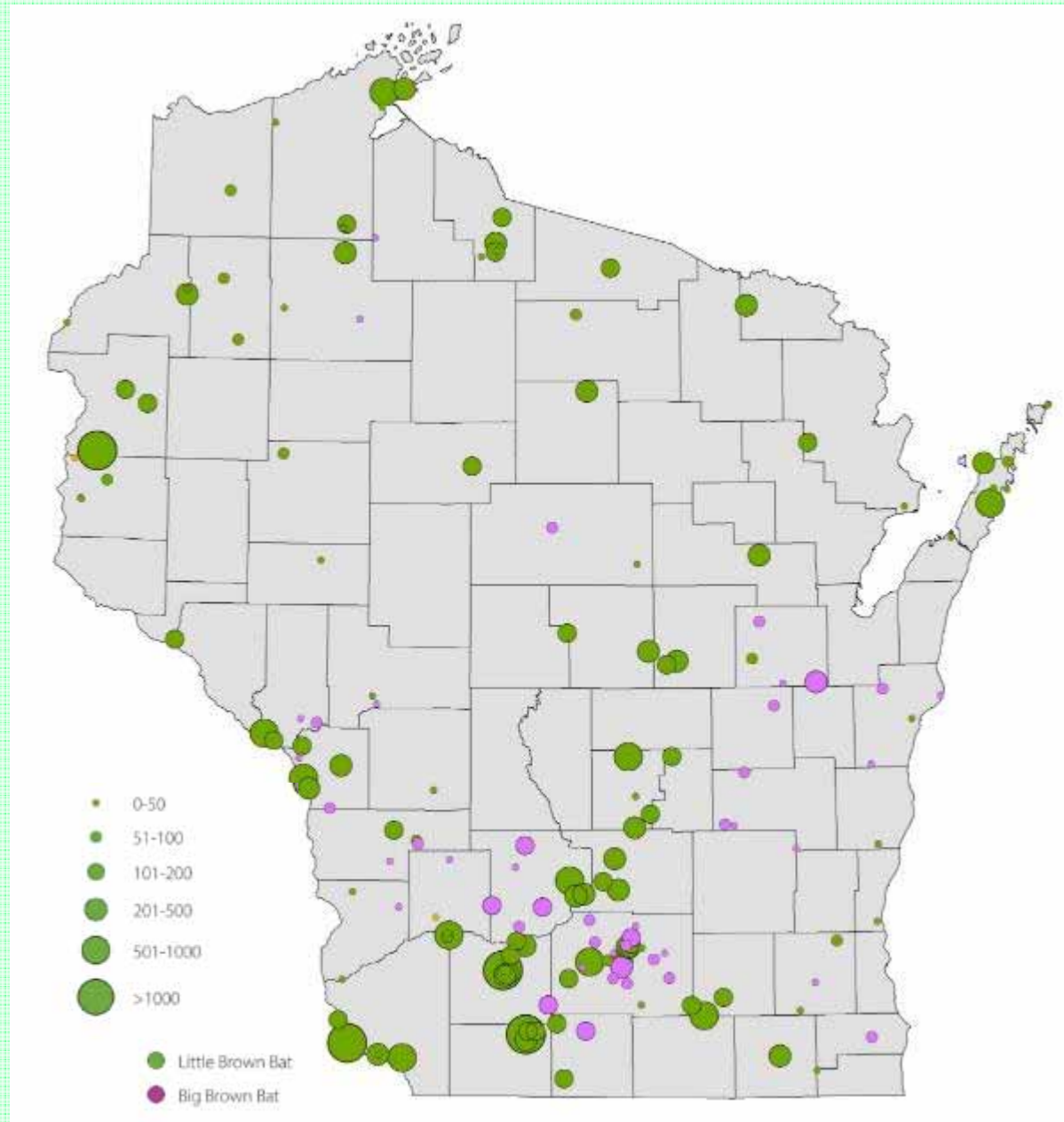
*Would you like to connect with
others who have the same
interest?*

If so, please join us!

