



## Northwest Minnesota Sharp-tailed Grouse and Prairie Chicken Refresher

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# MN Sharp-tailed Grouse Populations Trend



Figure 1. Survey regions for **sharp-tailed grouse** in Minnesota. Northwest (NW) and East Central (EC) survey regions are depicted relative to county boundaries (dashed lines) and influenced by Ecological Classification System Subsection boundaries.

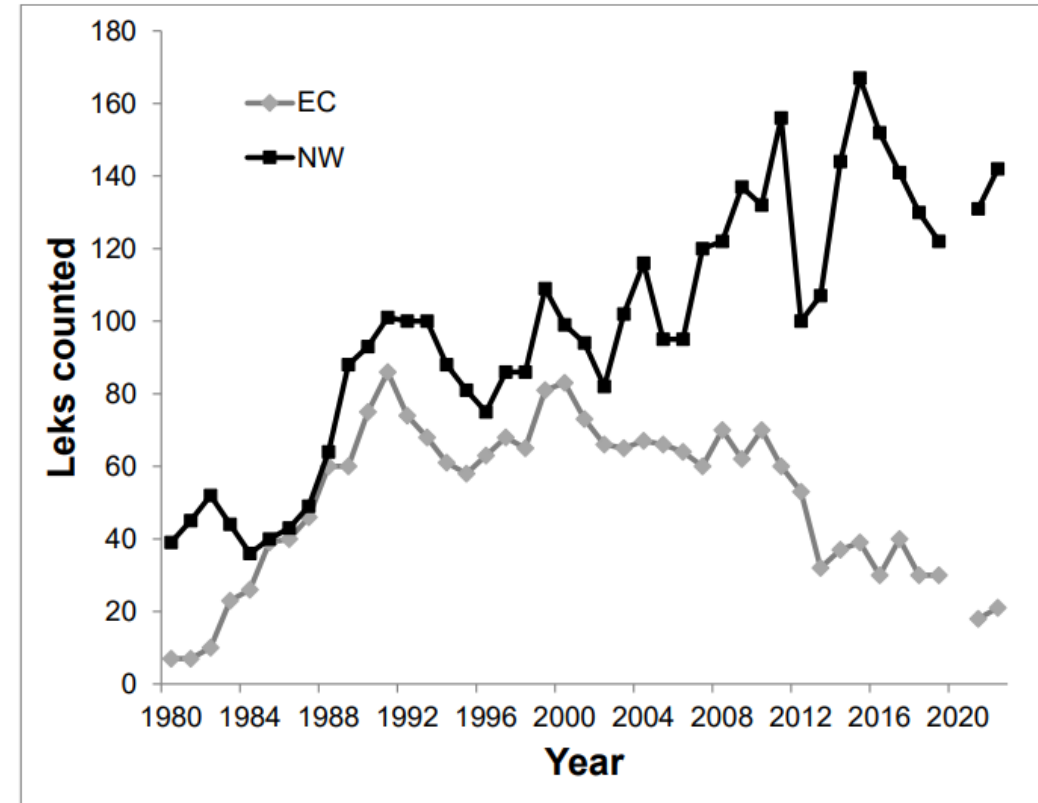


Figure 3. The number of **sharp-tailed grouse** leks with 2 or more birds counted in spring lek surveys in the Northwest (NW) and East Central (EC) survey regions of Minnesota during 1980 – 2022. Survey data were not collected in 2020 due to the Governor's Stay at Home Order during the COVID-19 pandemic.

