

**Environment and Natural Resources Trust Fund
2015 Request for Proposals (RFP)**

Project Title:

ENRTF ID: 014-A

Creating a Statewide Wetland Bird Survey

Category: A. Foundational Natural Resource Data and Information

Total Project Budget: \$ 146,520

Proposed Project Time Period for the Funding Requested: 3 years, July 2015 - June 2018

Summary:

Develop a statewide wetland bird survey utilizing volunteer citizen scientists to establish long-term monitoring of the status of these birds and the health of their wetland habitats.

Name: Mark Martell

Sponsoring Organization: Audubon Minnesota

Address: 2357 Ventura Dr, Ste 106
St. Paul MN 55125

Telephone Number: (651) 739-9332

Email mmartell@audubon.org

Web Address http://mn.audubon.org/

Location

Region: Statewide

County Name: Statewide

City / Township:

Alternate Text for Visual:

Map of Yellow Rail Sightings from 5 years of the MN Breeding Bird Survey showing the dearth of information available for some wetland species.

_____ Funding Priorities	_____ Multiple Benefits	_____ Outcomes	_____ Knowledge Base
_____ Extent of Impact	_____ Innovation	_____ Scientific/Tech Basis	_____ Urgency
_____ Capacity Readiness	_____ Leverage	_____ TOTAL	



PROJECT TITLE: Creating a Statewide Wetland Bird Survey

I. PROJECT STATEMENT

We will develop a statewide wetland bird survey, which would include rails, bitterns, and waterbirds, utilizing a combination of volunteer citizen scientists and paid surveyors. The objective is to establish a long-term statewide wetland bird monitoring system to provide state agencies and others with a method to monitor the status of these birds and the health of their wetland habitats. Many wetland birds are underrepresented in wildlife surveys such as the recently ENRTF funded Minnesota Breeding Bird Atlas, and the Breeding Bird Survey, in large part because of their inconspicuous nature, and the difficulty of accessing their habitats. Because of this, more effort is being put into wetland bird monitoring across the Midwest using standardized protocols and data collection. Effective conservation planning and habitat management for wetland birds is challenging and information regarding abundance, distribution, population trends, habitat relationships, and management needs for these species is limited. Systematic and coordinated wetland bird monitoring has been recognized as a high priority in state, regional and national conservation plans.

We will use already established standardized protocols to conduct these surveys but will consult with researchers in Minnesota and other states to incorporate any modifications developed between now and the start of our surveys to ensure we are using the most up to date and effective methods. For example, a recently established secretive marsh bird survey protocol has been developed to address research questions while providing a regional measure of population status and trends. This framework allows for a statewide survey which is compatible with larger-regional scale monitoring. Survey sites will be chosen based on a sub-sample of wetlands currently being monitored by the MN DNR. Using a combination of volunteers and paid staff proved extremely effective in completing the Breeding Bird Atlas and we propose to follow that model in this project. Such a combination allows for volunteer involvement and its reduced costs while ensuring that hard to access sites are also covered. We will use a Website for data entry allowing for easy and immediate data collection and review if necessary.

Because these birds are dependent on wetlands they can serve as valuable indicators of habitat quality and are useful monitoring tools for wetland quality as well as restoration efforts.

II. PROJECT ACTIVITIES AND OUTCOMES

Activity 1: Finalize study design

Budget: \$ 14,300

Because marsh bird monitoring at smaller scales is being done in Minnesota and surrounding states we will review current protocols and update them with the most current knowledge. We will work with the MN DNR to determine a subset of monitored wetlands to include in this survey. Using online GIS tools we will develop a website for data collection and display.

Outcome	Completion Date
1. Review Current Efforts from Minnesota and surrounding states	October 2015
2. Revise and finalize protocols	December 2015
3. Create a data entry website	December 2015

Activity 2: Season1 data collection

Budget: \$ 51,360

Recruit volunteers and hire surveyors for season 1. All surveyors will be trained in our data collection and recording protocols. Season 1 data collection will occur from April – July 2016. Following the field season we will analyze data and modify our protocols as needed.

Outcome	Completion Date
1. Recruit and train volunteers and hire surveyors	March 2016
2. Conduct Field Work	August 2016



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3. Analyze Season 1 Field Work and revise protocols as needed	December 2016
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Activity 3: Season 2 data collection

Budget: \$ 51,360

We will recruit volunteers, ideally using many from Season 1 and hire paid surveyors for season 2. Surveyors will be trained in our protocols and Season 2 data will be collected from April – July 2017.