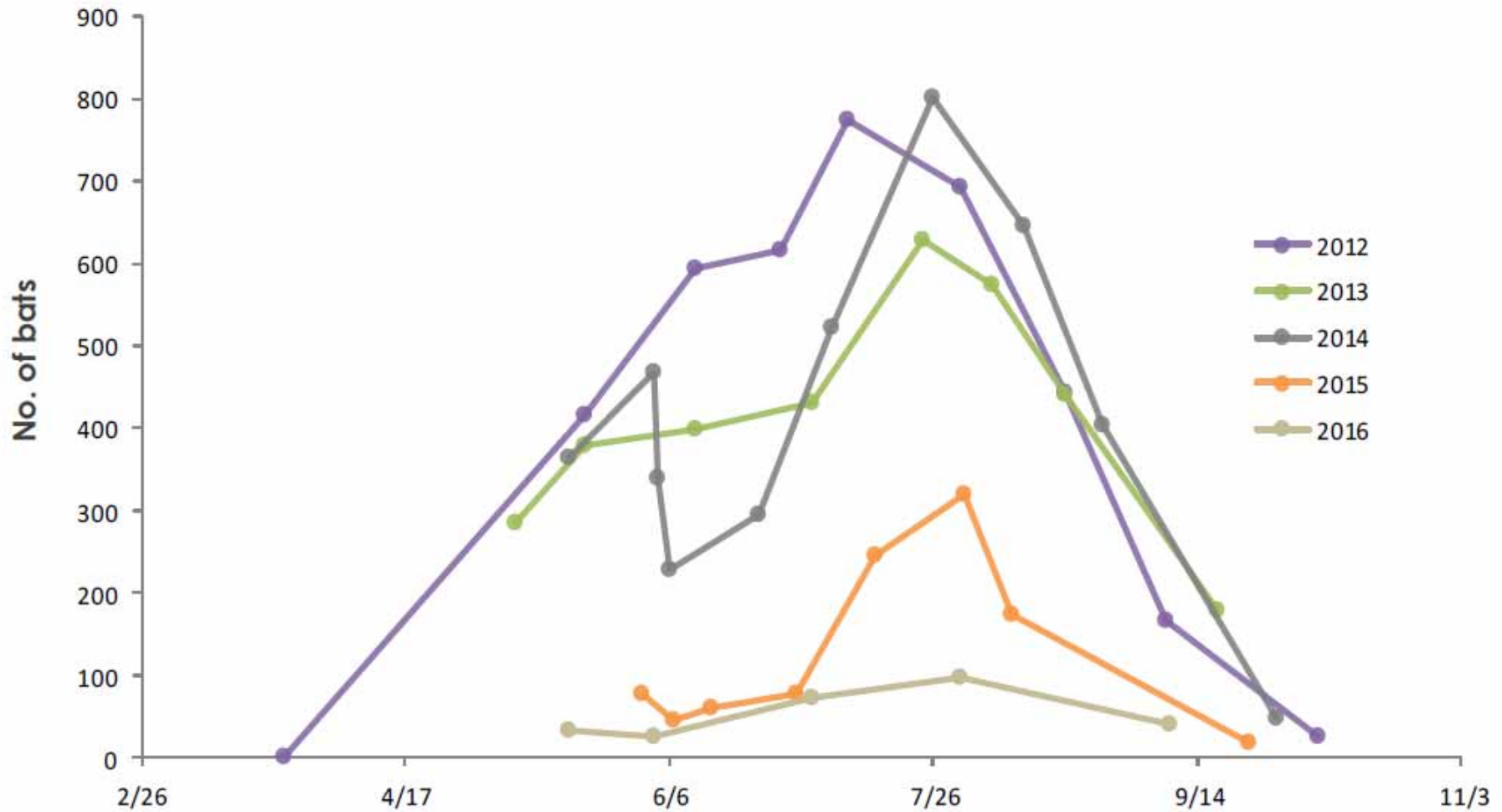
Wisconsin Bat Program



2016 Bat Roost by Colony Size



Barn Roost in Door County



Roost Monitoring Needs

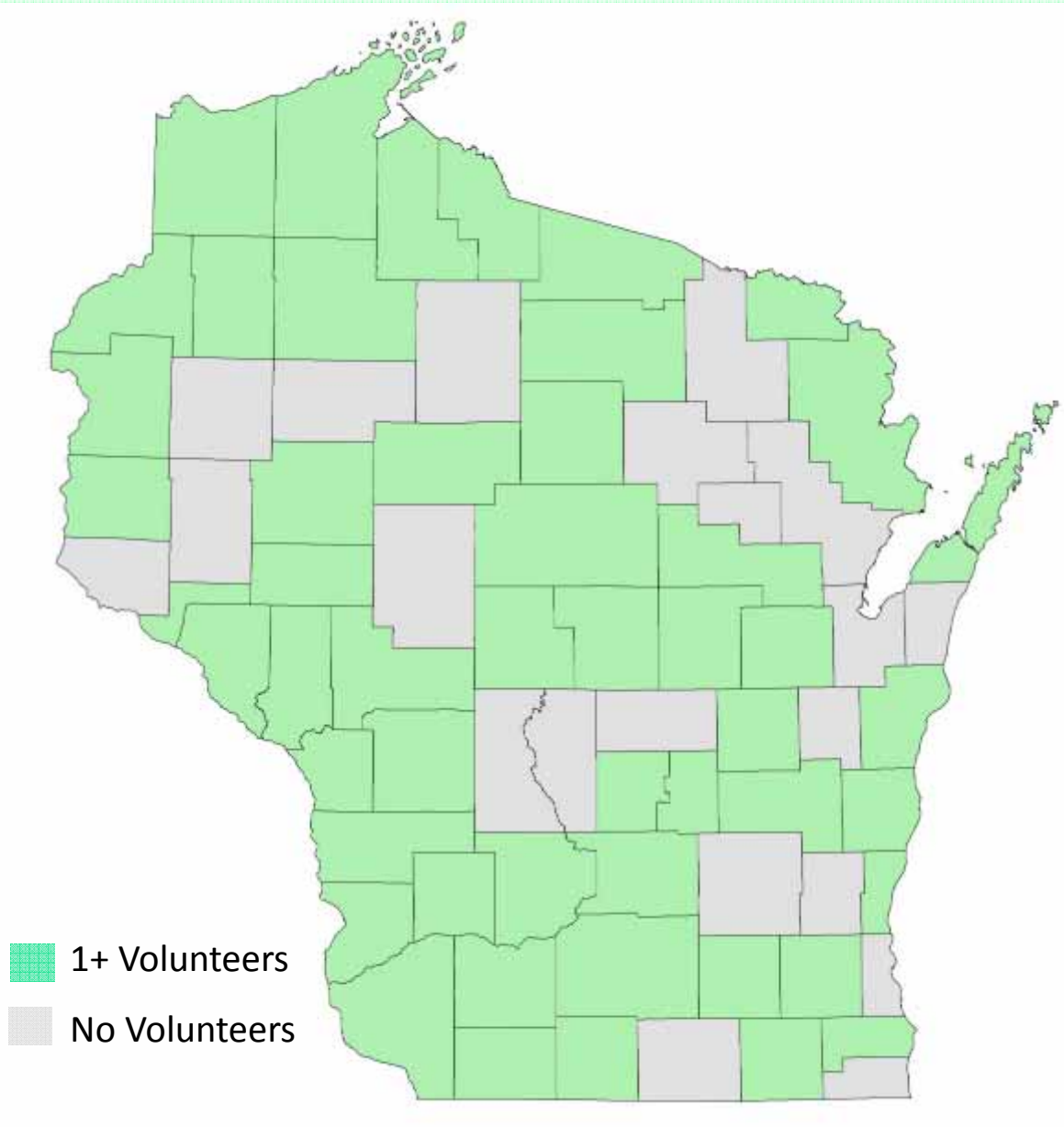


Great Wisconsin

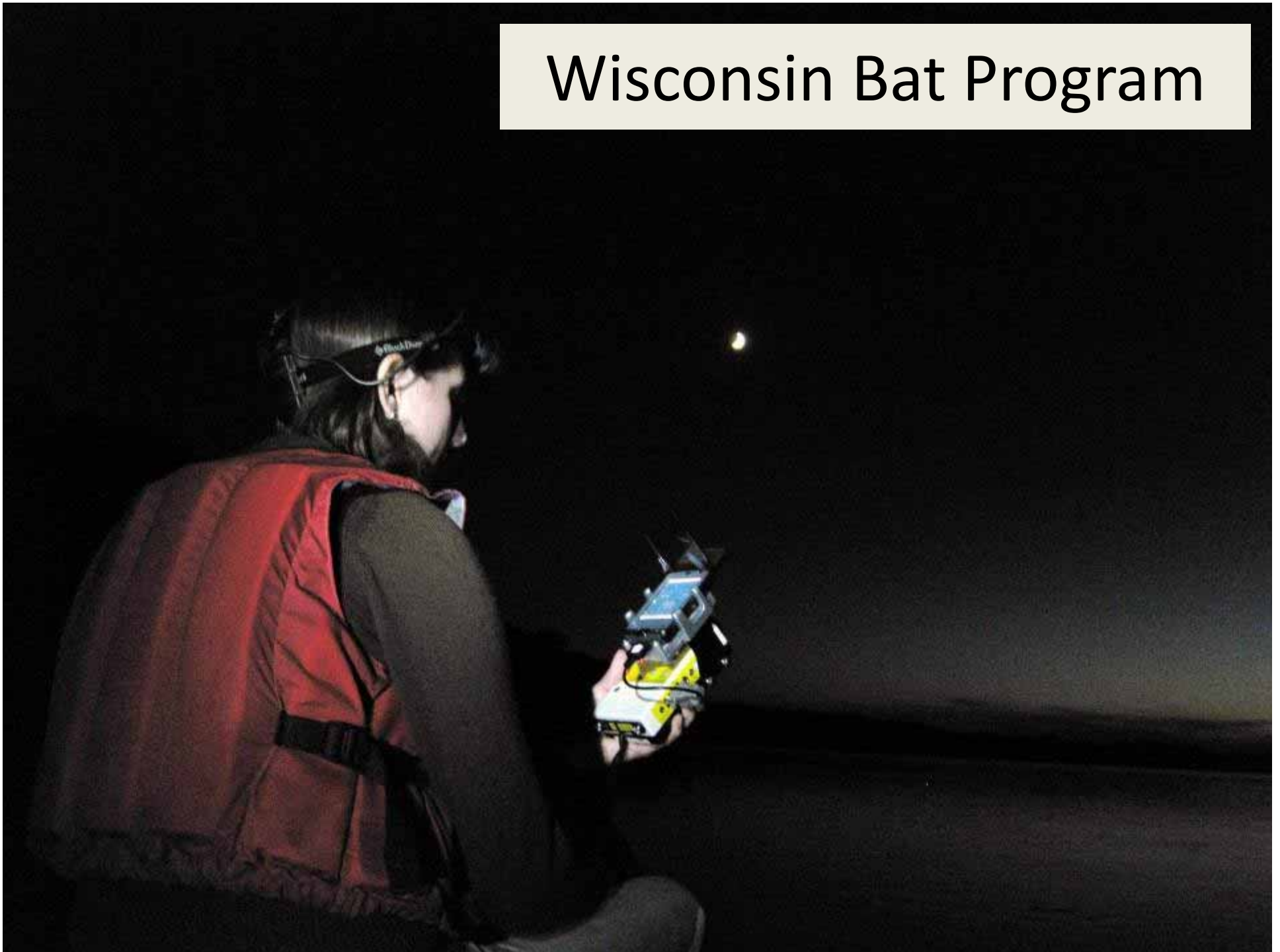
