

Continuing Waterfowl and Wetland Research in Wisconsin



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About Me, briefly



2010



Minnedosa, Manitoba



About Me, briefly

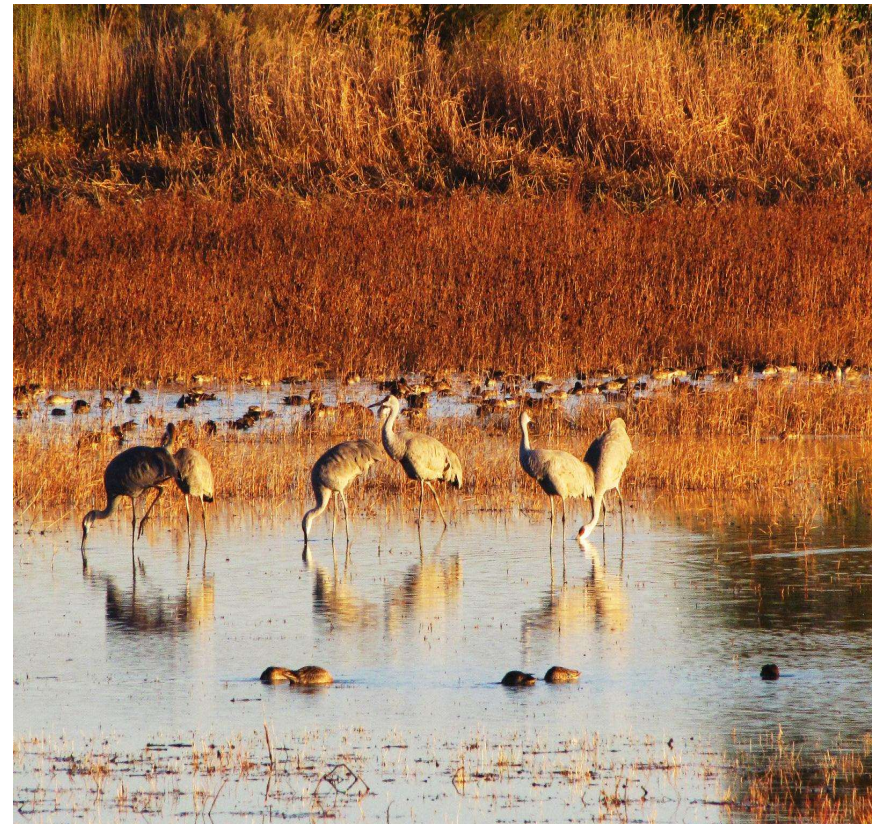


2010



LOUISIANA STATE UNIVERSITY

2013



Bosque del Apache NWR
San Antonio, New Mexico

About Me, briefly



2010



2013



2018



Pool 19
Keokuk, Iowa



Missouri State Convention
Ducks Unlimited



Jilin, China

Welcome to Wisconsin...





Overview

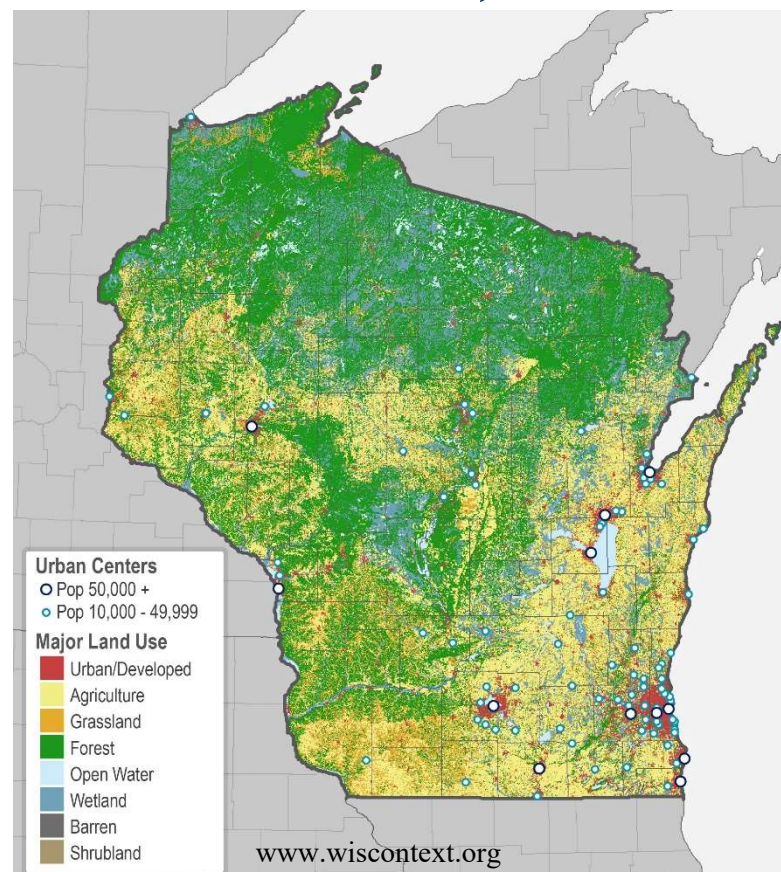
1. Challenges to waterfowl management in Wisconsin

