



Environment and Natural Resources Trust Fund

2027 Request for Proposal

General Information

Proposal ID: 2027-080

Proposal Title: Rediscovering Bobwhite and Warblers in the Driftless Region

Project Manager Information

Name: Dale Gentry

Organization: Audubon Upper Mississippi River

Office Telephone: (651) 274-1073

Email: dale.gentry@audubon.org

Project Basic Information

Project Summary: Audubon will evaluate the Minnesota Driftless habitat Cerulean Warbler and Northern Bobwhite Quail rely upon, and drive management strategies to increase populations on private and public lands.

ENRTF Funds Requested: \$365,000

Proposed Project Completion: June 30, 2030

LCCMR Funding Category: Fish and Wildlife (D)

Project Location

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

Region(s): SE

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

Region(s): SE

When will the work impact occur?

During the Project

Narrative

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

The Driftless Area in southeastern Minnesota contains a distinct topography of unique habitats and species. However, the introduction of invasive woody plants, restriction of natural disturbances (i.e. fire and grazing), and acceleration of land transitioned to agriculture left behind isolated and often small patches of habitat that lack natural transitional habitats. What remains are largely isolated patches of mature forest for birds like Cerulean Warblers, a Special Concern species in Minnesota, and forest edges lacking transition zones needed by birds like Northern Bobwhite. Both species' Minnesota populations are found almost exclusively in this region, yet we lack understandings about their range and habitat preferences. The recent reappearance and persistence of Northern Bobwhite quail, and the present but rare and fragmented Cerulean Warbler population, invite study to determine what habitats they are using in this remodeled landscape to inform private and public land management strategies.

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.

This proposal aims to examine the habitats relied upon by Cerulean Warblers and Northern Bobwhite Quail in the Driftless Area of Minnesota to guide future conservation. Assessing the habitats used by Cerulean Warbler and Bobwhite, Audubon will propose management strategies to private and public landowners to manage for habitats they, and other species, need in the region. We will gain better understanding of the distribution of focal species within the Driftless Area by utilizing Autonomous Recording Units (ARUs) to detect focal species across transitional woodland and mature forest zones. The presence/absence data from the ARUs will be compared with habitat assessments to inform land management options on private and public lands.

Additionally, we will conduct a Bobwhite telemetry study to assess overwintering habitat use. It is assumed that Northern Bobwhite are unable to survive winters in Minnesota despite being historic resident species. Recent conversations with local landowners found there are populations surviving winter with natural spring breeding. However, it is unclear what habitats and strategies they are using to survive. This telemetry study will identify habitat cover overwintering Northern Bobwhites are utilizing, informing land managers on key landscape elements missing to improve overwinter survival.

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?

This study will grow understanding of population distribution and habitat use of Cerulean Warbler and Northern Bobwhite Quail within Minnesota's Driftless Region, leading to more informed land management strategies across private and public lands. To expand knowledge of these management strategies, Audubon will co-host workshops with partners such as Trout Unlimited and Pheasants/Quail Forever to highlight qualities of ideal focal species habitats and introduce the best management practices to obtain habitat goals, while also engaging local landowner associations to support large scale habitat improvements. Additionally, Audubon will develop formal habitat management guidance to inform public and private land management.

Activities and Milestones

Activity 1: Design, Deployment, and Data

Activity Budget: \$248,450

Activity Description:

During the winters of 2027 and 2028, Audubon will coordinate with the MN Zoo to capture and place 10 radio telemetry collars on Bobwhites on 5 identified private and/or public lands. The intent is to collect data on Bobwhite survival, dispersal and habitat selection during the winter season. The Cerulean Warbler ARU study will be conducted across the spring seasons of 2028 and 2029 during the breeding seasons when the species is most vocal and detectable. In coordination with volunteers, Audubon will deploy 50 ARUs across 6 public land units within the project area. The audio data collected will be analyzed by Audubon to determine Cerulean Warbler habitat use, distribution, and abundance throughout the Driftless ecoregion. For the Cerulean Warblers, we will compare the ARU results with DNR landcover layers and habitat inventory points (where available) to identify the site and landscape level conditions favored by the birds. For Bobwhite, we will provide qualitative descriptions of the habitats they're detected in.