# MN Prairie Chicken Population Trend

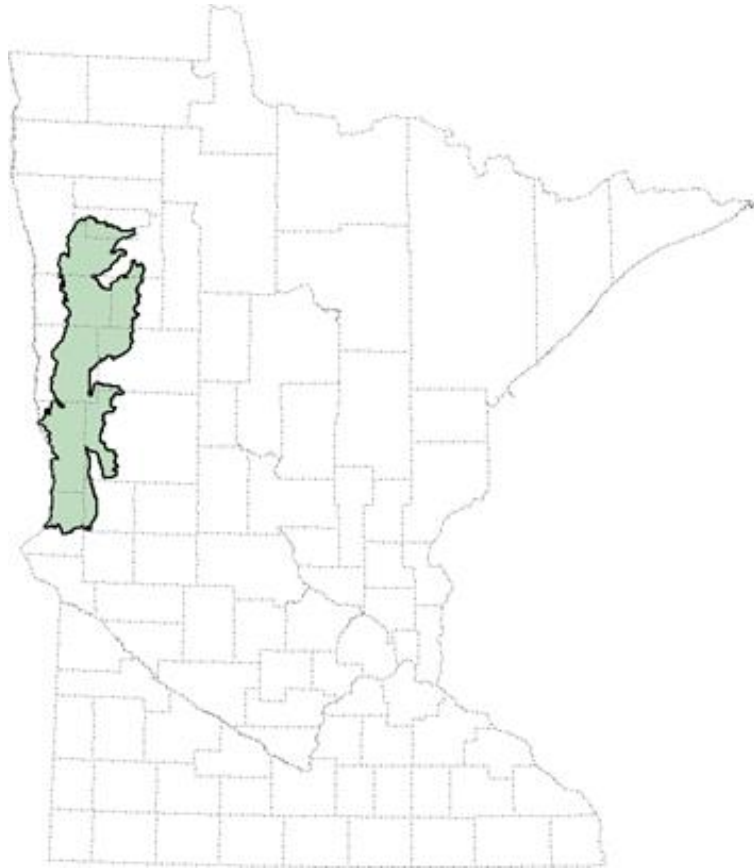


Figure 1. Primary greater prairie-chicken range in Minnesota (shaded area) relative to county boundaries. The range boundary was based on Ecological Classification System Land Type Associations and excludes some areas known to be occupied by prairie-chickens.

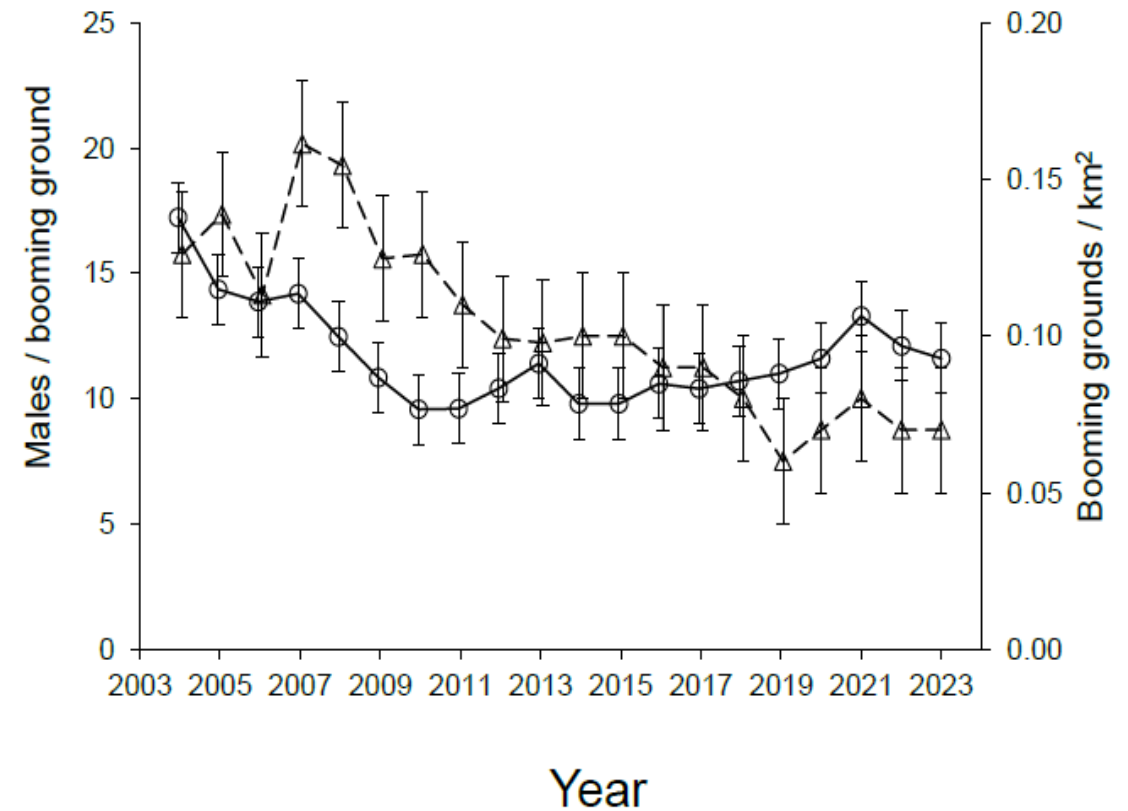


Figure 3. Mean prairie-chicken males/booming ground (circles connected by solid line) and booming grounds/km² (triangles connected by dashed line) in survey blocks in Minnesota with 95% confidence intervals.