2. Identifying knowledge gaps and prioritizing research

Challenges to Waterfowl and Migratory Game Bird Management

A 30,000 ft. perspective...

- Landscapes / habitats in Wisconsin are non-static; under anthropogenic pressure
 - Wetland loss and drainage
 - Habitat fragmentation
 - Invasive species (98 identified plant species; 33 wetland predominate)
 - Urban development



Challenges to Waterfowl and Migratory Game Bird Management

A 30,000 ft. perspective...

- Climate currently is undergoing change and will likely continue to do so

Rising air temperatures /
reduced snow cover

- Northward shift in overwintering?
- Delayed migration phenology?
- Influence on winter and spring habitat energetics?

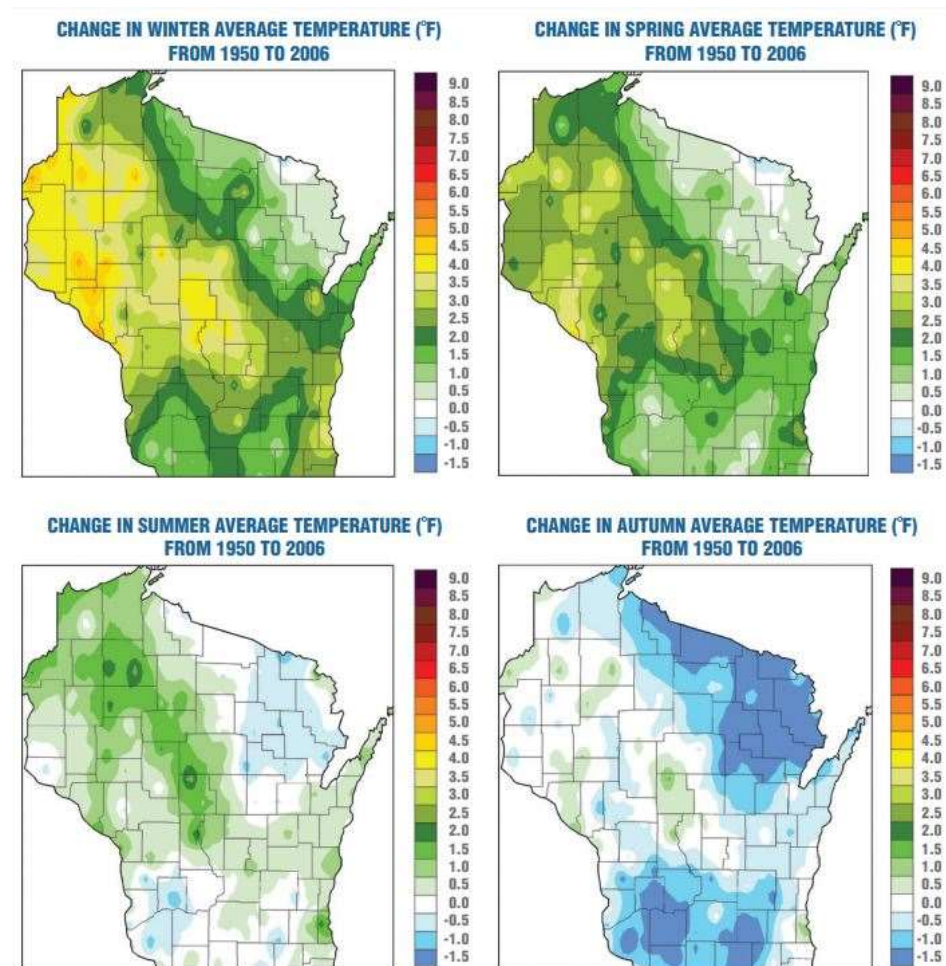


