



Environment and Natural Resources Trust Fund

2025 Request for Proposal

General Information

Proposal ID: 2025-092

Proposal Title: Surveying Minnesota's Secretive Marsh Birds

Project Manager Information

Name: Dale Gentry

Organization: Audubon Minnesota

Office Telephone: (651) 739-9332

Email: dale.gentry@audubon.org

Project Basic Information

Project Summary: Audubon will conduct a statewide secretive marsh bird survey to provide state and federal agencies with an assessment of marsh bird population status and useful information on wetland habitat health.

ENRTF Funds Requested: \$443,000

Proposed Project Completion: October 31, 2028

LCCMR Funding Category: Foundational Natural Resource Data and Information (A)

Project Location

What is the best scale for describing where your work will take place?

Statewide

What is the best scale to describe the area impacted by your work?

Statewide

When will the work impact occur?

During the Project and In the Future

Narrative

Describe the opportunity or problem your proposal seeks to address. Include any relevant background information.

Many marsh birds are designated as Species of Greatest Conservation Need, are declining, and difficult to survey due to their secretive, inconspicuous nature, and the difficulty of accessing their habitats. Effective conservation planning and habitat management for marsh birds is challenging because information regarding abundance, distribution, population trends, habitat relationships, and management needs for these species is limited due to monitoring challenges. Current avian surveys such as the Breeding Bird Survey and spring Waterfowl Surveys do not adequately monitor these species resulting in a lack of information upon which to base conservation and management actions. Systematic and coordinated marsh bird monitoring has been recognized as a high priority in state, regional and national conservation plans such as the 2016 Partners in Flight Landbird Conservation Plan due to the lack of current information and estimated population declines. Because marsh birds are dependent on wetlands, they can serve as valuable indicators of habitat quality and are useful indicators for wetland quality as well as restoration efforts. This project will continue an ongoing, long-term marsh bird monitoring survey to provide natural resource managers and conservation planners the information necessary to effectively plan and manage marsh birds and their habitats.

What is your proposed solution to the problem or opportunity discussed above? Introduce us to the work you are seeking funding to do. You will be asked to expand on this proposed solution in Activities & Milestones.

Despite the challenges, marsh birds can be monitored with targeted audio playback techniques. Marsh birds will be monitored by a combination of paid and volunteer surveyors. By using volunteers, we expect the long-term cost of this survey to be affordable to federal and state agencies, and NGOs with an interest in and obligation for these species and their habitats. This community science model is used effectively by Audubon for our Christmas Bird Count, now in its 115th year, the USGS in the Breeding Bird Survey, and by the MN DNR in its Common Loon and amphibian surveys.

This survey will collect baseline information on distribution, relative abundance, and specific habitat requirements of breeding marsh birds in Minnesota, including rails, bitterns, and other select waterbirds. Results from this statewide survey can be used on a local or regional scale because of efforts to standardize methodologies between management entities.

We will conduct a two-year project to survey secretive marsh birds and, with data from the 2016-17 effort, analyze long-term population and habitat trends. The results of this project will be shared with state and regional land managers and conservation groups to guide conservation planning.

What are the specific project outcomes as they relate to the public purpose of protection, conservation, preservation, and enhancement of the state's natural resources?

The overall goal of this project is to re-sample the 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.

Our long-term goals are:

- To confirm and implement a standardized protocol for marsh bird surveys on public and private lands in Minnesota.
- To estimate population status and trends of secretive marsh birds.
- To better inform management of wetland and marsh habitats.
- Provide a baseline for potential management activities in surveyed sites.
- To create a public marsh bird data hub to share information with partners.

Activities and Milestones

Activity 1: Finalize Study Design

Activity Budget: \$60,000

Activity Description:

Since marsh bird monitoring was done in 2016 and 2017, we will review those protocols to determine if changes are needed to align with current guidelines from the Upper Mississippi/Great Lakes Joint Venture and standardized North American Marsh Bird Monitoring Protocol (Conway 2011). We will adapt or adjust these protocols using the most current knowledge. We will work with the MN DNR and other land management agencies to review and confirm which wetlands will be included in this survey.