Activity Milestones:

Description	Approximate Completion Date
Deploy and Track Bobwhite Quail Telemetry Collars – Year 1	March 31, 2028
Deploy and Collect Cerulean Warbler ARUs – Year 1	July 31, 2028
Data analysis for telemetry and ARU studies	November 30, 2028
Deploy and Track Bobwhite Quail Telemetry Collars – Year 2	March 31, 2029
Deploy and Collect Cerulean Warbler ARUs – Year 2	July 31, 2029
Data analysis for telemetry and ARU studies, with final results.	November 30, 2029

Activity 2: Landowner Workshops and Associations

Activity Budget: \$43,050

Activity Description:

In coordination with local Driftless Area partners, including but not limited to Trout Unlimited, Pheasants Forever, and Quail Forever, Audubon will co-host three landowner workshops across the project period. These workshops will provide education on land management techniques that benefit the project's focal species, in addition to other desirable wildlife species that require concerted land management across the Driftless region, as aligned with partner priorities. Workshops will include instructional presentations from partner representatives coupled with field tours to showcase the ideal habitats for all priority species. Associated costs will comply with the Commissioner's Plan. Landowners and land managers will learn how to manage and provide habitat for the region's Bobwhite Quail and Cerulean Warblers and other wildlife populations while supporting healthy soils, clean water, and reducing erosion and sedimentation. Interested landowners will be educated on how to implement bird-friendly habitat management prescriptions.

Activity Milestones:

Description	Approximate Completion Date
Co-Host 1 Landowner Workshop in 2028	September 30, 2028
Co-Host 1 Landowner Workshop in 2029	September 30, 2029
Co-Host 1 Landowner Workshop in 2030	June 30, 2030

Activity 3: Driftless Habitat Guides

Activity Budget: \$73,500

Activity Description:

Based on the data analysis completed through the ARU and telemetry studies, Audubon will develop a habitat management guidebook centered on managing for Bobwhite Quail and Cerulean Warblers. This guidebook is intended for private and public land managers and will be available on the Audubon website and in printed form. Audubon’s science and field staff will collaborate to write the guidebook and will coordinate with our communications associate to design and publish. Once the guidebook has been published, Audubon will incorporate recommendations into the 2030 landowner workshop and will provide hard copies to attendees. Additionally, Audubon will partner with Trout Unlimited to assist with updating the Trout Unlimited Nongame Wildlife Habitat Guide for the Driftless ecoregion, which was originally published in 2009. Trout Unlimited will lead the online update over the project period, while Audubon will provide additional management recommendations for Bobwhite and Cerulean Warblers as data analysis is concluded. Once finalized, the Nongame Wildlife Habitat Guide will be published online and printed.

Activity Milestones:

Description	Approximate Completion Date
Drafting and Designing Bobwhite/Cerulean Warbler Habitat Management Guidebook	December 31, 2029
Finalize, Post Online, and Print Habitat Management Guidebook.	May 31, 2030
Update, Post Online, and Print Nongame Wildlife Habitat Guide for Driftless Ecoregion.	May 31, 2030

Project Partners and Collaborators

Name	Organization	Role	Receiving Funds
Sara Strassman	Trout Unlimited	Workshop and Habitat Management Guidebook Partner	Yes
MN DNR Division of Fish and Wildlife	MN DNR	Telemetry Study Partner	No
Minnesota Zoo Conservation Department	Minnesota Zoo	Telemetry Study Partner	No
Zachary Glaunert	Pheasants Forever - Quail Forever	Workshop Partner	No

Dissemination

Describe your plans for dissemination, presentation, documentation, or sharing of data, results, samples, physical collections, and other products and how they will follow ENRTF Acknowledgement Requirements and Guidelines.

There will be three means of dissemination of the focal species data analysis and habitat association information and at each stage Audubon will ensure that ENRT acknowledgements will follow standard requirements and guidelines. The three stages of dissemination of the habitat management recommendations will include:

1. Educational workshops and field tours on sites that highlight what these habitats should look like and introduce the best practices for management.
2. Publications through a new guidebook and Trout Unlimited's updated Nongame Wildlife Habitat Guide detailing the habitat types of the Driftless region that are supporting Cerulean Warbler and Northern Bobwhite and land management strategies.
3. Assist partners to establish localized cooperative management groups to support large scale habitat improvements aligned with management recommendations outlined in project published guidebooks.