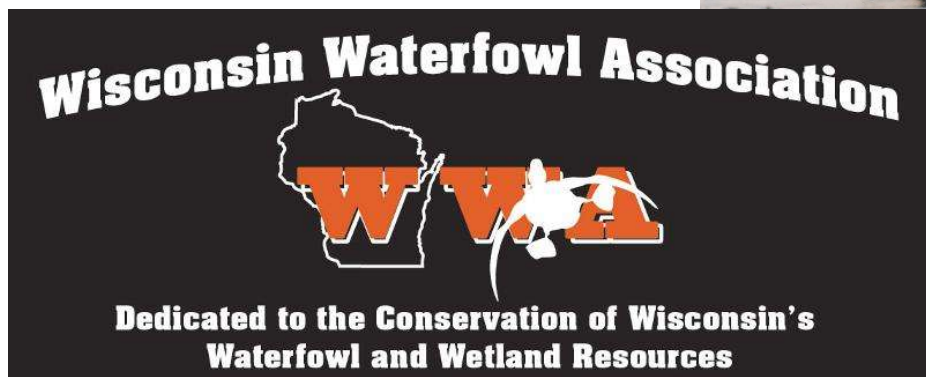
Figure 5. Wisconsin winters have warmed more than any other season in recent decades, especially in the northwestern part of the state, where average temperatures have increased by as much as 4.5°F. Fall has seen a slight cooling trend.

Nelson Institute for Environmental Studies, University of Wisconsin-Madison and the Wisconsin Department of Natural Resources. 2011.

Challenges to Waterfowl and Migratory Game Bird Management

A 30,000 ft. perspective...

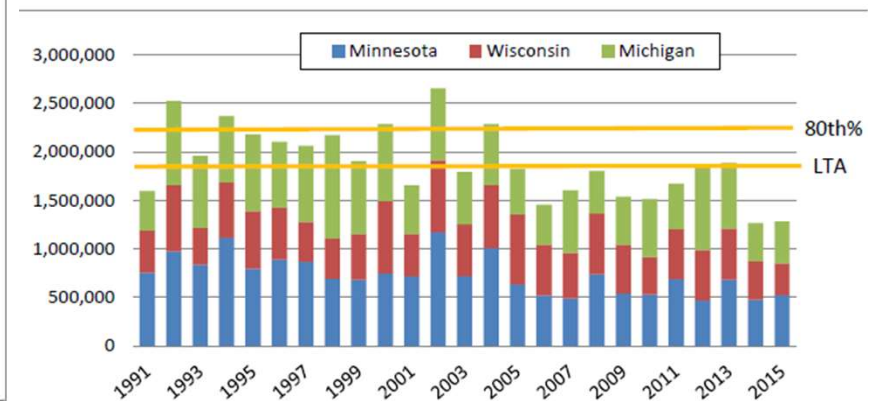
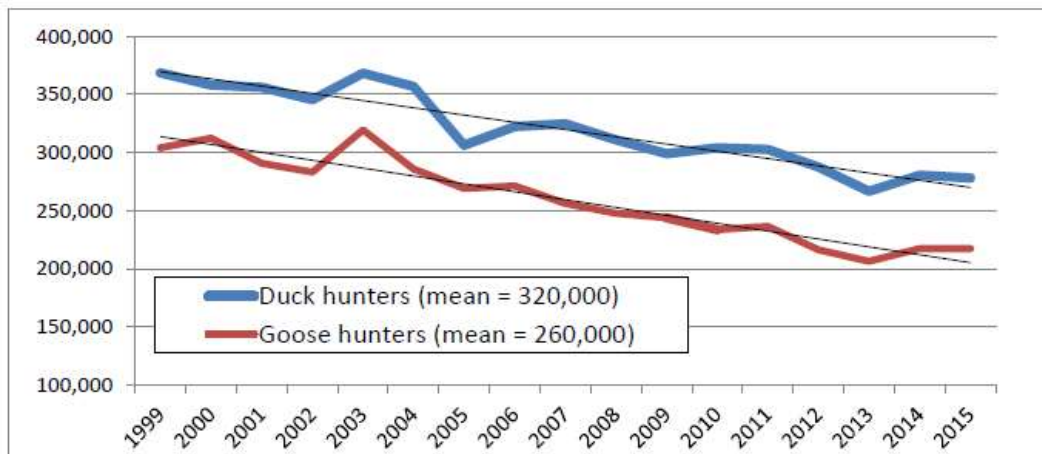
- Strong state culture around waterfowl and game bird hunting



Challenges to Waterfowl and Migratory Game Bird Management

A 30,000 ft. perspective...

