## An introduction to

## Wisconsin Breeding Bird Atlas II

Nicholas M. Anich Wisconsin Department of Natural Resources Kim Kreitinger Wisconsin Society for Ornithology Observers with most Field Cards: Noel Cutright - 1st Jim Baughman - 2nd Mike Mossman - 3rd

Observers with Most Field Cards from the same Quad: Thomas Schultz - 1st Karen Etter Hale - 2nd Jeff Baughman - 3rd

Observers with Most Species: Chris Wood - 1st Mike Mossman - 2nd Brian Boldt - 3rd

Observers with Most Records submitted: Chris Wood - 1st Dennis Kuecherer - 2<sup>nd</sup> Ron Hull - 3rd

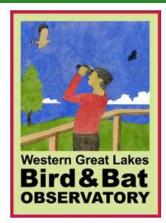
#### WBBA II Steering Committee

- Nicholas Anich (WDNR)
- Owen Boyle (WDNR)
- Ryan Brady (WDNR)
- Florence Edwards-Miller
- Karen Etter Hale (WBCI)

- Kim Kreitinger (WSO)
- Charlie Luthin (WSO)
- William Mueller (WGLBBO)
- Mike Reese
- Carl Schwartz (Bird City)









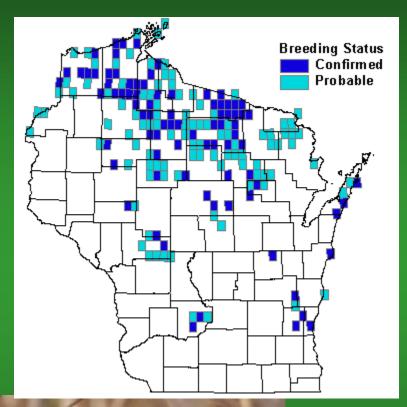
#### WBBA II Planning Team

Stephanie Beilke Aaron Boone **Rick Burkman** Jennifer Callaghan Lisa Gaumnitz Erin Gordon **Kim Grveles** Chuck Hagner Tim Hahn Ashley Hannah **Bettie Harriman Bob** Howe Scott Hull Derek Johnson Carly Lapin Davin Lopez

Sumner Matteson Matt Mendenhall Mike Mossman Tom Prestby **Christine Reel** Amber Roth **Bob Russell** David Sample Amy Staffen **Rich Staffen** Yoyi Steele Tim Vargo Nicholas Walton Ben Zuckerberg

Also thanks to: Noel Cutright Julie Bleser Mike Diss-Torrance Paul Jakoubek Jason Riddle Jill Rosenberg Team eBird

#### What is a bird atlas?



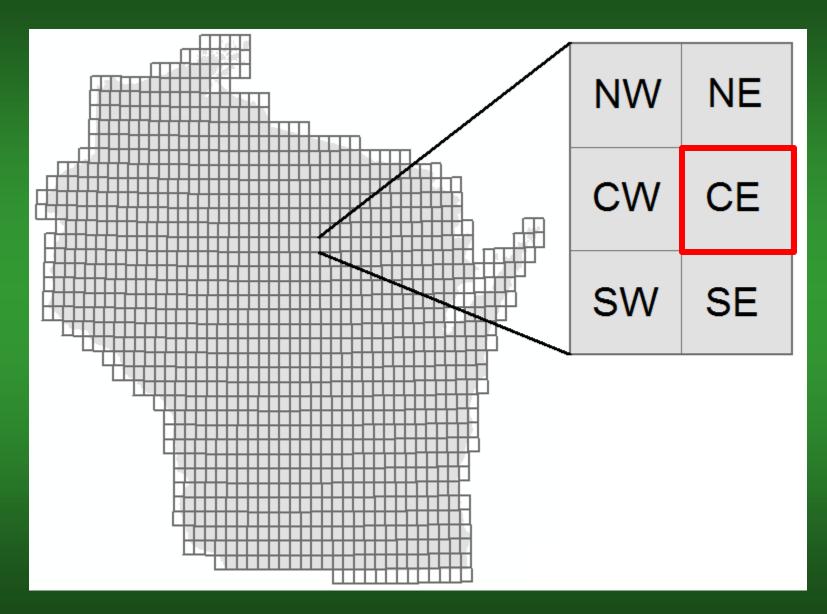
• Document bird species breeding across entire region

