

Environment and Natural Resources Trust Fund

2021 Request for Proposal

General Information

Proposal ID: 2021-386

Proposal Title: Bird Academy: Conservation for Kids

Project Manager Information

Name: Katie Burns Organization: Audubon Minnesota Office Telephone: (605) 321-6171 Email: katie.burns@audubon.org

Project Basic Information

Project Summary: Bridge achievement gaps in public schools by providing equitable access to natural resource science education, focused on bird conservation; in-classroom lessons will transition to outdoor activities

Funds Requested: \$291,000

Proposed Project Completion: 2023-06-30

LCCMR Funding Category: Environmental Education (C)

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.

In 2019, the Cornell Lab of Ornithology released a peer-reviewed study that found bird populations have recently seen steep declines. For example, grassland bird populations have declined by more than 50 percent and migratory bird populations have declined by nearly 30 percent since 1970. Black Terns, Prothonotary Warblers, Bobolinks, Sharp-tailed Grouse, and Red-headed Woodpeckers are all examples of birds that have faced conservation threats such as significant habitat loss in Minnesota and many have suffered steep population declines.

Last fall, the National Audubon Society released a report called Survival by Degrees: 389 Bird Species on the Brink, which models the next 80 years as we see more fires, floods, droughts, and other extreme climate events. At the same time, many schools have cut valuable programming such as natural resources education due to economic struggles. Our kids are spending more and more time on screens and less time outside.

We know that birds respond well to targeted, well-researched conservation efforts and that today's youth will be the community leaders and natural resource managers of tomorrow. Our future leaders will need to be educated and equipped to make informed decisions about environmental conservation needs.

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.

Audubon is dedicated to inspiring positive change through our programming for birds and people. We will make programming available to all school districts, to ensure equitable access to these programs, and provide additional support for schools that desire a higher level of engagement. Providing equitable access to conservation-focused education ensures that no matter where students go to school and no matter their socioeconomic standing, they will be connected to local wildlife and natural resources.

Audubon is a leader in engaging students through experiential learning and its educational programming is a costeffective way to offer specialized learning not readily available in the general curriculum. Birds live alongside people in every community in the world and students have a natural curiosity to learn about recognizable wildlife they see every day. Students are motivated by this curiosity and it leads to a deeper and more effective learning experience, where students may otherwise struggle to learn when feeling disconnected from the curriculum topic.

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?

Audubon Minnesota will engage at least 10,000 students in conservation-focused education programming beginning in fall 2021; running through spring 2023. Programming will take place inside the classroom and, when possible, will transition outdoors where students will be encouraged to ask and answer their own scientific questions about the environment. Programming will enable students to learn and practice scientific investigation, which is key to understanding science content and process. Students will be challenged to take what they learned and apply their observation skills to develop questions, formulate thoughtful explanations based on their investigations, and communicate solutions to local conservation challenges.

Activities and Milestones

Activity 1: Engage at least 10,000 students in conservation focused environmental education in the classroom and outdoors

Activity Budget: \$275,000

Activity Description:

Identify and partner with schools and education centers throughout the state to bring Audubon Minnesota's conservation focused environmental education programming to their young learners. Audubon has had success utilizing a compilation of curriculum, materials, and resources including Flying WILD from the Council for Environmental Education and the BirdSleuth program from Cornell Lab of Ornithology. Using these tried and true tools, Audubon will tailor a program that guides students in science learning where students will learn about local conservation issues and formulate their own solutions that will benefit bird species facing conservation threats, Minnesota communities, and whole ecosystems. Programming will take place in the classroom and transition outdoors.