- Strong state culture around waterfowl and game bird hunting
 - Hunter recruitment
 - Urban sprawl
 - Non-hunting background
 - Publically available hunting access



Big picture questions:

- How are populations responding to complex pressures of change?
- How do we manage waterfowl under dynamic landscape, climate, harvest, and cultural/policy change?
- How well are our conservation plans / efforts meeting defined objectives?
- How well are we engaging the public?

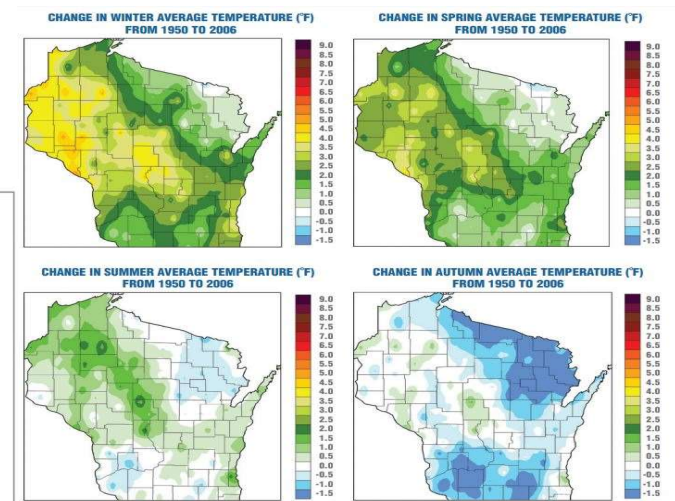
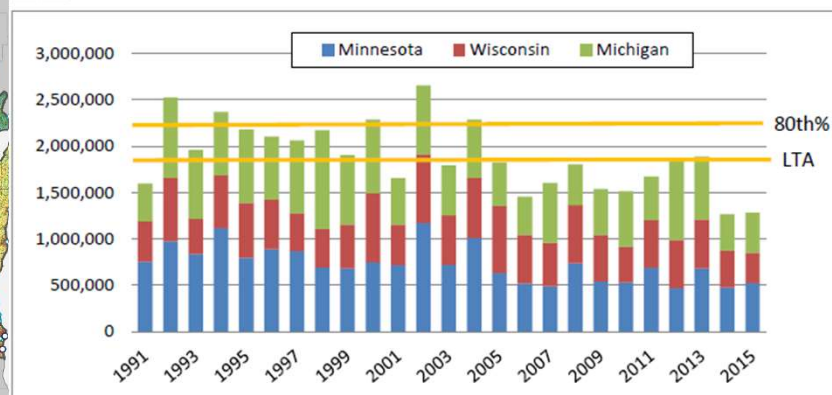
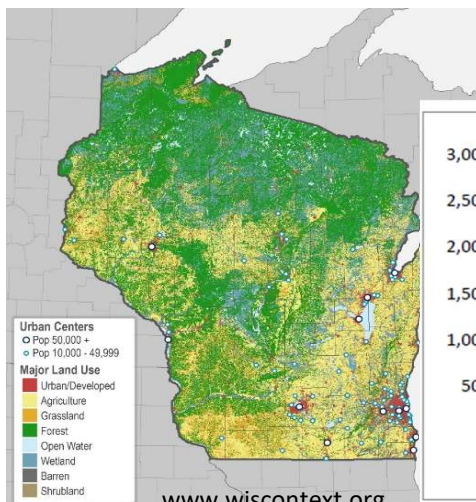


Figure 5. Wisconsin winters have warmed more than any other season in recent decades, especially in the northwestern part of the state, where average temperatures have increased by as much as 4.5°F. Fall has seen a slight cooling. Nelson Institute for Environmental Studies, University of Wisconsin-Madison and the Wisconsin Department of Natural Resources. 2011.