# NW MN Open Landscape Habitat Availability

- MN DNR manages approximately 865,000 acres of Wildlife Management Areas in NW MN—including 268,000 acres of open landscape (210,000 brushland, 58,000 grassland)
- Most open landscape potential remains on private property--CRP enrollments, pastures, hay land, etc.
- Prairie grouse population data indicates a strong parallel correlation with increases/decreases in CRP landcover over the past 30 years

# NW MN Open Landscape Management

- Prescribed burning – large annual variation, but averages 10,000-15,000 acres/year
- Mechanical regeneration (shearing, mowing) – average 2,000-3,000 acres/year
- All Area wildlife staff feel at least doubling annual acre accomplishments is necessary to keep up with just the priority sites
- Properly managing all open landscapes in NW MN for the benefit of prairie grouse would require fire or mowing/shearing at least 30,000 acres annually.

- Minnesota Sharp-tailed Grouse Society
- Minnesota Prairie Chicken Society
- The Nature Conservancy
- American Bird Conservancy
- Rocky Mountain Elk Foundation
- Minnesota Deer Hunters Association
- Pheasants Forever

# Funding opportunities

- Direct Funding to MN DNR
  - Outdoor Heritage Fund (OHF) – Area projects + Roving Crew
  - Beltrami Island Conservation Funds (Red Lake WMA only)
  - Game and Fish Fund appropriations (hunting and fishing license revenue) – very limited
- Partnership Funding
  - Conservation Partner Legacy (CPL) – MDHA
  - Rocky Mountain Elk Foundation Project Advisory Committee (PAC) Grants
  - Minnesota Deer Hunters Association

- Funding
  - MN DNR has relied heavily on Outdoor Heritage Funds for past decade due to lack of Game and Fish funds.
  - MN DNR had self imposed restriction on requesting OHF forest/brushland habitat projects until FY23. This will fortunately result in new opportunities going forward
- Contractor availability
- Area office staffing levels have only recently improved
- Large land holdings complicate effectively managing open landscape habitats
- Most open landscape opportunities remain on private land



- Continued and new Partnerships
- Research – Best Management Practices, State Management Plans
- DNR Commissioner's Office no longer restricting OHF forest/brushland project proposals
- Collaborating with MN Department of Agriculture to promote sustainable ag practices that are more prairie grouse friendly
- Strategically prioritizing open landscape habitat projects to more efficiently utilize resources and make the largest positive impact to prairie grouse

# Thank You!

**Kyle Arola**

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# Status of STG in East Central Minnesota