-- Develop list of target schools and education centers throughout the state in July 2021

-- Outreach to schools and education centers throughout the state will begin in September 2021 and continue through spring 2023

-- Programming to begin as early as fall 2021 and run through spring 2023

-- 45-90 min in-person programs facilitated in public school classrooms, libraries, nature centers, and state parks throughout the state reaching 10,000 students

Activity Milestones:

Description	Completion
	Date
Develop prioritized list of potential partner schools and education centers throughout state	2021-09-30
Pre- and post- evaluations administered to student participants to assess knowledge base and gains	2023-05-31
Pre- and post-evaluations administered to teachers	2023-05-31
10,000 Minnesotan students engaged in conservation focused programming	2023-05-31
Outreach to schools and education centers; scheduling programming	2023-05-31

Activity 2: Survey student knowledge and compile to measure project success; disseminate results and project summary

Activity Budget: \$16,000

Activity Description:

The Audubon outreach team will work with teachers to administer pre- and post- program evaluations with students to determine their comprehension of the bird conservation lessons delivered through this project. Lesson planning will directly contribute to students' science learning experience. Through use of evaluation technology, Audubon will collect and measure data reflecting changes in knowledge, attitudes, and comprehension. Data from the evaluations will be pivotal for determining program success and evaluating teaching methods. Audubon's outreach team will assess the evaluation data in summer 2022, after the spring 2022 school year has ended, in order to determine if any changes should be made to programming that will improve the student learning experience.

Throughout the project implementation, data will be compiled and analyzed. At the end of this grant, Audubon will

develop an online report of a compiled data summary, teacher feedback, and highlighted student responses and insights. The report will be hosted on mn.audubon.org, source content for social media posts, and will be shared with teacher associations, school administrators, Minnesota media outlets, and natural resource organizations and agencies.

Activity Milestones:

Description	Completion	
	Date	
Develop database for inputting project information and reports	2021-10-31	
Populate database with information gathered from project implementation	2023-05-31	
Use evaluation technology to measure student understanding and knowledge	2023-05-31	
Distribute project report with relevant partners, nonprofits, media outlets, and agencies	2023-06-30	
Synthesize and summarize information into an online report	2023-06-30	

Project Partners and Collaborators

Name	Organization	Role	Receiving Funds
Education Partners	MN public schools, libraries, nature centers, and state parks	Administrators, program coordinators, and educators will be key in scheduling programs	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?

Audubon Minnesota's education programming has always been a pillar of our conservation work. For the last forty years, every project and program related to outreach and education has been evaluated and improved according to successes and challenges. Audubon's on-going education efforts will be greatly informed by implementing Bird Academy and we will incorporate any lessons learned. Audubon will update curriculum as necessary and continue to develop innovative ways to engage Minnesota students through private fundraising and state and federal grants, as needed and appropriate.

Other ENRTF Appropriations Awarded in the Last Six Years

Name	Appropriation	Amount
		Awarded
Implementing Conservation Plans for Avian Species of	M.L. 2019, First Special Session, Chp. 4, Art. 2, Sec. 2,	\$124,000
Concern	Subd. 03k	
Maximize Value of Water Impoundments to Wildlife	M.L. 2017, Chp. 96, Sec. 2, Subd. 06f	\$195,000
Local Planning and Implementation Efforts for Bird	M.L. 2017, Chp. 96, Sec. 2, Subd. 05e	\$280,000
Habitat		
Minnesota Breeding Bird Atlas - Final Phase	M.L. 2014, Chp. 226, Sec. 2, Subd. 05f	\$300,000
Controlling Reed Canary Grass to Regenerate	M.L. 2016, Chp. 186, Sec. 2, Subd. 08e	\$218,000
Floodplain Forest		
Creating a Statewide Wetland Bird Survey	M.L. 2015, Chp. 76, Sec. 2, Subd. 03f	\$146,000

Project Manager and Organization Qualifications

Project Manager Name: Katie Burns

Job Title: Outreach Manager

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

Katie Burns joined Audubon Minnesota five years ago and she is equipped with a unique skillset that combines extensive knowledge of Minnesota bird conservation, science education, and school curriculum requirements. Her leadership in education and outreach supports Audubon's mission through school and community engagement activities and events, focusing on environmental education, conservation and restoration of the ecosystems. Audubon Minnesota's Outreach program offers businesses, schools, community groups, and individuals with opportunities to make a difference and support Audubon's initiatives in a variety of ways. Over the course of her career Katie has worked directly with dozens of schools and thousands of students.

