Collaborative Study of Breeding Boreal Birds throughout BCR 12

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Nicolet NF Bird Survey

- Longest running volunteer bird monitoring program in any NF (since 1987)
 - Previously surveyed annually
 - Now conducted every 5 years (2021)
- Conduct breeding boreal bird surveys in northern WI during off years starting in 2018!











Why Boreal Birds?

- Little is known about them
- Some are declining in parts of the western Great Lakes states
 - Gray Jay + Olive-sided Flycatcher
 (Niemi et al. 2016, PIF Watch List)
- Vulnerable to climate change effects on boreal habitat









Objectives

- Track breeding populations of boreal bird species in WI (+ hopefully BCR 12):
 - Boreal Chickadee
 - Gray Jay
 - Olive-sided Flycatcher
 - Palm Warbler
 - Spruce Grouse
- Identify boreal bird hotspots in BCR 12
- Investigate how landscape modifications or other factors affect them







Target Habitats

- Black spruce / tamarack
- Open bogs
- Lowland shrubs
- Swamp conifer



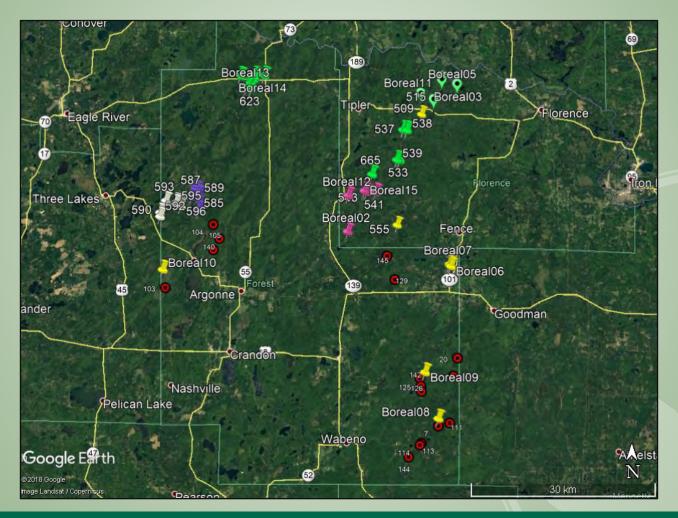








Proposed WI Survey Locations









Survey Methodology

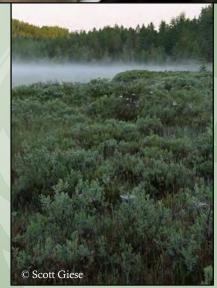
20-min point counts

- First 10 min: Knutson et al. (2008) unlimited-distance count recording all species
- Second 10 min (target species only):
 - 5-min playback (30-sec species + 30-sec silence)
 - 5 min of silence

Breeding surveys in late May-June in WI (may change in other areas of BCR 12)

Local habitat surveys of forest structure











Other Boreal Bird Work

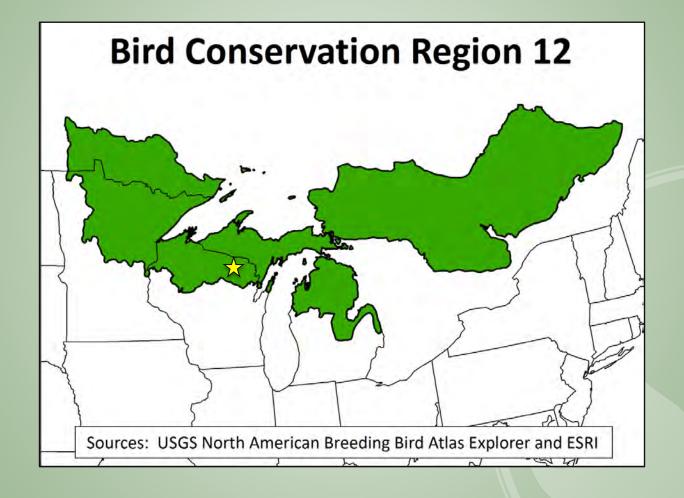
- N. Wisconsin in spring 2012-2013 (Nick Anich)
- Some sites in Nicolet, Chequamegon, Chippewa, and Superior NFs (1990s-present; WI, MN)
- Ottawa NF in recent years (Brian Bogaczyk, MI)
- Seney NWR (Greg Corace, MI)
- Experimental harvesting of lowland conifer to benefit wildlife (NRRI, MN)
- Development of habitat models/maps for breeding bird species in the Agassiz lowlands (NRRI, MN)
- Others?







Beyond WI + Across BCR 12









Food for Thought

- Should other target species be added to the list?
 - Ex: Connecticut Warbler, Ruby-crowned Kinglet
- Should we sample other habitats (e.g., jack pine)?
- Field survey methodology recommendations?