Research Priorities



- Assess demographic variation in focal species to changing habitat characteristics (survival, fecundity, growth, abundance)



Overview

1. Challenges to waterfowl management in Wisconsin

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Research Priorities



- How does habitat quality and harvest regulations limit population growth of wood ducks in Wisconsin?
- Is harvest pressure of mallards and wood ducks focused towards those that are derived locally or those originating out of state?
- What is the relationship between harvest and survival in local mallards and wood ducks?

Research Priorities



- What are the effects of habitat type and landscape composition on nest density and recruitment in prairie nesting ducks?



Research Priorities



- What are the limiting factors that drive population change in ring-necks?
- What impact does our management have on nest success and brood survival?
- What are the effects of increasing human development in key nesting grounds on productivity?

Research Priorities



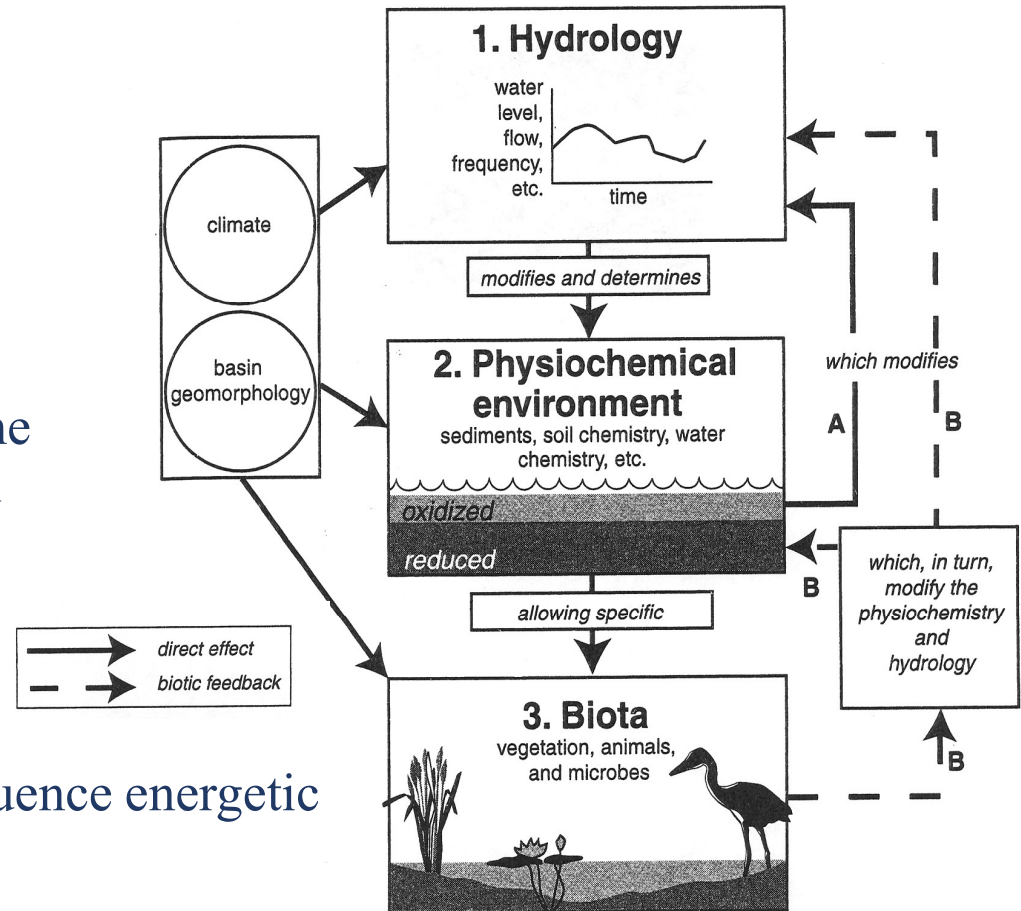
- What are the seasonal distributions, abundance, habitat use, and harvest susceptibility of diving ducks and sea ducks?
- What is the relationship between harvest rates and survival rates in long-tailed ducks?

Research Priorities



- How should wetlands be managed throughout the state to provide for the temporal needs of diverse waterfowl and waterbirds?

- How does current management influence energetic availability during fall and spring?



Questions?
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