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 study will inform future habitat management action within the Driftless to support Bobwhite and Warbler populations, therefore, Audubon's next steps will include prioritizing technical and financial assistance to land managers across the region to meet the identified habitat conservation goals. Technical assistance will be a key conservation action provided by Audubon ecologists by developing habitat management plans alongside land managers, which will identify necessary management practices and financial assistance opportunities to aid implementation. To accomplish this, Audubon will continue to build collaborative approaches to seek additional financial support through regional and state funding.

Other ENRTF Appropriations Awarded in the Last Six Years

Name	Appropriation	Amount Awarded
Mapping Migratory Pitstops in Minnesota	M.L. 2023, , Chp. 60, Art. 2, Sec. 2, Subd. 03c	\$340,000
Conservation Grazing for Birds, Beef, and Better Soil	M.L. 2024, , Chp. 83, Art. , Sec. 2, Subd. 08f	\$342,000

Surveying Minnesota's Secretive Marsh Birds	M.L. 2025, First Special Session, Chp. 1, Art. 2, Sec. 2, Subd. 03g	\$413,000
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Project Manager and Organization Qualifications

Project Manager Name: Dale Gentry

Job Title: Director of Conservation

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

Dr. Dale Gentry is the Director of Conservation for Audubon Upper Mississippi River, overseeing avian conservation and science initiatives across Minnesota, Iowa, and Missouri. Dale’s 25 years of experience in avian ecology and conservation include roles as professor at the University of Northwestern – Saint Paul, where he chaired the biology department and conducted research on woodpeckers and their role in controlling invasive emerald ash borers. He was also field science faculty at the Graduate Program of the Teton Science Schools in Grand Teton National Park. Dale’s graduate work focused on the breeding biology of songbirds and the keystone role of cavity-nesting birds in post-fire pine ecosystems.

Organization: Audubon Upper Mississippi River

Organization Description:

Audubon Upper Mississippi River is the regional office of the National Audubon Society serving Minnesota, Iowa, and Missouri. Our mission is to protect birds and the places they need, today and tomorrow. We are a dedicated team of conservation, education, policy, and engagement professionals committed to addressing the greatest stressors to birds and their habitats.

Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineligible	% Benefits	# FTE	Classified Staff?	\$ Amount
Personnel								
Range Ecologist		Coordination and implementation of ARU/telemetry study, workshops, and contributing to driftless habitat management guides.			27%	0.45		\$43,000
Senior Conservation Manager		Manage Range Ecologist, coordinate ARU/telemetry studies, and contribute to driftless habitat management guides.			27%	0.15		\$22,500
Director of Conservation		Manage staff, coordinate and plan ARU/telemetry studies, and contribute to driftless habitat guides.			27%	0.15		\$26,700
Science Associate		ARU data analysis			27%	0.45		\$39,500
Senior Manager, Qualitative Science		ARU study design and data analysis			27%	0.15		\$21,000
Grant Specialist		Grant management			27%	0.21		\$26,000
Communications Associate		Event outreach and designing driftless region habitat guide.			27%	0.3		\$29,100
GIS Specialist		ARU study design and habitat analysis			27%	0.3		\$30,050
							Sub Total	\$237,850
Contracts and Services								
Trout Unlimited	Subaward	210 hours in the TU subcontract. 2.8% effort: Driftless Engagement Specialist, prep for & attend workshops 2.8% effort: Driftless Area Director, oversee project & convene nongame workgroup 2.8% effort: Stream Restoration Specialist, work with partners/contractors to update blueprints for new guide 1%% effort: TU Communications for publication support.				28.2		\$13,000
							Sub Total	\$13,000
Equipment, Tools, and Supplies								

	Equipment	Autonomous Recording Units and Accessories	Monitoring Cerulean Warbler local populations and occupancy across project area.						\$29,000
	Equipment	Telemetry Study Equipment	Equipment for telemetry study for Northern Bobwhite Quail winter survival and distribution analysis.						\$52,000
								Sub Total	\$81,000
Capital Equipment									
								Sub Total	-
Acquisitions and Stewardship									
								Sub Total	-
Travel In Minnesota									
	Miles/ Meals/ Lodging	Approximately 50 roundtrips for 4 staff members, 6 car rentals, rental car gasoline, and travel meals.	Roundtrip travel to study sites for equipment deployment and collection over two study years, roundtrip travel for 3 workshops + related partner meetings within the Driftless region.						\$6,500
	Conference Registration Miles/ Meals/ Lodging	2 people to attend 2 instate conferences.	Conference registration and booth expenses to conferences that align with project study goals, subject matter learning, and partner networking.						\$2,700
								Sub Total	\$9,200
Travel Outside Minnesota									
								Sub Total	-
Printing and Publication									
	Printing	Printing 150 copies of the Driftless Habitat Management Guidebook.	To communicate the outcomes from the Cerulean Warbler ARU and Northern Bobwhite Quail telemetry studies, Audubon will develop and design a Driftless Region-specific						\$4,500