Bat Count

June 2-4

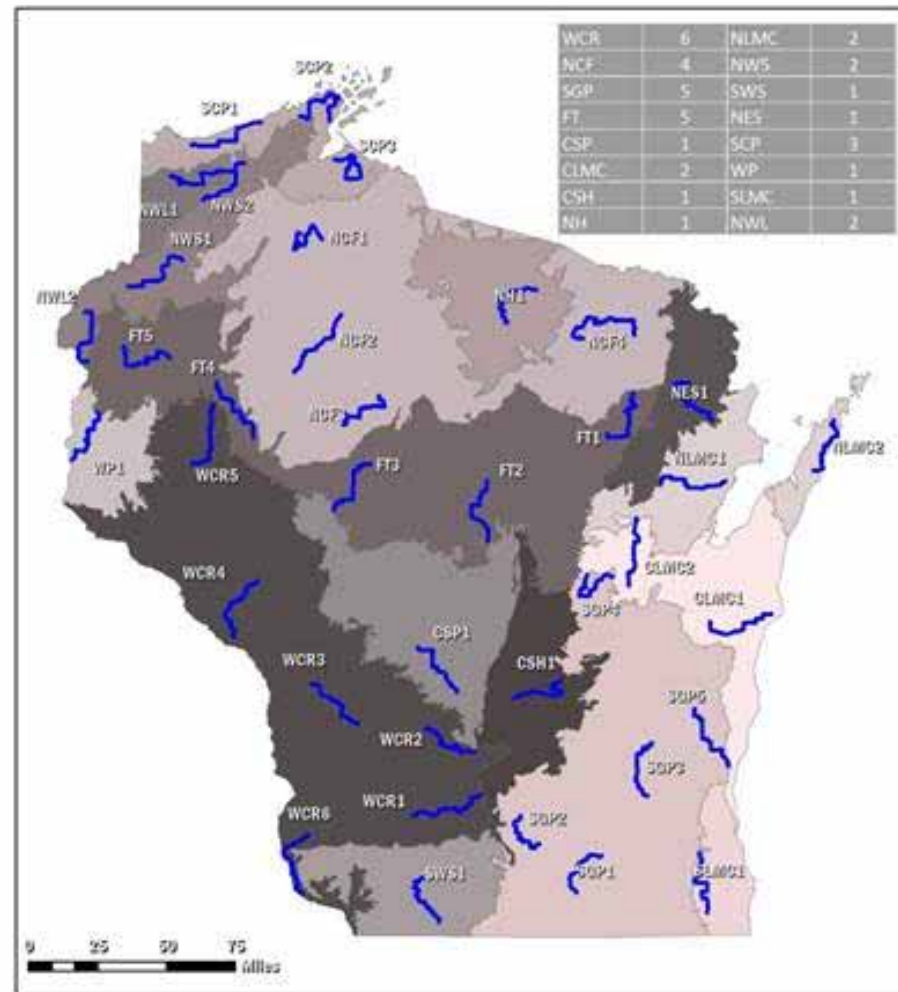
July 28-30



Wisconsin Bat Program



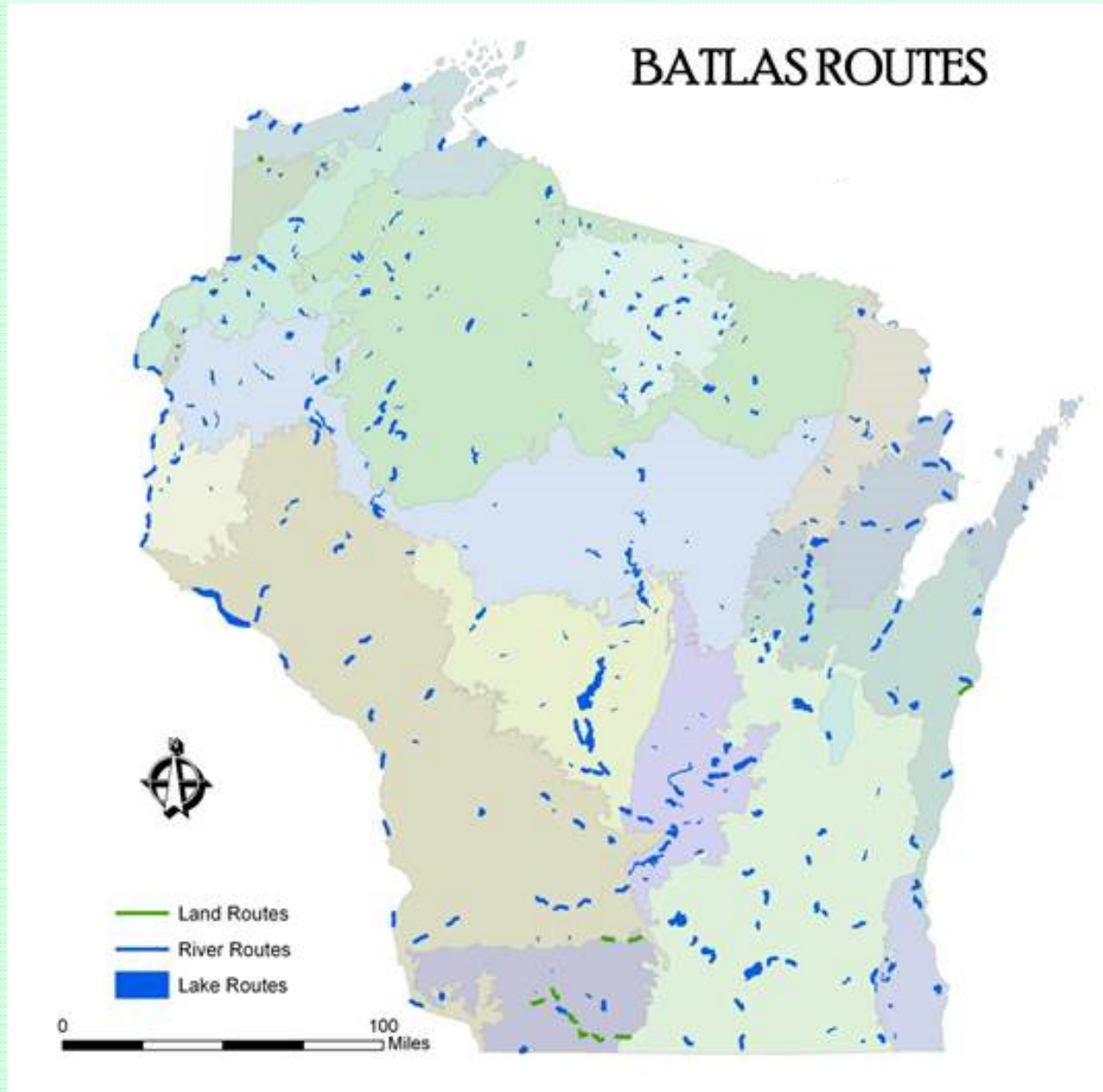
Acoustic Monitoring Needs- Driving



**Wisconsin Bat Monitoring Program
Acoustic Bat Survey Driving Routes**