Activity Milestones:

Description	Approximate Completion Date
Review and confirm monitoring protocols for marsh bird surveys	November 30, 2025
Review previous sites and identify future sites for marsh bird surveys	February 28, 2026
Develop protocols and training materials for volunteer and staff surveyors	March 31, 2026

Activity 2: Data Collection

Activity Budget: \$293,000

Activity Description:

Recruit volunteers and hire two contracted surveyors for marsh bird monitoring. We will provide mandatory training in our data collection and recording protocols for all volunteer and paid surveyors. Data collection will occur from April – July in 2026 and 2027. Following the field season we will analyze data and modify our protocols if needed for future surveys. We will develop an online GIS based data hub to share the outcomes of the project and information about that status of secretive marsh birds.

Activity Milestones:

Description	Approximate Completion Date
Recruit volunteers and contractors for marsh bird surveys	March 31, 2026
Hold year one training events for staff and volunteers	April 30, 2026
Complete year one marsh bird surveys	August 31, 2026
Hold year two training events for staff and volunteers	April 30, 2027
Complete year two marsh bird surveys	August 31, 2027
Develop public online GIS-based marsh bird data hub	December 31, 2027

Activity 3: Analysis and Implementation

Activity Budget: \$90,000

Activity Description:

We will review methodology and data from field work and develop a complete data set from the surveys. We will analyze the data by developing occupancy and abundance models, accounting for imperfect detection, for 9 wetland bird species breeding in Minnesota. Finally, we will develop plan to implement the standardized waterbird survey statewide on a 5-year cycle.

Activity Milestones:

Description	Approximate Completion Date
Complete preliminary analysis of year one surveys	March 31, 2027
Complete the analysis of both years of surveys	April 30, 2028
Publish data hub and share trends in marsh bird populations and wetland habitat with partners	May 31, 2028

Project Partners and Collaborators

Name	Organization	Role	Receiving Funds
MN DNR Nongame Wildlife Program	MN DNR	Provide technical assistance and assist with volunteer recruitment and coordination	No
Mississippi Headwaters Audubon Society	Bemidji, MN based chapter of the National Audubon Society	Assist with volunteer recruitment for the marsh bird surveys	No
Zumbro Valley Audubon Society	Rochester, MN based chapter of the National Audubon Society	Assist with volunteer recruitment for the marsh bird surveys	No
St. Paul Audubon Society	St. Paul, MN based chapter of the National Audubon Society	Assist with volunteer recruitment for the marsh bird surveys	No
Austin Audubon Society	Austin, MN based chapter of the National Audubon Society	Assist with volunteer recruitment for the marsh bird surveys	No
Brainerd Lakes Area Audubon Society	Brainerd, MN based chapter of the National Audubon Society	Assist with volunteer recruitment for the marsh bird surveys	No
Duluth Audubon	Duluth, MN based chapter of the National Audubon Society	Assist with volunteer recruitment for the marsh bird surveys	No
Minnesota River Valley Audubon Society	Southern Twin Cities Metro area chapter of the National Audubon Society	Assist with volunteer recruitment for the marsh bird surveys	No

Long-Term Implementation and Funding

Describe how the results will be implemented and how any ongoing effort will be funded. If not already addressed as part of the project, how will findings, results, and products developed be implemented after project completion? If additional work is needed, how will this work be funded?

This project will inform marsh bird habitat conservation efforts across Minnesota. It will produce a finished assessment of the current bird populations that will not require future funding to complete. The outcomes will be shared with interested agencies through out public data hub on Audubon’s website. We will host information-sharing meetings with our partners in the region to discuss new conservation opportunities that will arise from our work. This project will

increase the impact that Outdoor Heritage, and other funds, have already invested in restoring and enhancing Minnesota’s most critical wetland habitats.