 Volunteers head into atlas blocks and report evidence of breeding

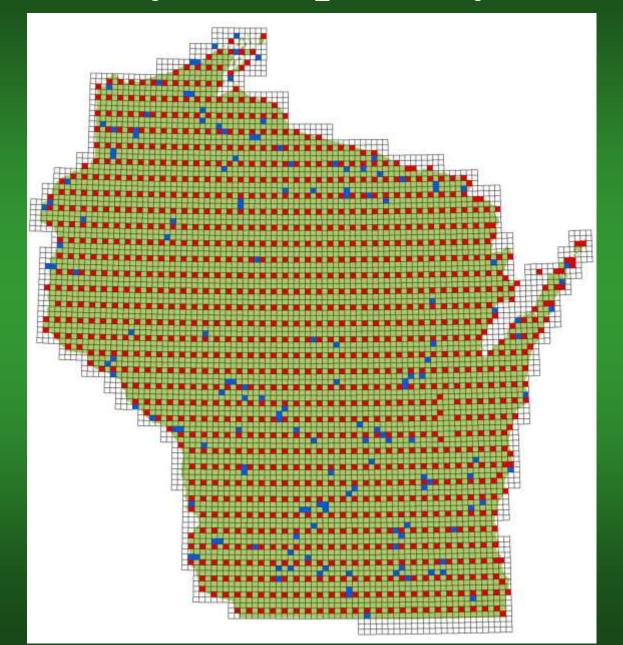
• Grid system



#### Atlas block system



#### Priority and specialty blocks



# How does atlasing differ from general birding?





- Moving more slowly, observing behaviors
- Assigning behaviors to breeding codes (e.g., S-Singing male, P- Pair, FY - Feeding Young)
- Classed as Possible, Probable, Confirmed

### Major project objectives



- Replicate methods of the first atlas to measure changes in bird populations
- Obtain information to guide management, esp. species of concern
- Produce a robust dataset that allows for scientific analyses and lays groundwork for WBBA III
- Engage the public in bird conservation

#### Uses of atlas data

- Conservation planning aided by:
  - Inventory data on properties
  - Locations and habitat data for species of conservation interest
  - Estimates of population size, density maps
  - Information on range shifts, changing abundances since WBBA I



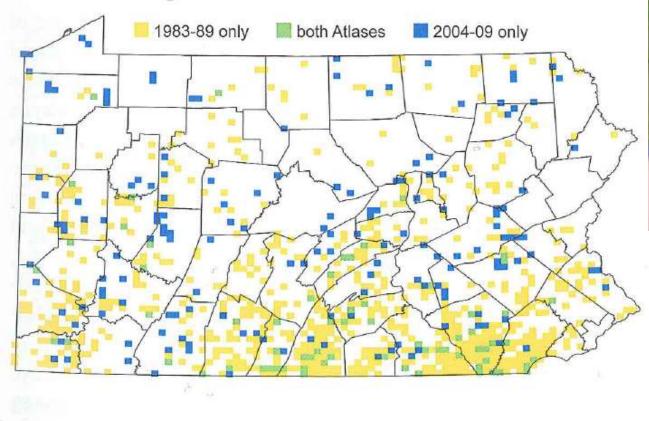
#### Larger benefits of an atlas effort

- Mobilizes a huge group of citizen scientists
- Rich dataset for analysis
- Collects information on a broad scale, systematically
- Tracking bird populations can provide an important indicator of habitat quality or change



## Results from second atlases: population decline

#### **Distribution Change**





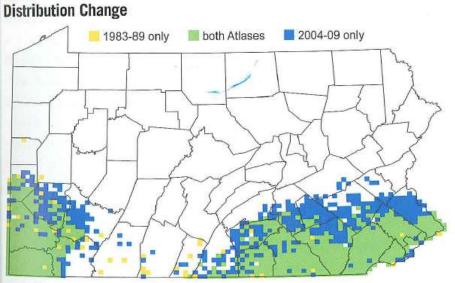
Wilson, et al. 2012. Second Atlas of Breeding Birds in Pennsylvania.