— Driving Route

Acoustic Monitoring Needs- Water





Wisconsin Breeding Bird Atlas II

Wisconsin Frog & Toad Survey



Two Ways to Participate



Driving Surveys

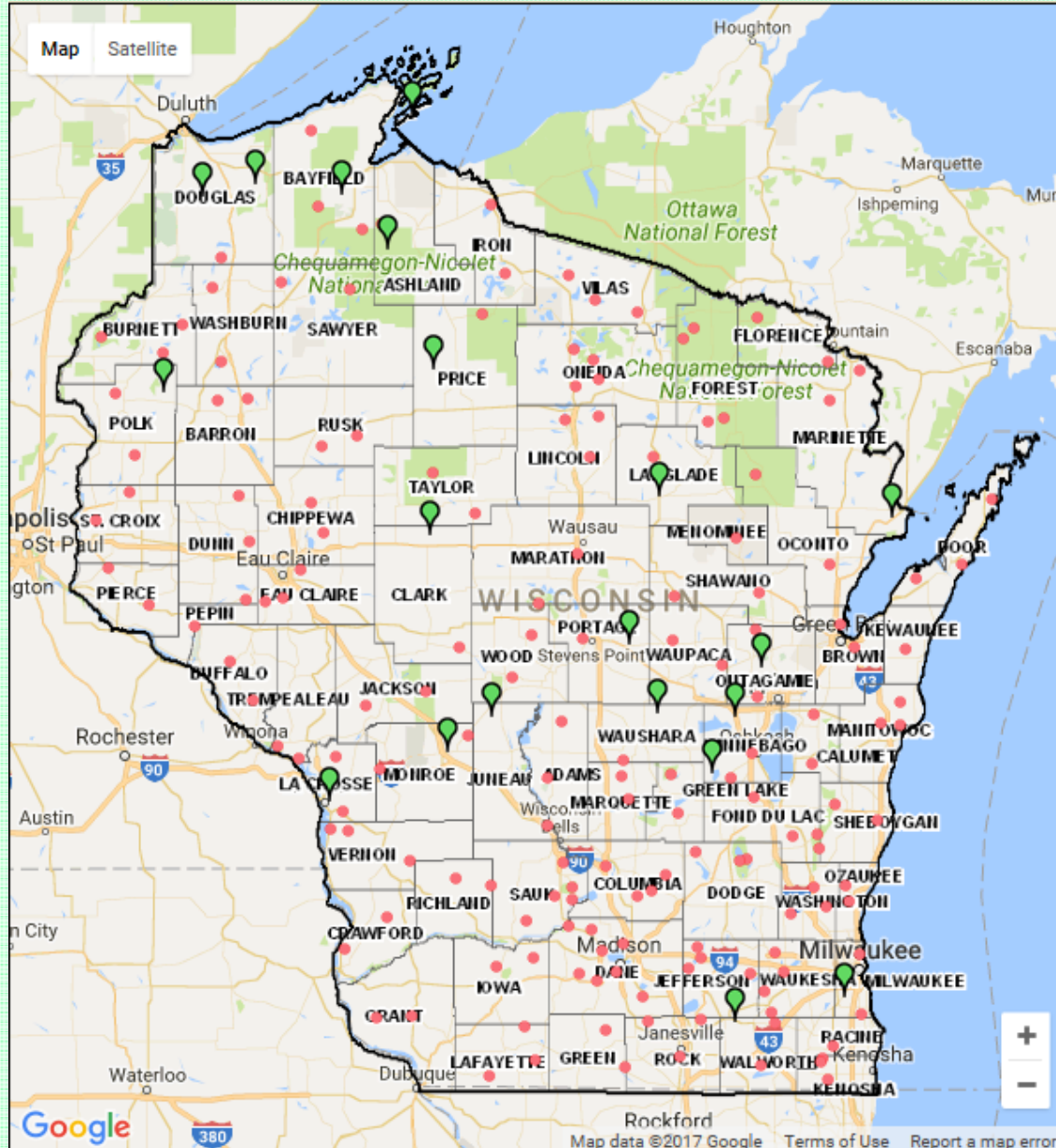
- Pre-determined route
- 10-25 miles
- 10 stops
- 3 times per year



Phenology Surveys

- Single location (chosen by you)
- 1-2 times per week April 1- Aug 1

Volunteers Needed!



Wisconsin Turtle Conservation Program



Results (2012-2016)

