



## Environment and Natural Resources Trust Fund

### 2022 Request for Proposal

#### General Information

**Proposal ID:** 2022-066

**Proposal Title:** Expanding Access to Wildlife Learning Bird by Bird

#### Project Manager Information

**Name:** Alison Cariveau

**Organization:** MN DNR - Ecological and Water Resources Division

**Office Telephone:** (651) 259-5149

**Email:** alison.cariveau@state.mn.us

#### Project Basic Information

**Project Summary:** Bird by Bird engages young people in wildlife conservation with three approaches:

1. Bird watching in schools,
2. Young adult outdoor leadership training,
3. Neighborhood bird walks inspiring community engagement.

**Funds Requested:** \$276,000

**Proposed Project Completion:** June 30 2025

**LCCMR Funding Category:** Environmental Education (C)

#### Project Location

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

Region(s): Metro

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

Region(s): Metro

**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.**

Experiences in nature provide enduring physical and emotional health benefits, as reflected in numerous initiatives for getting outside and nature prescription. Unfortunately, many people do not have regular opportunities to connect with nature, and the demographics of Minnesotans enjoying the outdoors and choosing natural resources careers do not reflect the racial and ethnic diversity in our communities. Trends in Minnesota indicate that population growth is greatest in urban areas, and populations of color are projected to make up one-third of our population by 2053, yet in a recent survey of State Park visitors only 5% of respondents identified as non-white.

Nature is especially important for young people. Repeated exposure during childhood can have lasting positive effects on academic achievement, environmental stewardship, and career choice as adults. College students from underrepresented groups have reported that lack of access to nature as youth and lack of representative role models are barriers to entering natural resources fields. Educational programs rooted in local place-based learning can engage young people in conservation, serve as a bridge between underrepresented communities and nature, enhance representation in environmental careers, and provide multigenerational opportunities for students and their families to enjoy nature and develop a community-based conservation ethic.

**What is your proposed solution to the problem or opportunity discussed above? i.e. What are you seeking funding to do? You will be asked to expand on this in Activities and Milestones.**

The DNR Nongame Wildlife Program, in broad partnership (including US Fish and Wildlife Service, Audubon Chapter of Minneapolis, additional partners) proposes a new program, Bird by Bird, that integrates environmental education and leadership training for young Minnesotans. The Program will engage diverse demographics currently underrepresented in natural resources through three activities:

1. Students at 10 schools underserved in environmental education will engage in active learning; caring for bird feeders, learning about bird ecology, and entering scientific data into a community science program like eBird. Bird by Bird Volunteers will visit classes to teach bird identification, highlight conservation issues, and lead birding walks. Students will also participate in field trips to view birds up close at metro natural areas.
2. Young adults will gain leadership experience and exposure to natural resource professions through a Birding and Outdoor Leadership Development (BOLD) project. BOLD Leaders, recruited from underrepresented communities, will receive mentorship, training, and stipends to co-lead community events.
3. Community Bird Walks led by Bird by Bird Volunteers and BOLD Leaders will provide outdoor experiences for families near participating schools. These free educational programs in neighborhood parks and open spaces will be promoted through community centers such as schools, churches, and YMCAs.

**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?**

Students, teachers, and families will actively learn about Minnesota birds and their conservation issues. An estimated 500 students and 10 teachers will participate in experiential learning throughout the year, increasing their environmental literacy and preparing these youth to become caring stewards of our natural resources.

Through the BOLD mentorship project 10-20 young adults will gain invaluable leadership experience that may spark interest in pursuing natural resource careers and ultimately increase representation in our state's conservation workforce.

An estimated 50 families will engage in bird watching in their neighborhoods, increasing their knowledge of wildlife, environmental, and natural resource conservation issues.

## Activities and Milestones

### Activity 1: Bird by Bird Classrooms: Birdwatching at School

**Activity Budget:** \$179,558

**Activity Description:**

Students in grades 5 – 8 at 10 schools identified as underserved in natural resource education will engage in active learning to increase knowledge of wild birds and enhance understanding of biodiversity and a healthy environment. Bird feeding stations at schools provide on-site bird watching opportunities, with an option to plant a wildlife garden. Students will care for bird feeders, observe and identify birds, and enter data into a community science program (such as Cornell's Feeder Watch or eBird).