### Results from second atlases: population increase

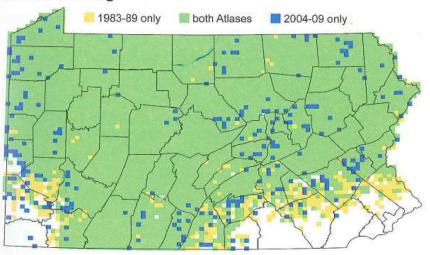


McGowan and Corwin. 2008. The Second Atlas of Breeding Birds in New York State.

### Results from second atlases: range shifts



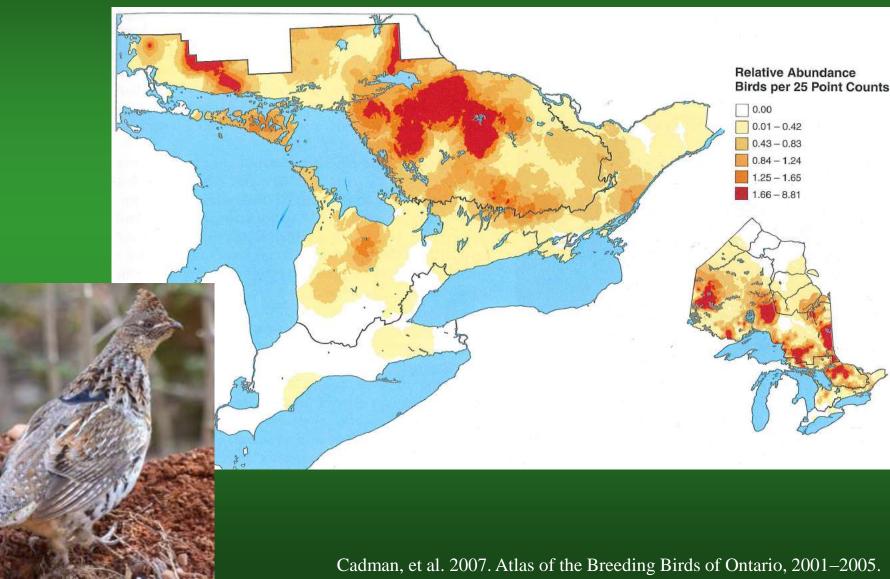
#### **Distribution Change**



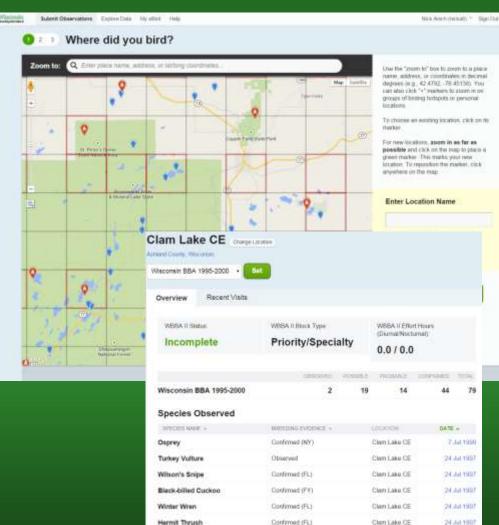


Wilson, et al. 2012. Second Atlas of Breeding Birds in Pennsylvania.

#### Results from second atlases: abundance estimation



#### Submit observations using custom eBird portal



Confirmed (FL)

Confirmed (FL)

Confirmed (FL)

Clam Lake CS

Clam Lake CE

Clam Lake CS

24 Jul 1997

24 Jul 1997

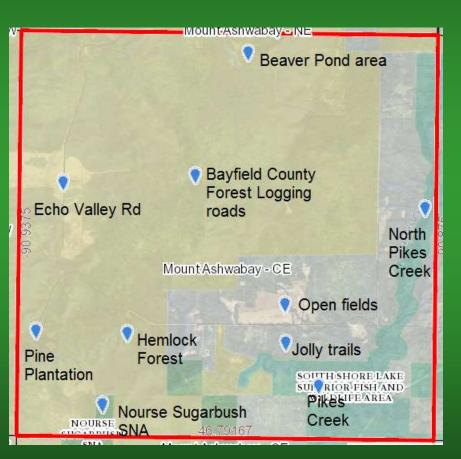
24 34 9900

Mourning Warbler

Common Yellowthroat

- Report full checklists from every visit
- Cover sublocations within a block
- Observations from multiple points within a block get rounded up into block summary