Chris Balzer and Derek Frost

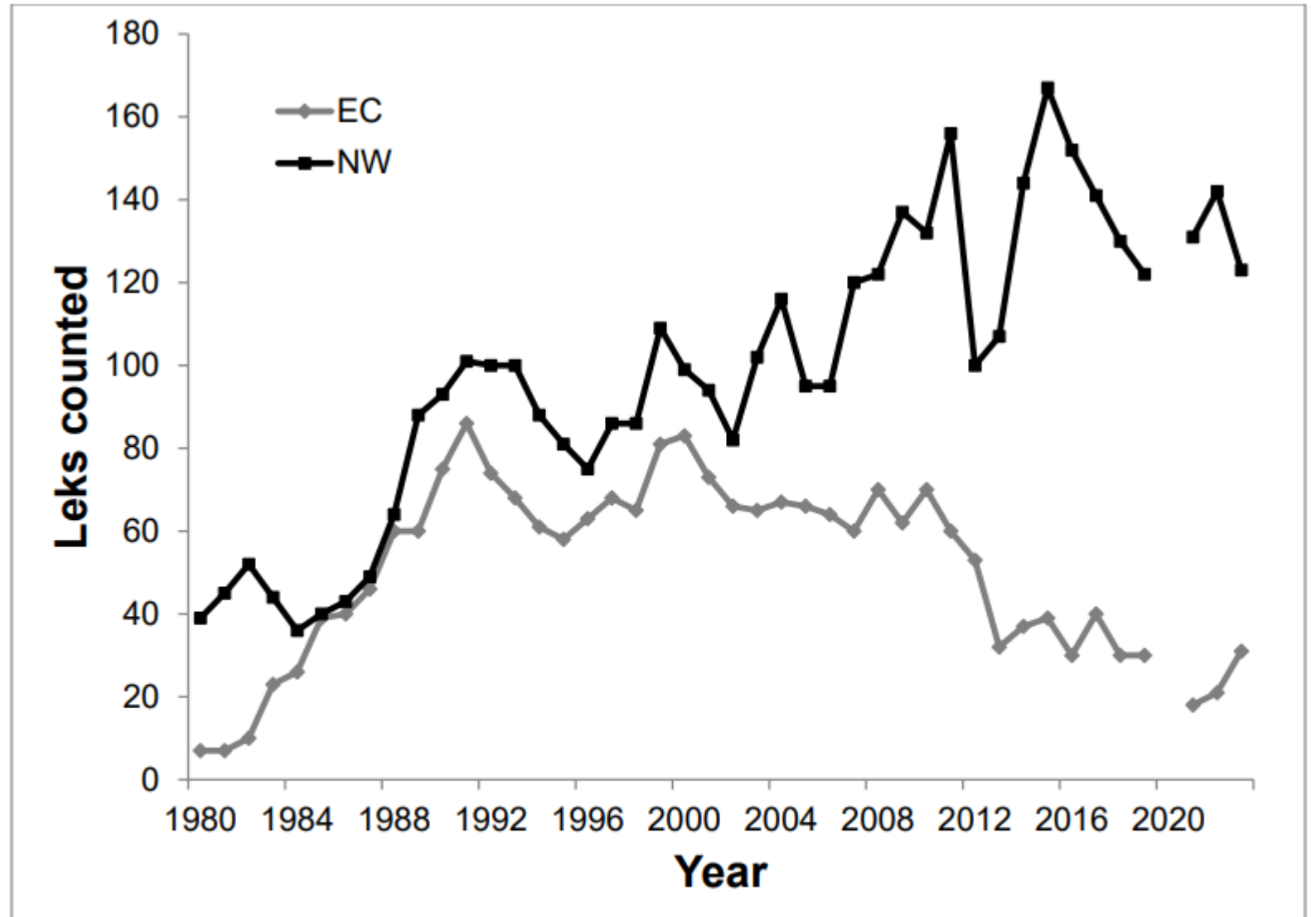
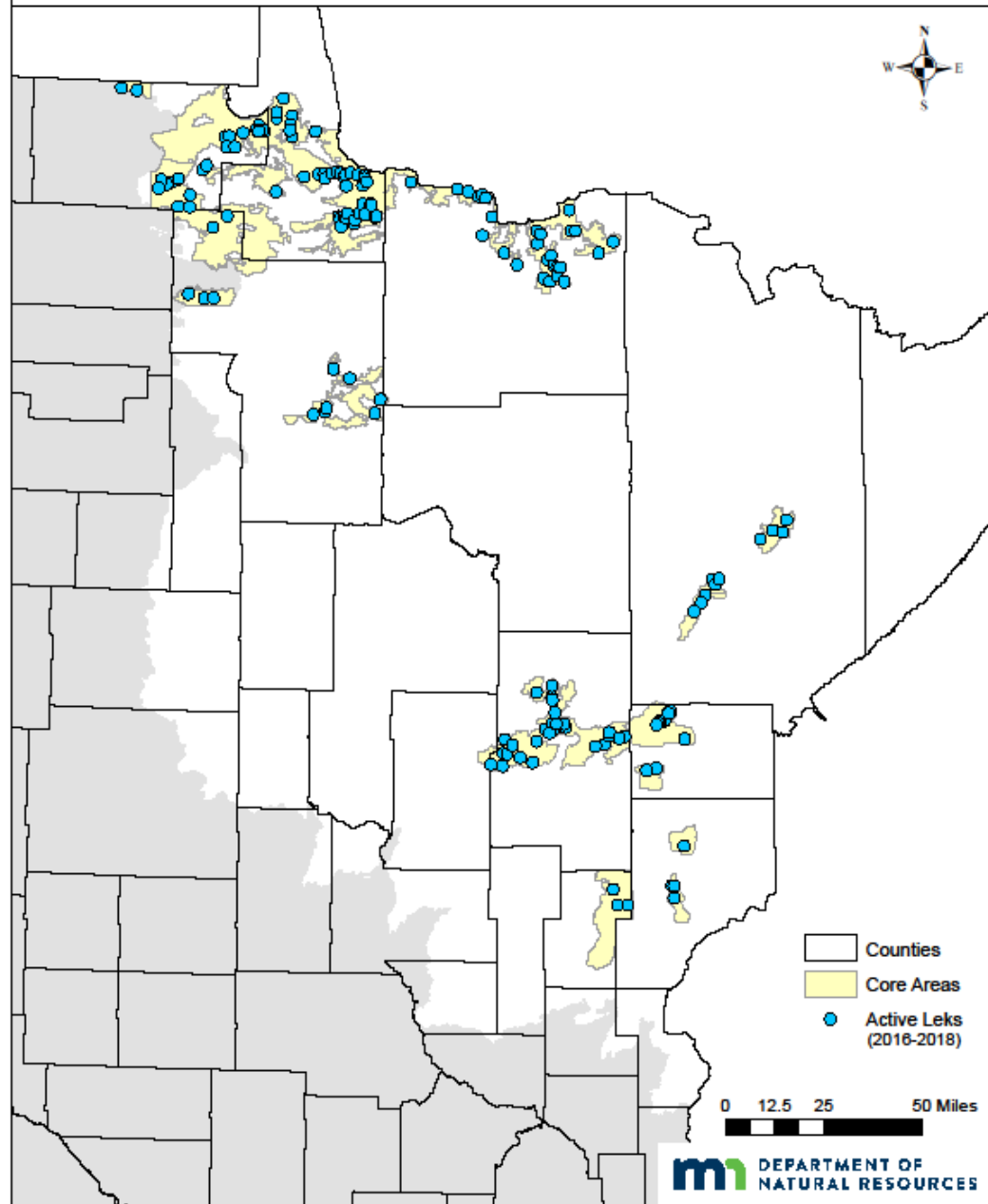