- 2,177 Individual Reports
- 267 Nest Site Reports
- 1,036+ Volunteers

Christiann Curley



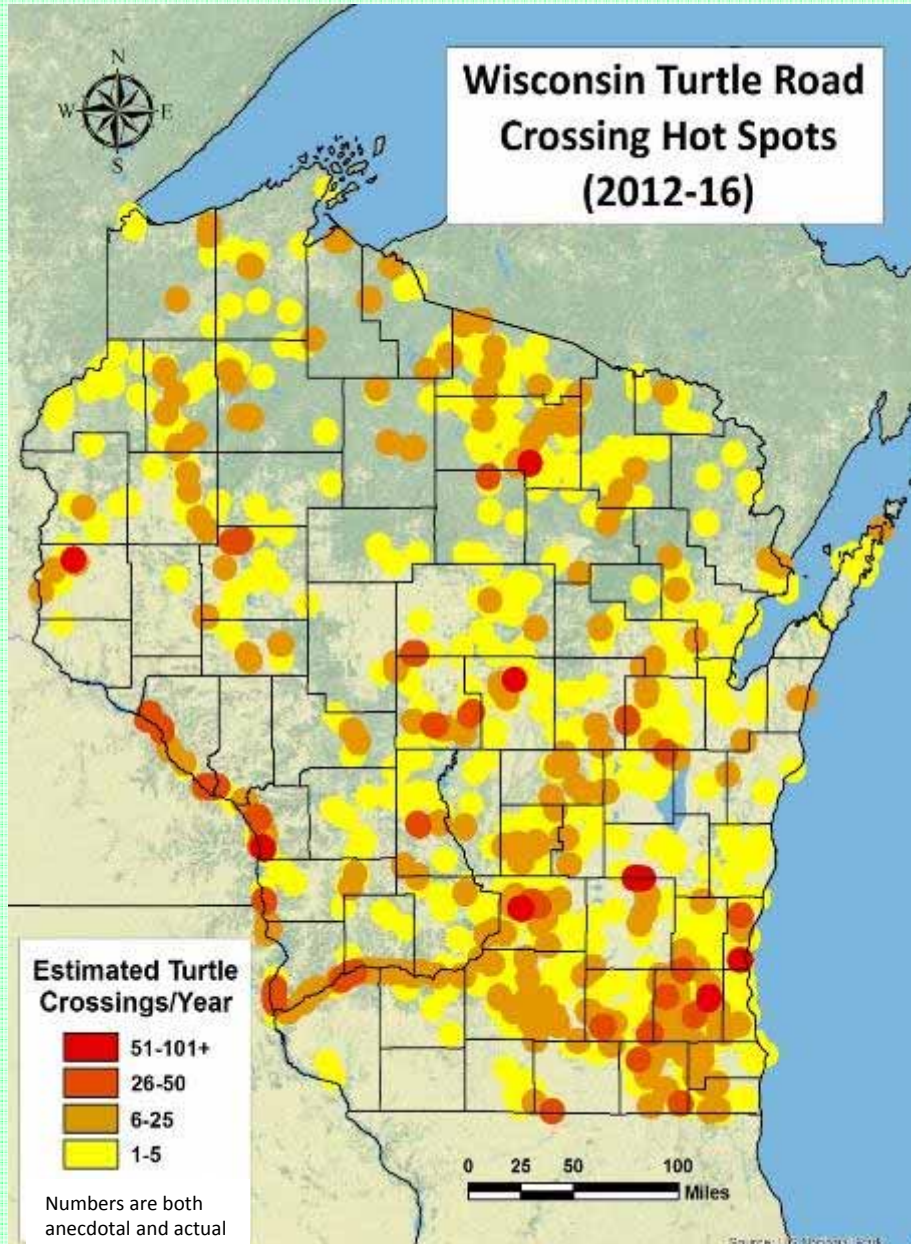
David Grey



Species Reports Vetted

- 67 Blanding's Turtles
- 10 Wood Turtles
- 1 False Map Turtle
- 1 Ornate Box Turtle

Results (2012-2016)