Other ENRTF Appropriations Awarded in the Last Six Years

Name	Appropriation	Amount Awarded
Implementing Conservation Plans for Avian Species of Concern	M.L. 2019, First Special Session, Chp. 4, Art. 2, Sec. 2, Subd. 03k	\$124,000
Habitat Associations of Mississippi Bottomland Forest Marsh Birds	M.L. 2021, First Special Session, Chp. 6, Art. 5, Sec. 2, Subd. 08g	\$275,000
Mapping Migratory Pitstops in Minnesota	M.L. 2023, , Chp. 60, Art. 2, Sec. 2, Subd. 03c	\$340,000

Project Manager and Organization Qualifications

Project Manager Name: Dale Gentry

Job Title: Surveying Minnesota's Secretive Marsh Birds

Provide description of the project manager’s qualifications to manage the proposed project.

Dr. Dale Gentry has 25 years of experience studying and teaching avian ecology and conservation. Dale joined Audubon as Conservation Manager in 2021 and transitioned to Director of Conservation in 2022. Before joining Audubon Dale was a professor at the University of Northwestern –Saint Paul where he studied the reuse of natural and woodpecker cavities and the role of woodpeckers as biological control for the invasive emerald ash borer. He also chaired the department of biology and taught courses in ecology, conservation, and ornithology. Before moving to Minnesota, Dale was field science faculty at the graduate program of the Teton Science Schools in Grand Teton National Park. He supervised research, taught graduate courses in conservation, community, and winter ecology and partnered with the National Park Service and National Forest service on land management in Jackson Hole. Dale has a B.S. in Zoology from Idaho State University, a M.S. in Biology from the University of South Dakota, and a Ph.D. in Atmosphere, Environment and Water Resources from the South Dakota School of Mines and Technology. His graduate work compared the breeding biology of cup nesting songbirds in natural river corridors and anthropogenic woodlots (M.S.) and the keystone species concept in cavity nesting communities in old burns in the Black Hills in South Dakota (Ph.D.).

Organization: Audubon Minnesota

Organization Description:

Audubon Minnesota was established in 1979 and is the state office of the National Audubon Society, one of the oldest conservation organizations in the world. For the last 40 years, Audubon Minnesota has been at the forefront of critical conservation issues that will impact us for generations to come.

While we are one of 23 Audubon regional offices, we establish our own statewide conservation projects, generate our own funding, and have an 11-member state Board of Directors who meet quarterly. Our state office mission is, “To conserve and restore natural ecosystems in Minnesota, focusing on birds and their habitats for the benefit of humanity and the earth’s biological diversity.” Today there are 24,000 Audubon members in Minnesota and 13 geographically-based chapters from the Mississippi Headwaters Audubon Chapter in Bemidji to Zumbro Valley Audubon Chapter in Rochester.

Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineligible	% Benefits	# FTE	Classified Staff?	\$ Amount
Personnel								
Project Director		Manage all aspects of the project including directing staff and coordinating data collection and management			28%	0.75		\$106,000
Volunteer Coordinator		Recruitment and management of volunteer surveyors			28%	0.9		\$82,000
Conservation Manager		Assist with study design and implementation, volunteer training, and management of survey data			28%	0.3		\$36,000
Prairie Project Manager		Conduct marsh bird surveys and assist with regional volunteers in NW Minnesota			28%	0.3		\$25,000
Grant Management		Manage financial aspects of grants and contracts			28%	0.09		\$10,000
Quantitative Science Director		Supervise data analysis			28%	0.15		\$23,000
Sr. Manager Quantitative Science		Conduct analysis of all survey data			28%	0.45		\$57,000
Communications Manager		Assist with volunteer recruitment and develop materials to share outcomes of the project.			28%	0.15		\$11,000
GIS Specialist		Develop the public MN Marsh Bird Data Hub			28%	0.45		\$39,000
							Sub Total	\$389,000
Contracts and Services								
TBD	Professional or Technical Service Contract	Bird surveyors to complete sites were volunteers are not available				0.3		\$18,000
TBD	Professional or Technical Service Contract	Bird surveyors to complete sites were volunteers are not available				0.3		\$18,000
							Sub Total	\$36,000
Equipment, Tools, and Supplies								