Outcome	Completion Date
1. Recruit and train volunteers and hire surveyors	March 2017
2. Conduct Field Work	August 2017

Activity 4: Final Analysis and Statewide Design

Budget: \$ 29,500

Conduct final analysis of methodology and data from both seasons of field work. From this we will develop a finalized protocol and develop a statewide wetland bird monitoring survey.

Outcome	Completion Date
1. Analyze Season 2 field work and produce final survey protocols.	December 2017
2. Do final data analysis	December 2017
3. Develop plan for ongoing state wetland bird monitoring	March 2018

III. PROJECT STRATEGY

A. Project Team/Partners

Project Partners Receiving Funds

Mark Martell, Audubon Minnesota – Project lead

Project Partners Not Receiving Funds

Katherine Koch, U.S. Fish and Wildlife Service - Connecting Project with other efforts throughout the Midwest, facilitating data management and sharing with our Midwest Avian Data Center’s marshbird database

Carrol Henderson, MN DNR Nongame Program – Facilitating statewide effort within the DNR and other partners

B. Project Impact and Long-Term Strategy

The intent of this project is to create an ongoing, long-term wetland bird monitoring survey in Minnesota. This will provide natural resource managers information they need to effectively manage these birds, and their wetland habitats. For example, some of these birds are game species yet the dearth of information on their population numbers makes setting bag limits difficult. By using volunteers we expect the long-term cost of this survey to be minimal. This “citizen science” model is used effectively by Audubon for our Christmas Bird Count, now in its 115th year, and by the MN DNR in its Common Loon and amphibian surveys.

C. Timeline Requirements

Year 1

July - December 2015 – Update and finalize protocols and ID sites

Spring 2016 – Train volunteers and other personnel and conduct surveys

Year 2

Fall 2016 – Summary and evaluation of Season 1

Spring 2017 – Train volunteers and other personnel and conduct surveys

Year 3

Fall 2017 – Summary and evaluation of Season 2

Final Summary and Reports

2015 Detailed Project Budget

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IV. TOTAL ENRTF REQUEST BUDGET: 3 years

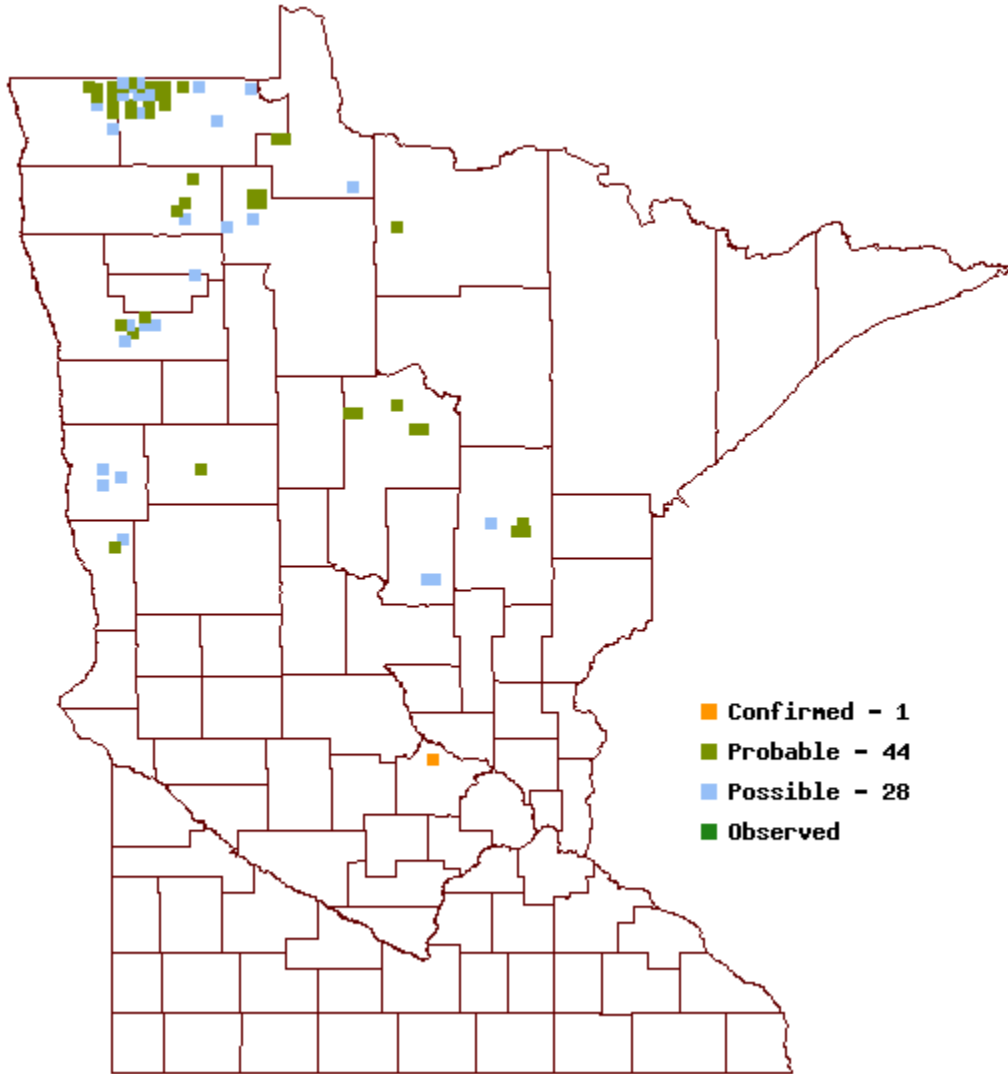
<u>BUDGET ITEM</u>	<u>AMOUNT</u>
Personnel:	\$ -
Mark Martell, Project Manager (65% salary, 35% benefits); 20% FTE for 3 years	\$ 48,600
Kristin Hall, GIS specialist and field supervisor (65% salary, 35% benefits), 20% FTE for 3 years	\$ 32,400
Susan Swanson, Administrative support (65% salary, 35% benefits); 5% FTE for 3 years	\$ 7,500
2 Temporary Field Surveyors (Salary and 12% benefits), 15 weeks for 2 years	\$ 35,840
Equipment/Tools/Supplies:	\$ -
2 Spotting Scopes with Tripods (\$1,000 each)	\$ 2,000
2 Call playback machines (\$500 each)	\$ 1,000
2 sets of waders (\$90) each	\$ 180
Travel:	\$ -
Temp Employees mileage and lodging for travel to survey sites (2 years)	\$ 13,000
Audubon Staff travel to survey sites (2 years)	\$ 6,000
Additional Budget Items: <i>In this column, list any additional budget items that do not fit above categories. List by item(s) or item type(s) and explain how number was reached. One row per type/category.</i>	\$ -
TOTAL ENVIRONMENT AND NATURAL RESOURCES TRUST FUND \$ REQUEST =	\$ 146,520