Bird by Bird Volunteers will visit classes 3-5 times per year to assist in active learning, including bird walks around schools. Volunteers will be selected from an applicant pool, screened, and trained. Teachers will receive training in lesson plans and educational materials that meet Minnesota Academic Standards and drawing from existing curricula, such as FlyingWild. Students and teachers will learn about conservation issues affecting birds, identification of birds by sight and sound, and collection of scientific data.

Each student will receive a pair of binoculars and field guide to use throughout the school year. Students will also participate in at least one special field trip to view birds up close, at one of several bird-banding stations or nearby nature centers.

**Activity Milestones:**

Description	Completion Date
3 or more meetings of the Advisory Team comprised of community partner organizations	June 30 2023
Select curricula, prepare materials, and plan training sessions for teachers, students, volunteers, and BOLD participants	June 30 2023
Recruitment, application reviews, screening, and selection of Bird by Bird Volunteers and Mentors	June 30 2023
5 schools engaged and ready to begin programming	September 30 2023
5 additional schools (for a total of 10 active schools) engaged and ready to begin programming	September 30 2024

### Activity 2: Birding and Outdoor Leadership Development (BOLD) Mentoring Project

**Activity Budget:** \$57,207

**Activity Description:**

We will engage 10-20 high school students or first year graduates who are curious about natural resources, outdoor leadership, or environmental stewardship to participate in a Birding and Outdoor Leadership Development (BOLD) Project, with focused recruitment in communities underrepresented in the conservation field.

BOLD young adults will work with Bird by Bird Mentors who will be selected from an applicant pool by the Advisory Team or its designees, screened, and trained. BOLD participants will learn about bird conservation and identification through lectures, study materials, and several birdwatching trips.

BOLD young adult leaders will gain experience and skills co-leading Bird by Bird sessions with their mentors and other BOLD Leaders. BOLD participants will co-lead community bird walks, co-host other bird-related outreach event, and teach students in Bird by Bird Classrooms if schedules permit.

BOLD participants will be provided with binoculars, bird field guides, and transportation stipends. BOLD Leaders will

receive teaching stipends when leading field trips or classroom sessions as acknowledgement of their acquired skill and time.

BOLD offers invaluable experience to young adults that may spark their interest in pursuing natural resource careers and ultimately may increase representation in our state's natural resource workforce.

**Activity Milestones:**

Description	Completion Date
10 BOLD participants are selected	June 30 2023
10 BOLD participants receive initial training and mentorship	September 30 2023
10 BOLD leaders co-lead at least two school or community bird events each (20 events)	September 30 2024
10 BOLD leaders co-lead at least two school or community bird events each (20 events)	June 30 2025

### Activity 3: Community Bird Walks

**Activity Budget:** \$39,235

**Activity Description:**

Bird by Bird Volunteers, Mentors, and BOLD Leaders will lead bird watching opportunities for communities, focused primarily in diverse neighborhoods around participating schools. These free, family-friendly walks will take place in local places, such as city or county parks. Place-based experiences in neighborhoods underscore the accessibility of nature even within our urban communities.

Binoculars will be provided for participants. Alternative activities such as watching a bald eagle or osprey nest may be added. For younger participants, activities such as coloring, scavenger hunts, and interactive games may also be incorporated. Information in non-English languages will be provided as opportunity presents. Events will be announced and promoted through community centers such as schools, churches, libraries, and YMCAs.

Leadership by BOLD young adults provides a unique opportunity for 'near-peer' mentoring (where the mentor and mentee are from similar backgrounds and relatively close in age), which can create meaningful relationships and lasting benefits. Multi-generational programming enhances well-being for all and promotes a sense of shared community.

When families engage in bird watching in their neighborhoods, they gain health benefits from being outdoors, while also increasing environmental literacy and inspiring our youth to become caring stewards of our natural resources.