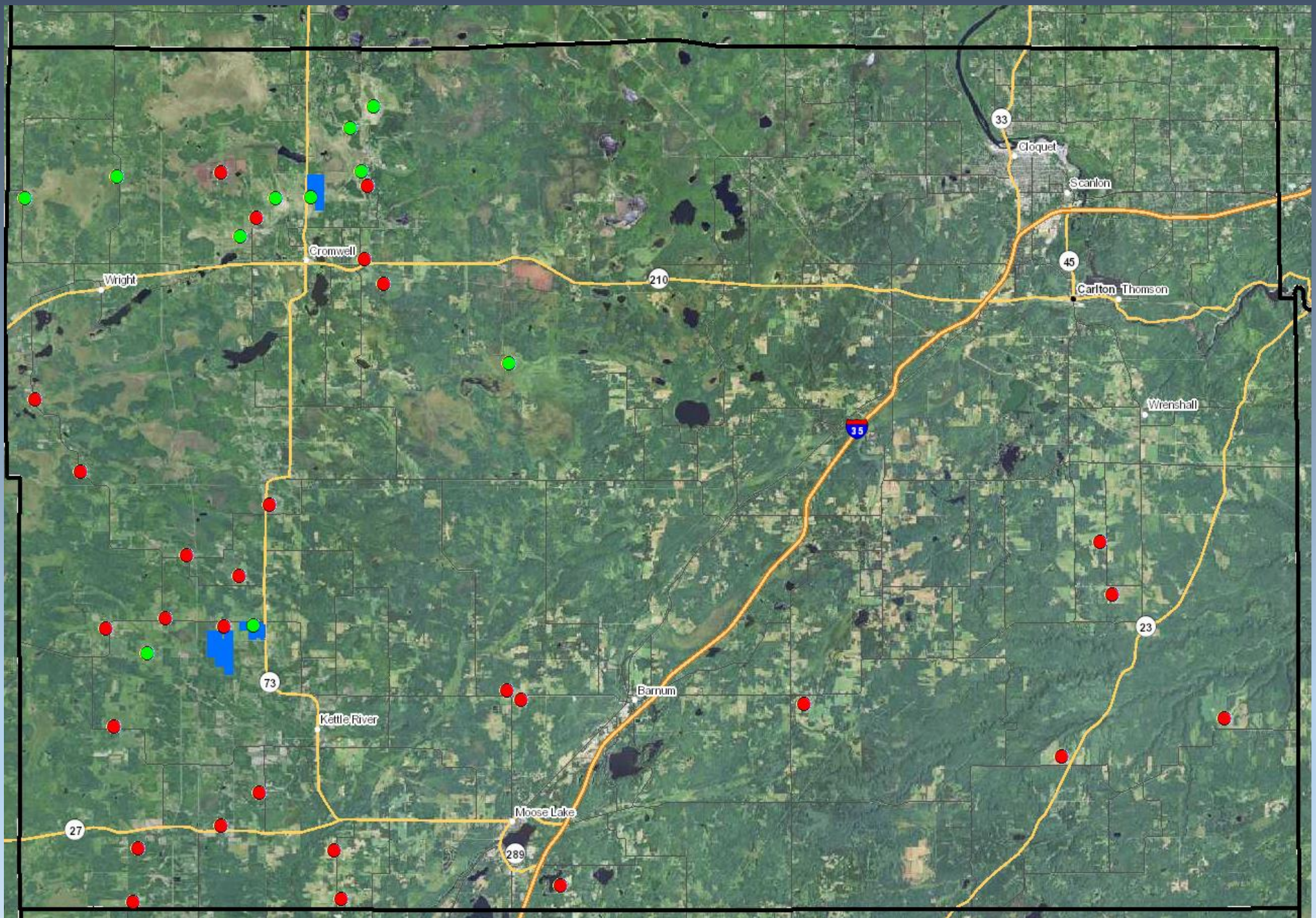
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# Minnesota Forest Region Open Landscape Core Areas and Sharp-tailed Grouse Leks