	Tools and Supplies	Training materials and tablet computers for field surveys	Printed materials for volunteer and contractor trainings, field safety equipment, and Survey 123 software subscriptions					\$3,000
							Sub Total	\$3,000
Capital Expenditures								
							Sub Total	-
Acquisitions and Stewardship								
							Sub Total	-
Travel In Minnesota								
	Miles/ Meals/ Lodging	20 trips averaging 200 miles per trip for one individual plus meals and lodging	Staff travel to training and partners meetings and to survey sites					\$6,000
	Miles/ Meals/ Lodging	80 trips of 100 miles for one individual	Reimbursement of volunteer travel mileage					\$6,000
	Conference Registration Miles/ Meals/ Lodging	Two people attending one conference each year.	Conference attendance to coordinate with partners how marsh birds can guide wetland management					\$3,000
							Sub Total	\$15,000
Travel Outside Minnesota								
							Sub Total	-
Printing and Publication								
							Sub Total	-
Other Expenses								
							Sub Total	-
							Grand Total	\$443,000

Classified Staff or Generally Ineligible Expenses

Category/Name	Subcategory or Type	Description	Justification Ineligible Expense or Classified Staff Request
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Non ENRTF Funds

Category	Specific Source	Use	Status	Amount
State				
			State Sub Total	-
Non-State				
In-Kind	Volunteer hours	Marsh bird surveys completed by volunteers	Pending	\$25,000
			Non State Sub Total	\$25,000
			Funds Total	\$25,000

Total Project Cost: \$468,000

This amount accurately reflects total project cost?

Yes

Attachments

Required Attachments

Visual Component

File: [729a0b94-218.pdf](#)

Alternate Text for Visual Component

A one-page front and back summary of the project including a map of the study sites, a summary of the project needs and goals, project partners, and photos of the focal species....

Financial Capacity

Title	File
National Audubon Society Audit	6df62cbe-792.pdf
National Audubon Society 990	032a5da5-830.pdf

Board Resolution or Letter

Title	File
Marsh bird 2024 advisory board support letter	e926bf51-2c0.docx

Supplemental Attachments

Capital Project Questionnaire, Budget Supplements, Support Letter, Photos, Media, Other

Title	File
MN DNR Letter of Support	4e3e7d97-9fd.pdf

Administrative Use

Does your project include restoration or acquisition of land rights?

No

Does your project have potential for royalties, copyrights, patents, sale of products and assets, or revenue generation?

No

Do you understand and acknowledge IP and revenue-return and sharing requirements in 116P.10?

N/A

Do you wish to request reinvestment of any revenues into your project instead of returning revenue to the ENRTF?

N/A

Does your project include original, hypothesis-driven research?

No

Does the organization have a fiscal agent for this project?

No

Does your project include the pre-design, design, construction, or renovation of a building, trail, campground, or other fixed capital asset costing \$10,000 or more or large-scale stream or wetland restoration?

No

Do you propose using an appropriation from the Environment and Natural Resources Trust Fund to conduct a project that provides children's services (as defined in Minnesota Statutes section 299C.61 Subd.7 as "the provision of care,

treatment, education, training, instruction, or recreation to children")?

No

Provide the name(s) and organization(s) of additional individuals assisting in the completion of this proposal:

Jen Degen, Grant Manager, National Audubon Society, Sarah Hewitt, Conservation Manager, Audubon Upper Mississippi River