**Activity Milestones:**

Description	Completion Date
10 community bird watching walks	September 30 2024
An additional 10 community bird walks (for a total of 20)	June 30 2025

## Project Partners and Collaborators

Name	Organization	Role	Receiving Funds
Tom Cooper	United States Fish and Wildlife Service	USFWS Region 3 Migratory Bird Program and Minnesota Valley National Wildlife Refuge have been working to increase and diversify participation in wildlife viewing and education in the metro area. The USFWS will support the program by providing Bird by Bird Volunteers and collaborating on bird walks and community programming.	No
Katie Burns and Irene Bueno Padilla	Audubon Chapter of Minneapolis	Audubon Chapter of Minneapolis (ACM) will support this program by sharing educational resources and providing volunteers for classroom and young adult mentoring. This program aligns with the ACM mission that includes engaging our diverse community in bird-related activities and their emphasis on engaging youth in community outreach and education.	No
Jennifer Vieth	Carpenter Nature Center	Carpenter Nature Center will support this Program by serving on its Advisory Team, assisting with BOLD youth leader trainings, and hosting field trips for students to see birds in the hand up close at their bird-banding station. (Minimal fees to cover field trip programming are included within the budget.)	Yes
Hayley Ball	Urban Roots	Urban Roots will support the Bird By Bird Program by advising and collaborating on the Birding and Outdoor Leadership Development (BOLD) Program. Urban Roots has partnered with DNR on a highly successful youth employment program providing high quality job training internships to underserved youth in conservation, agriculture, and culinary arts.	No
Victoria Hall	The Raptor Center	The Raptor Center will actively support this Program by serving on the Advisory Team, assisting with BOLD program trainings, and hosting classroom experiences. The Raptor Center offers extensive experience with bringing educational ambassador birds and STEM based curricula into Minnesota classrooms in underserved communities.	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 be funded?**

We request three years of funding for the Bird by Bird Program to ensure a strong base is built with buy-in and support from partners that will enable long-term success. We anticipate that schools will value the Bird by Bird Classrooms, Volunteers, Mentors, and BOLD Leaders will value their relationships, and most materials will roll over from year to year. Once launched, this Program will be sustainable with minimal financial inputs for bussing, replacement supplies such as binoculars, and Program coordination time. If this initial Program is successful, DNR will work with partners to cover these costs in the future.

## Project Manager and Organization Qualifications

**Project Manager Name:** Alison Cariveau

**Job Title:** State Wildlife Grants Coordinator

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

Alison Cariveau works within the Nongame Wildlife Program managing more than \$1 million in State Wildlife Grants and leading initiatives to prioritize, track, and report conservation activities under Minnesota's Wildlife Action Plan. Alison has a M.S. in Wildlife Biology from the University of Montana and a B.A. in Biological Anthropology from the University of California, San Diego. She has a diversity of professional work experiences including Director of Research at Bird Conservancy of the Rockies, Science Coordinator for Monarch Joint Venture, Marshbird Survey Volunteer Coordinator at

Audubon Minnesota, Business Specialist at Rutgers University, as well as numerous field positions. Trained as an avian ecologist, Alison has conducted numerous bird studies, led bird walks, conducted bird-banding, and trained volunteers for citizen science programs. She has eight peer-reviewed scientific publications. Alison has a strong background in grant writing, grants management, and execution of grant-funded projects. For this project, she will serve in an advisory role and provide administrative oversight.

**Organization:** MN DNR - Ecological and Water Resources Division

**Organization Description:**

The mission of the Minnesota Department of Natural Resources (DNR) is to work with Minnesotans to conserve and manage the state's natural resources, to provide outdoor recreation opportunities, and to provide for commercial uses of natural resources in a way that creates a sustainable quality of life. One of seven DNR divisions, Ecological and Water Resources (EWR) works towards its vision of healthy lands and waters throughout Minnesota. Within EWR, the Nongame Wildlife Program will lead this project. The Nongame Wildlife Program maintains and enhance the state's diversity of wildlife by protecting and managing crucial habitats, conducting scientific research to better understand Minnesota's wildlife species and the ecosystems that sustain them, and forging connections between Minnesotans and native wildlife through engagement and education.

## Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineligible	% Benefits	# FTE	Classified Staff?	\$ Amount
<b>Personnel</b>								
Coordinator		Coordinates Program and all participants: schools, volunteers, mentors, BOLD leaders, sets up trainings, plans for school visits and community events			25%	1.5		\$150,000
							<b>Sub Total</b>	<b>\$150,000</b>
<b>Contracts and Services</b>								
Bird-banding or Bird-demonstrations (Nature Center or equivalent)	Professional or Technical Service Contract	Bird-banding Expertise and Facility for Field Trips - To use facilities and for avian expert to lead the events (estimated at \$200/event, 15 field trips)				0		\$3,000
							<b>Sub Total</b>	<b>\$3,000</b>
<b>Equipment, Tools, and Supplies</b>								
	Tools and Supplies	Binoculars	for 10 participating schools estimate 30 students plus 2 teachers per classroom (\$190/ea. *320 pair)					\$60,800
	Tools and Supplies	Field guide books	book on bird identification to be distributed 17 per participating classroom (1 per pair of students for 30 students per class plus 2 for teachers; \$16/book*170 books)					\$2,720
	Tools and Supplies	Bird feeders	Feeders to hang at participating schools for observation (\$30/feeder*2 feeders/ school)					\$600
	Tools and Supplies	Bird Feeder Hangers	To hang the bird feeders at the schools: shepard's hooks or other suitable bird feeder poles, attachments (\$35/pole*10)					\$350
	Tools and Supplies	Bird baths	Water source important for birds; One bird bath or water supply per school,					\$500



			heated if electric is available (\$50/bath*10)					
	Tools and Supplies	Bird seed	Direct to school supplied bird seed for feeders (\$500 per year per school; 5 schools in Year 2, 10 schools in Year 3)					\$7,500
	Tools and Supplies	Native plants	Native plants for wildlife for bird feeding areas at schools lacking sufficient native plants to attract birds					\$3,000
	Tools and Supplies	BOLD Leader supplies	BOLD leaders (10): one pair of binoculars (\$200), field guide (\$16), and natural history guides or apps (\$22.50)					\$2,295
	Tools and Supplies	Community Bird Walk kit	For use in Community bird walks, 2 kits of each: 5 pairs of binoculars (\$200 each) and 5 field guides (\$16 each)					\$2,060
	Tools and Supplies	Community event supplies	Event supplies such as learning activity materials (\$50/event *30 events)					\$1,500
							<b>Sub Total</b>	<b>\$81,325</b>
<b>Capital Expenditures</b>								
							<b>Sub Total</b>	-
<b>Acquisitions and Stewardship</b>								
							<b>Sub Total</b>	-
<b>Travel In Minnesota</b>								
	Miles/ Meals/ Lodging	Travel stipend for Volunteers to participate in school classroom sessions, field trips, BOLD mentoring sessions, or community events (\$0.56/mile*50 miles roundtrip*4 trips per year*5 schools in Year 2 and 10 schools in Year 3)	Travel for Volunteers for Class Visits, Field Trips, and Community Events					\$2,100
	Other	Bus trip for field trips to bring students to nature center for banding and hands on experience (\$500/bus*2 busses per school; one trip year per school, 5 schools in Year 2 and 10 schools in Year 3)	Bussing to field trips					\$15,000

	Miles/ Meals/ Lodging	Coordinator in-state travel to schools, advisory team meetings, trainings, community events, and field trips (\$0.56/mile*50 miles/trip*30 trips/yr*3 yrs)/ trip*20 trips)	Travel for Coordinator to schools, meetings, trainings, and community events					\$2,520
	Miles/ Meals/ Lodging	Travel stipend to cover transportation costs for BOLD young adult leaders to get to and from community events and/or school teaching sessions (\$30/ trip *4 trips*10 participants*2 years)	Travel for BOLD young adult leaders					\$2,400
							<b>Sub Total</b>	<b>\$22,020</b>
<b>Travel Outside Minnesota</b>								
							<b>Sub Total</b>	<b>-</b>
<b>Printing and Publication</b>								
	Printing	Community bird walk and Community event flyers and educational materials (\$80/event * 30 events)	To announce and invite people to neighborhood community bird walks and other community events					\$2,400
							<b>Sub Total</b>	<b>\$2,400</b>
<b>Other Expenses</b>								
		Training workshop including venue rental, avian expert speakers, hands-on birding sessions (two in each of years 2 and 3 for \$400 each)	Training for Volunteers, BOLD participants, and Teachers					\$1,600
		Leading Community bird walks and/or Classroom sessions (\$30 per bird walk, 3 per leader per year, 10 leaders for two years)	Stipend for BOLD young adult leaders					\$1,800
		MN DNR Direct and Necessary Costs	D&N calculation: People support (\$2,496), Safety support (\$387), Financial support (\$3,342), Communication support (\$1,311), IT support (\$5,311), Planning support (\$1,008)					\$13,855
							<b>Sub Total</b>	<b>\$17,255</b>
							<b>Grand Total</b>	<b>\$276,000</b>