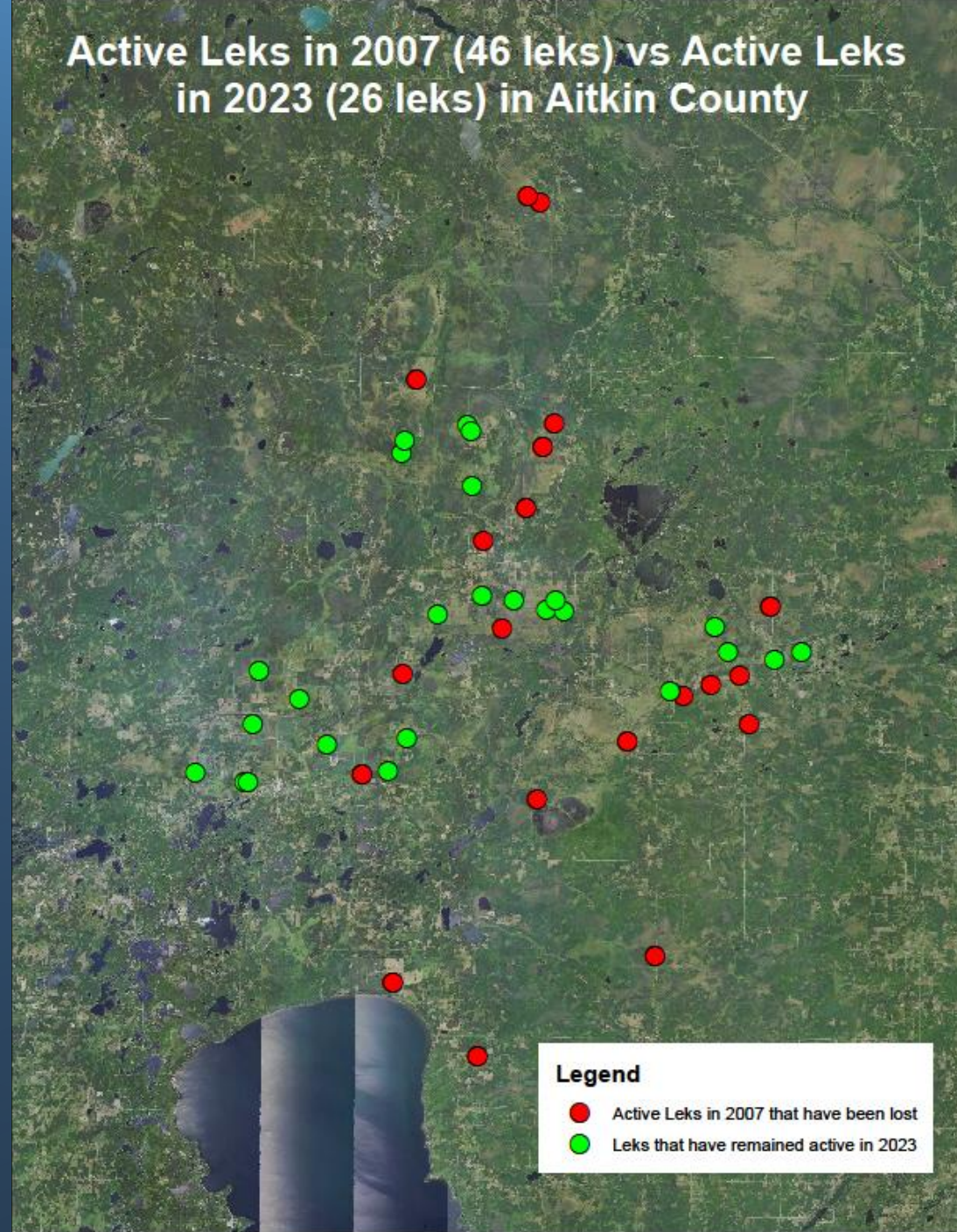








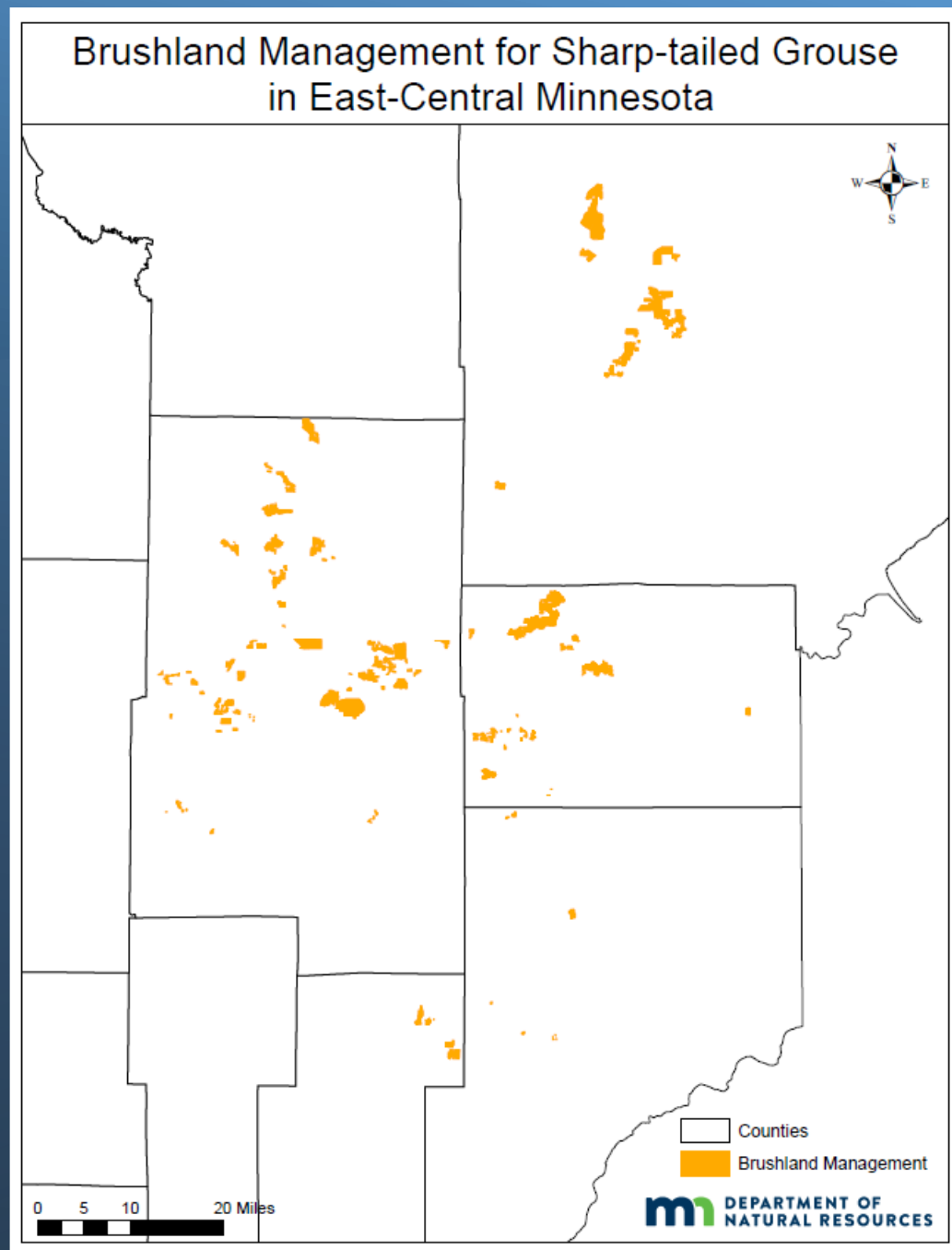
# Active Leks in 2007 (46 leks) vs Active Leks in 2023 (26 leks) in Aitkin County



96,651 acres managed  
from 1985 – 2018  
(includes re-treated acres)

