

## Dunes Calumet Secretive Marsh Bird Coordinator

### Project Summary

Indiana Audubon, in partnership with National Audubon and the Indiana Department of Natural Resources is seeking an Indiana Secretive Marsh Bird Coordinator to oversee planning and execution of the Calumet Region secretive marsh bird monitoring program in Northwest Indiana and Northwest Illinois. The contracted coordinator will undertake the following activities:

- Volunteer recruitment, training, and coordination, including survey equipment management.
- Assist in planning of survey locations and site access.
- Assist in the coordination and training of volunteers.
- Execute Conway protocol secretive marsh bird monitoring at northwest Indiana sites identified by Audubon staff, filling gaps where volunteers and staff are not covering.
- Perform ARU installation, data collection, and processing for nocturnal surveys of Black Rail (*Laterallus jamaicensis*) at Kankakee Sands.
- Complete habitat surveys at all marsh bird survey locations within the marsh bird survey period
- Quality-check data collected by volunteers.
- Participate in meetings with landowners to discuss results and management recommendations.

### Project Description

Since 2018, Indiana Audubon has partnered with Audubon Great Lakes and Indiana Department of Natural Resources to support an annual statewide marsh bird survey. The primary goal of the survey is to elucidate species-habitat associations for secretive marsh birds to inform management practices at high priority wetlands in Indiana. Six secretive marsh bird species that breed in Indiana are listed as state endangered including the American Bittern (*Botaurus lentiginosus*), Black Rail (*Laterallus jamaicensis*), Common Gallinule (*Gallinula galeata*), King Rail (*Rallus elegans*), Least Bittern (*Ixobrychus exilis*), and Virginia Rail (*Rallus limicola*). Some basic information, such as habitat preferences, is lacking for these secretive species due to the difficulty in detecting them using standard surveys such as the Breeding Bird Survey (BBS), and there is a need for targeted surveys in order to understand population trends and to best assess how to manage habitat for these species. Targeted secretive marsh bird surveys make use of audio broadcast of secretive species calls to enhance detection during early morning surveys.

During the 2018-2021 survey, although most focal species have been detected at least once, volunteers collecting marsh bird data have failed to detect the endangered Black Rail on surveys. This was not wholly unexpected, because the Black Rail is notoriously difficult to detect using standard surveys. The 2021 coordinator will assist with the deployment of ARUs at six marsh bird survey points. The ARUs will be programmed to record from sunset to sunrise, the typical period when Black Rails should be actively calling, during the May 1-June 15 marsh bird survey period. This will amount to a maximum of approximately 2,760 hours of recording (6 recorders x 10 hours x 46 days). The coordinator will additionally oversee the analysis of audio recordings and will use Cornell's BirdNet, a free software that compares audio recordings to files compiled in the Macaulay Library to identify detections of Black Rail. The Macaulay Library has over 600 verified recordings of Black Rails.

## Project Timeline and Deliverables

March 2022: Field season prep, recruitment and training of volunteers. Order pre-selected equipment.

April: Assist with marsh bird volunteer training. Meet with The Nature Conservancy on site to scout ARU deployment locations. Deploy ARUs by April 30.

May-June: Conduct marsh bird surveys. Change batteries and SD cards in ARUs as needed. Conduct ARU maintenance as needed. By June 16, pull all ARUs and upload data.

June-July: Marsh bird data entry.

August-October: ARU data analysis

## Contract Payment Terms and Conditions

Total Contract: \$12,000.00

Total estimated work is not expected to exceed 550 hours to complete. Payment will be made in four installments, subject to quarterly progress reports submitted by the coordinator.

The coordinator is responsible for all expenses related to providing the Services under this Agreement. This includes, but is not limited to, supplies, travel expenses, operating costs, business costs, employment costs, taxes, disability insurance, unemployment taxes, and any other cost that may or may not be in connection with the Services provided by Coordinator. At times, certain expenses may be reimbursed with prior approval by Indiana Audubon.

## Calumet Marsh Bird Survey Areas

