

Population Ecology and Monitoring of Iowa's Marsh Birds

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Marsh habitat at Big Wall Lake WMA, Wright County
Photo Credit: Tyler M. Harms

Little is known about Iowa's marsh bird populations because of their secretive nature and difficulties associated with surveying marsh habitat. By 1980 less than 1% of historical wetlands remained in Iowa. This has greatly reduced suitable habitat for Iowa's marsh birds and many species have experienced population declines nationwide. It is important to understand population dynamics in these species in order to implement conservation practices before extinction is imminent.

Project Goals

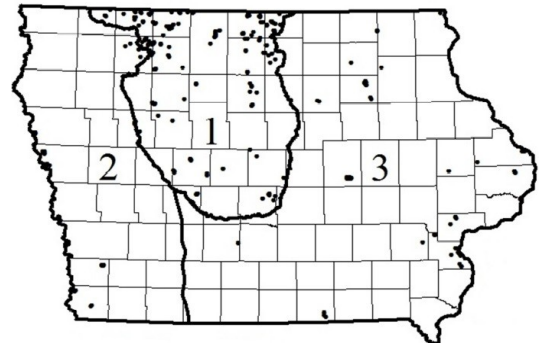
- Understand distribution, abundance, and habitat preferences of marsh birds in Iowa
- Refine national survey protocols for monitoring marsh birds in Iowa

Results

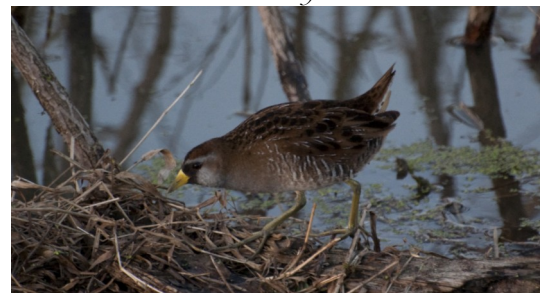
- All species were positively associated with larger wetlands
- There was no effect of wetland isolation on any species
- Pied-billed Grebes were more dense in region two, negatively associated with woody vegetation, and positively associated with deeper water
- Least Bitterns were more dense in regions one and two and were positively associated with deeper water
- Virginia Rails were more dense in region one and associated with taller, denser vegetation.
- Most species were more vocal early in the survey season.
- Pied-billed Grebes called at all hours early in the survey season but were more vocal in the morning late in the survey season.
- Time of day and time of season didn't have an effect on Least Bittern vocalization. They vocalize infrequently so call-broadcast surveys may not be the best method to survey this species
- Iowa's survey season can be extended past the 30th of May to the 15th of June

Quick Facts

- Study Dates: 2009-2010
- Study Regions and Wetlands



Sora - Photo Credit: Tyler M. Harms



Management Implications

- Knowledge of marsh bird habitat associations will help managers effectively restore habitat for these species
- Surveys for marsh birds should be conducted early in the season from mid-May to mid-June to increase detections of all species.