42,923 acres (67 sq. mi.)  
managed in the Cloquet  
Area from 1989 – present  
32,695 ac.in western  
Carlton County

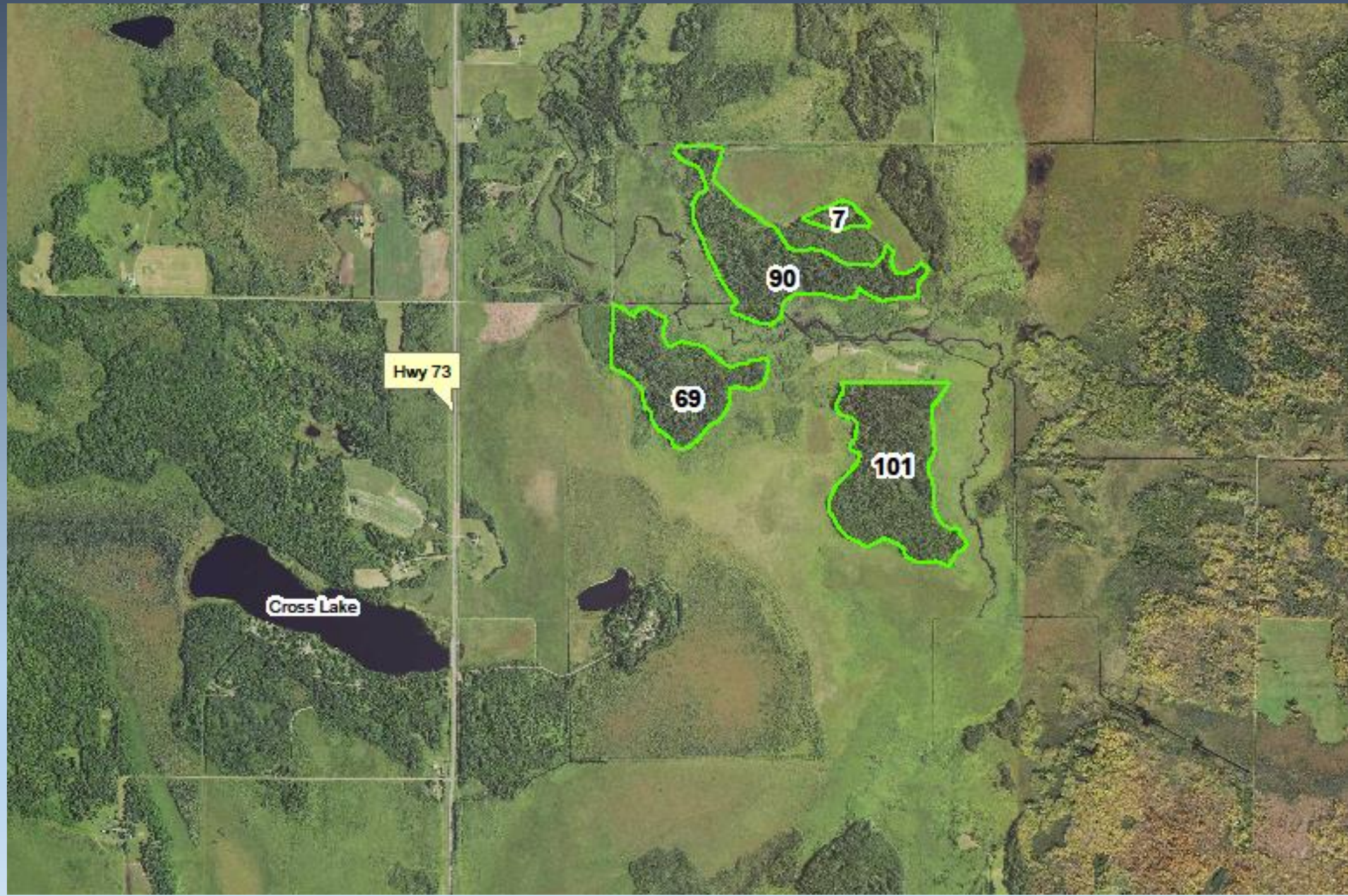
4,000 acres managed  
in the Aitkin Area  
just in the last 5 years



Management Methods:

- Burning
- Brush mowing
- Brush shearing
- Select herbicide use
- Tree removal
- Grass/prairie restoration
- Land acquisition









What are we missing?

Scale?

Climate Change?

Shifts or changes in predator communities?

Population genetics?

Questions?