## Experienced birders should sign up as the principal atlaser for a block



- Visit block throughout year
- Visit all habitats
- Complete surveying within a block (~20 hours)
- Results in a good picture of birds breeding in a block

# Opportunities for novice birders to participate



- Atlasing field trips with WSO and NRF
- Atlas mentor program
  - field skills
  - data entry
- Connect with local bird clubs
- Lots of resources

#### Resources for atlasers



 Website: <u>wsobirds.org/atlas</u>

• Online discussion forum

 County Coordinator for every county

Home / Atlas

**OIN THE FLOCK!** 

TRAINING EVENTS

WBBA II FORUMS

KICKOFF MEETING

SPONSOR-A-SPECIES

Online forums to discuss the Atlas

#### About the Atlas

#### Conserve Wisconsin birds by joining our bird survey

Birds are an essential part of Wisconsin's culture and ecology. Yet many species face grave threats from habitat loss, climate change, and other human-caused pressures and nearly one-third are imperiled or will be without intervention. To conserve them, we need a current understanding of birds that rely on Wisconsin to breed and



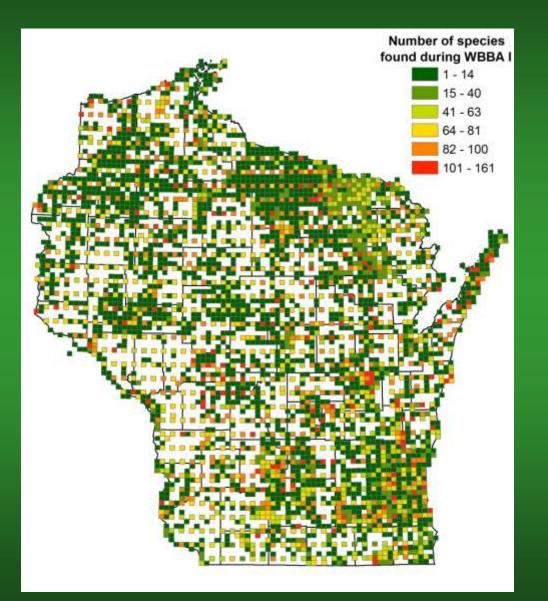
raise their young, Wisconsin Breeding Bird Atlas II mobilizes volunteers across the state to accomplish this — we need your help to document which birds are breeding in your areal

#### What is the Atlas?

The Wisconsin Breeding Bird Atias II is a comprehensive field survey that documents the distribution and abundance of birds breeding in an area. The information will allow us to see changes in bird populations since the last survey and to measure future changes. These insights help us identify the conservation needs of breeding birds and try to meet those needs.

Volunteering is easy and fun!

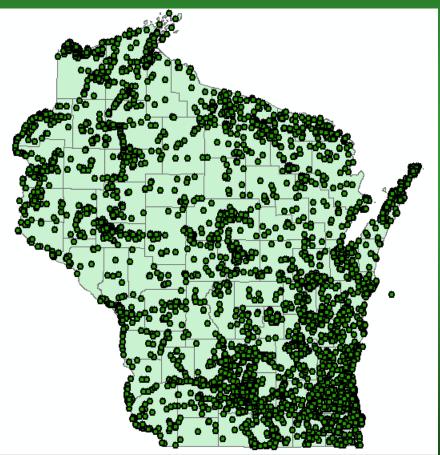
#### A collaborative effort



 WBBA I mobilized >1,600 observers to collect >170,000 breeding records

#### A collaborative effort

## 964 people submitted 224,000 observations!



- WBBA I mobilized >1,600 observers to collect >170,000 breeding records
- From June–August 2014 How many eBird records?
- Every observation is a piece of the puzzle