V. OTHER FUNDS *(This entire section must be filled out. Do not delete rows. Indicate "N/A" if row is not applicable.)*

<u>SOURCE OF FUNDS</u>	<u>AMOUNT</u>	<u>Status</u>
Other Non-State \$ To Be Applied To Project During Project Period:	\$ -	
Other State \$ To Be Applied To Project During Project Period: NA	\$ -	
In-kind Services To Be Applied To Project During Project Period: In-time of project partners (Koch and Henderson) - estimated	\$ 5,000	<i>pending</i>
Funding History: NA	\$ -	
Remaining \$ From Current ENRTF Appropriation: NA	\$ -	

Creating a Statewide Waterbird Survey

Map of Yellow Rail Sightings from 5 years of the MN Breeding Bird Survey showing the dearth of information available for some wetland species.



Creating a Statewide Wetland Bird Survey

Audubon Minnesota: Organizational Description

Audubon Minnesota is the state office of the National Audubon Society. Established in 1979, we share Audubon's 115-year heritage of working to protect our environment. While we are part of the national organization, we establish our own statewide programs and pursue our own funding for Minnesota efforts. The Audubon Minnesota mission is to conserve and restore Minnesota's natural ecosystems, focusing on birds and their habitats, for the benefit of humanity and the earth's biological diversity. Today there are nearly 17,000 Audubon members in Minnesota, organized into 14 geographically-based chapters from Agassiz Audubon Chapter in Thief River Falls to the Coulee Region Audubon Chapter in La Crescent.

Project Manager – Mark Martell, Director of Bird Conservation – Audubon Minnesota. Mark has an M.S. in Wildlife Conservation from the University of Minnesota. He has worked in bird conservation in Minnesota for over 25 years at Audubon Minnesota and the Raptor Center at the University of Minnesota. Mark has been project manager on previous LCMR grants most recently the 2007 - 2014 Breeding Bird Atlas and the 2005 Birding Trails project that produced 3 birding trail guide books for Minnesota. As project director Mark will be responsible for budget and project oversight, ensure full partner participation, and be the direct supervisor of project employees and volunteers