Using Audio Playback to Attract Desired Migratory Bird Species to Restored Coastal Wetland



CORE QUESTION:

Can conspecific audio playback help attract two common and two rare species of rails to suitable habitat during their spring migration?

RESTORING WETLAND HOMES

Coastal wetlands provide critical habitat for birds, fish, and other wildlife and can help improve water quality. In Michigan, coastal wetland coverage has been reduced by as much as two-thirds since the 1800s and many remaining coastal wetlands have been ecologically degraded. Various groups have worked to restore some coastal wetlands in the state, creating habitat to attract key wetland species to these ecosystems.

However, species sometimes do not recognize restored wetlands as suitable habitat for a variety of reasons, including a lack of already-present conspecifics, or individuals of the same species. Audio playback of bird calls has been successfully used to attract migrating and colonial species to restored wetlands in other areas. Several species of rails are key components of Michigan wetlands that might benefit from audio playback to help them identify suitable habitat.

A MUSICAL INVITATION

Dustin Brewer, a PhD candidate in Thomas Gehring's laboratory at Central Michigan University, will work with U.S. Fish and Wildlife Service biologists to use rail vocalization playbacks at multiple potential habitat sites near the Shiawassee River in central Michigan during the spring migratory period. He will then conduct weekly

surveys of these sites and control sites where no playback occured, and compare arrival dates and abundances of each rail species at each type of site. This study will improve understanding of how audio playback might help attract rails and other migratory marshbird species to restored habitats, and more generally improve our understanding of how conspecific cues might be used to help conserve populations of focal species.

This fellowship will allow Brewer to work directly with the U.S. Fish and Wildlife Service on a project with conservation value to Michigan's wildlife and natural ecosystems. After completing graduate school, Brewer hopes to work with a Cooperative Fish and Wildlife Research Unit or similar agency on projects with applied management implications. He previously earned a BS from Purdue University and a MS from Eastern Kentucky University.

CONTACT

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