			habitat management guidebook outlining the study's conclusions. Audubon expects that each booklet (150 units) will cost \$30 each.					
	Printing	Trout Unlimited Nongame Habitat Management Guide	Updating and printing TU Nongame Habitat Management Guide for distribution to landowners and land managers. Costs would cover CAD designer to do typical designs, and illustrator for guidebook images/layout. 100 copies of 70 page booklet, approximately \$12/booklet.					\$10,000
							Sub Total	\$14,500
Other Expenses								
		Landowner and Land Manager Workshops	Co-hosting 3 workshops/field tours to guide habitat management for driftless region species on private and public lands. These all day events will offer catering, speaker honorariums, room rental, event promotion, and printed materials for attendees.					\$9,450
							Sub Total	\$9,450
							Grand Total	\$365,000

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				
In-Kind	Minnesota Department of Natural Resources	Minnesota DNR's Farmland Wildlife Research Supervisor Nicole Davros and Resident Gamebird Consultant Roy Churchwell will each provide 100 hours of in-kind support for this project for each of three years, for a value of \$19,644 and \$17,751, respectively. Both Dr. Davros and Dr. Churchwell will provide feedback on study design and methodologies and provide editorial reviews of proposals, reports, and publications as requested. Minnesota DNR will also provide support to the project via the loaning of equipment, including two automated radiotelemetry towers, 2 VHF telemetry receivers, a vehicle telemetry mount, and banding kits and equipment (e.g., Pesola scales, wing rules). The value of this equipment is estimated at \$25,000, and Dr. Davros will take lead in gathering this equipment as it is housed at the Farmland Wildlife Populations and Research Group in Madelia.	Potential	\$62,395
			State Sub Total	\$62,395
Non-State				
In-Kind	Audubon UMR	Staff in-kind match from Range Ecologist and Senior Conservation Manager	Secured	\$36,826
In-Kind	Trout Unlimited	Trout Unlimited will be providing in-kind match in the form of habitat guide printing (\$5,000), staff salary for coordinating workshops (\$10,000), travel (\$500), and indirect costs (15%, \$2,825).	Potential	\$17,825
In-Kind	Audubon UMR	Administrative costs, utilities, and other expenses associated with implementation of project activities.	Potential	\$9,387
			Non State Sub Total	\$64,038
			Funds Total	\$126,433

Total Project Cost: \$491,433

This amount accurately reflects total project cost?

Yes

Attachments

Required Attachments

Visual Component

File: [99735688-ab8.pdf](#)

Alternate Text for Visual Component

Audubon UMR's Visual Component provides outline of project purposed, budget, and key deliverables....

Financial Capacity

Title	File
Audited Financial Statements and Uniform Guidance Report	5d6c816d-ac0.pdf
NAS Audited Statement	0c900c78-48c.pdf
National Audubon Society 990	be279122-238.pdf

Board Resolution or Letter

Title	File
Audubon UMR Board Resolution Letter	d0886b0c-7a9.pdf

Supplemental Attachments

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

Title	File
PF/QF Support Letter	29efaaa7-686.pdf
Trout Unlimited Letter of Support	f22bccf8-588.pdf
Minnesota Zoo Support Letter	dd58c7a3-6fb.pdf
MN DNR Partner Letter	5f2b5637-65a.pdf

Administrative Use

Does your project include restoration or acquisition of land rights?

No

Do you understand that travel expenses are only approved if they follow the "Commissioner's Plan" promulgated by the Commissioner of Management of Budget or, for University of Minnesota projects, the University of Minnesota plan?

Yes, I understand the Commissioner's Plan applies.

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:

Sarah Hewitt, Audubon UMR

Do you understand that a named service contract does not constitute a funder-designated subrecipient or approval of a sole-source contract? In other words, a service contract entity is only approved if it has been selected according to the contracting rules identified in state law and policy for organizations that receive ENRTF funds through direct appropriations, or in the DNR's reimbursement manual for non-state organizations. These rules may include competitive bidding and prevailing wage requirements

N/A