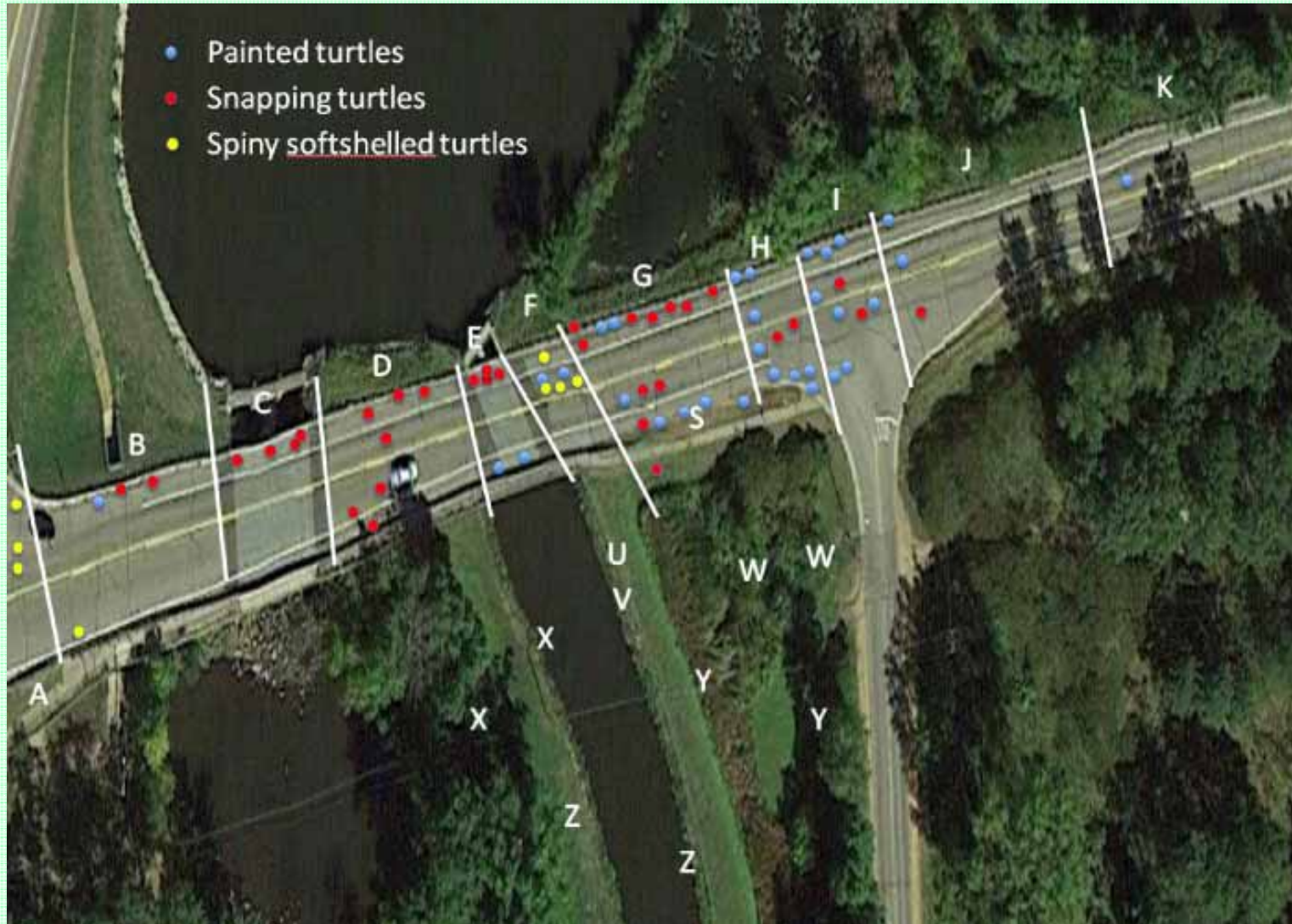


1,021 Crossing Reports

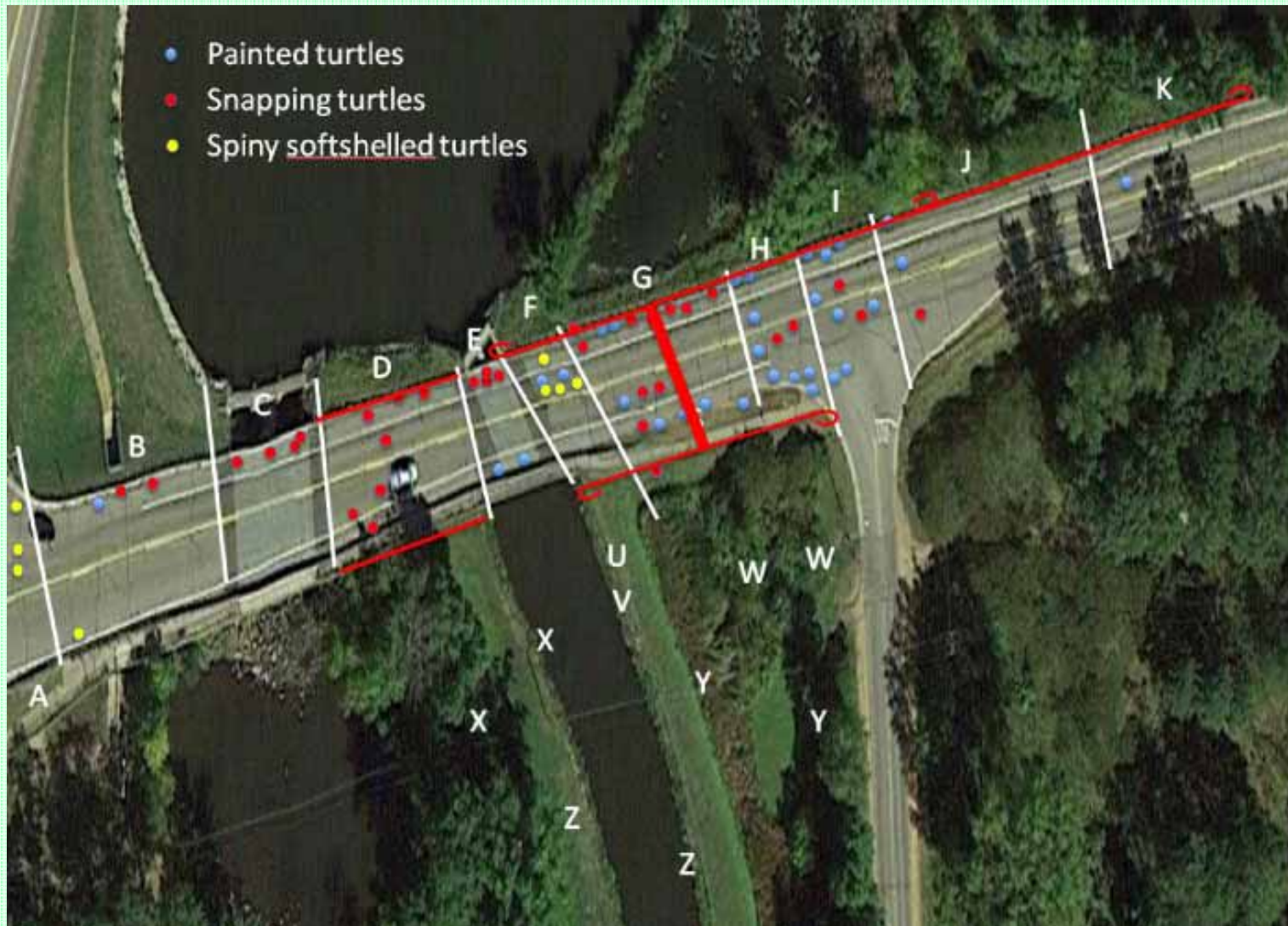
- 450 Road Crossings (Mortality)
- 568 Road Crossings (Non-Mortality)
- 3 Railroad Crossings (Mortality)



2015 Jordan Pond Mortalities



DOT & DNR Turtle Crossing Project



DOT & DNR Turtle Crossing Project



DOT & DNR Turtle Crossing Project



WINGSCAPES®



WILDLIFECAM

29 OCT 2016 01:46 pm

DOT & DNR Turtle Crossing Project



9/25/2016 3:33 PM



Success!



Friends of the Plover River Turtles

Like This Page · September 22 · Edited ·

This big beautiful female exits the north side to reach the pond.

Like Comment Share

2

Top Comments



9/20/2016 1:45 PM



How to Participate

- Find a project
 - Wisconsin Citizen-based Monitoring Network **wiatri.net/cbm**
 - Wisconsin DNR, **dnr.wi.gov**
- Get trained
- Follow protocols
- Take careful notes
- Enter your data





Questions?

Eva.lewandowski@wisconsin.gov



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