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
<b>State</b>				
Cash	Nongame Wildlife Fund - donations	Salary for the Program coordinator position (1 FTE for 3 years) will be cost-shared 1:1 with Nongame Wildlife Fund donations.	Secured	\$150,000
In-Kind	Nongame Wildlife Fund	Staff time to supervise and guide the Program, including participation on the Advisory Team, serving as classroom volunteers or mentors and expenses such as computer equipment	Secured	\$20,000
			<b>State Sub Total</b>	<b>\$170,000</b>
<b>Non-State</b>				
In-Kind	Federal State Wildlife Grants	Staff time to supervise and guide the Program, including participation on the Advisory Team, serving as classroom volunteers or mentors	Secured	\$10,000
			<b>Non State Sub Total</b>	<b>\$10,000</b>
			<b>Funds Total</b>	<b>\$180,000</b>

## Attachments

### Required Attachments

#### *Visual Component*

File: [77dc58e5-dd4.pdf](#)

#### *Alternate Text for Visual Component*

The Bird by Bird Program acknowledges that nature is healthy for mind and body, yet not everyone has access to true wilderness. Bird by Bird operates in three areas: 1) In Schools, students in Bird by Bird Classrooms learn about and care for birds at school. 2) In Leadership, young adults develop experience and skills co-leading bird programs. 3) In Community, exposure to nature has lasting benefits and opens the door to new career opportunities....

### Optional Attachments

#### *Support Letter or Other*

Title	File
Support Letter from Audubon Chapter of Minneapolis	<a href="#">b4c6f7f1-839.pdf</a>
Support Letter from The Raptor Center	<a href="#">bf471664-272.pdf</a>
Support Letter from Urban Roots	<a href="#">017633d9-02e.pdf</a>
Support Letter from U. S. Fish and Wildlife Service	<a href="#">f7e12800-4a7.pdf</a>
Support Letter from Carpenter Nature Center	<a href="#">9430c279-314.pdf</a>

## Administrative Use

**Does your project include restoration or acquisition of land rights?**

No

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

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

# Bird by Bird



Nature is healthy for mind and body, yet not everyone has access to true wilderness.

## Schools



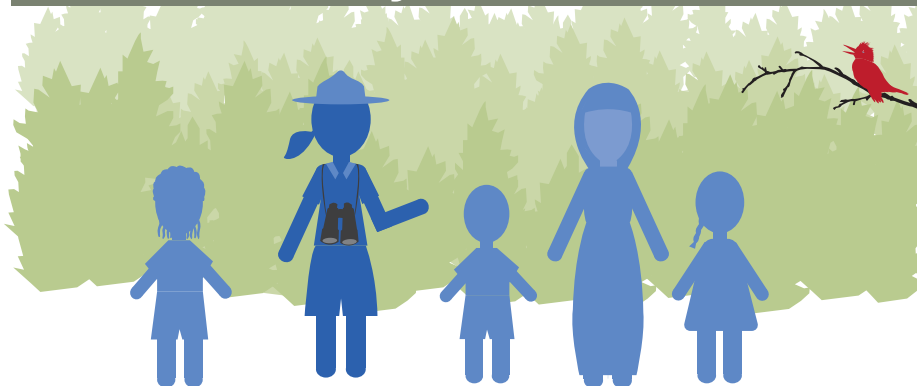
Students in Bird by Bird classrooms learn about and care for birds at school.

## Leadership



Young adults develop experience and skills co-leading bird programs.

## Community



Exposure to nature has lasting benefits and opens the door to new career opportunities.