Katie came to Audubon with more than 6 years of experience in environmental education from The Raptor Center at the University of Minnesota. She has experience in event planning, project development and volunteer program management in the nonprofit sector. Katie enjoyed 6 years of conservation and population medicine field research working with local, state, and federal agencies with project focus on grassland bird species distribution and habitat preference in South Dakota, flying squirrel and elk population studies in the Black Hills of South Dakota, and surveillance studies for avian influenza and Newcastle disease in migrating waterfowl throughout the upper Midwest.

In addition to her impressive professional qualifications, Katie is also an avid outdoorswoman. Katie enjoys cooking wild game recipes, ice fishing, birding throughout the country, riding her horse, trail running, nature photography, camping, and essentially any activity that gets her outside. These experiences not only ground Katie's conservation ethic, but they also provide Katie with fascinating stories that she employs when engaging students to pique their curiosity.

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 state 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.

During the past decade, we have augmented youth-focused education programs to work with thousands of students, teachers and community leaders each year to expand bird-focused conservation and clean water activities. Students have been inspired by Audubon's clean water work to restore prairies, create art murals, understand why the Mississippi River is a point of pride for their cities, and much more.

Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineli gible	% Bene fits	# FTE	Class ified Staff?	\$ Amount
Personnel								
Outreach & Education Manager		Program manager: Lead program implementation, school coordination, manage database, manage reporting			100%	2		\$164,000
Outreach Educator		Education staff: Work directly with schools, project implementation, reporting			100%	2		\$96,000
							Sub Total	\$260,000
Contracts and Services								
							Sub Total	-
Equipment, Tools, and Supplies								
	Tools and Supplies	Student survey technology	Before and after programming, administer student knowledge and understanding					\$6,500
							Sub Total	\$6,500
Capital Expenditures								
							Sub Total	-
Acquisitions and Stewardship								
							Sub Total	-
Travel In Minnesota								
	Miles/ Meals/ Lodging	Statewide travel to school, both rural and urban, for (2) staff implementing project plan	\$4,750/year for (2) full-time program staff: Mileage @\$.58/mile x 25,000 mi. (Total: \$14,500 or \$250/year) - Hotel stays @ \$100/night (average), not					\$19,500

			exceeding state rate at each location. (25 nights/year, x2 years = \$5,000)		
				Sub Total	\$19,500
Travel Outside Minnesota					
				Sub Total	-
Printing and Publication					
	Printing	Booklets and learning materials	Printing for handouts and conservation-related educational materials; 10,000 handouts @ \$.30 each (\$3,000); \$1000/year educational materials (\$2,000)		\$5,000
				Sub Total	\$5,000
Other Expenses					
				Sub Total	-
				Grand Total	\$291,000

Classified Staff or Generally Ineligible Expenses

Category/N	ame 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				
Cash	Beim Foundation	Student educational programming - funds limited to seven-county Twin Cities Greater Metro Area; results pending May 2020	Potential	\$24,000
			Non State	\$24,000
			Sub Total	
			Funds	\$24,000
			Total	

Attachments

Required Attachments

Visual Component File: <u>7474c3ef-662.pdf</u>

Alternate Text for Visual Component

Audubon Minnesota handout describing the program; photos of students served by educational programming included.

Financial Capacity File: <u>a124265c-38e.pdf</u>

Optional Attachments

Support Letter or Other

Title	File
Bird Academy-Board Support Letter	<u>0d1b59b2-c2a.pdf</u>

Administrative Use

Does your project include restoration or acquisition of land rights? No

Does your project have patent, royalties, or revenue potential?

No

Does your project include research?

No

Does the organization have a fiscal agent for this project?

No

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Urgency: Last year, a peer-reviewed study from the Cornell Lab of Ornithology found that bird populations have recently seen steep declines. For example, grassland birds have declined by more than 50 percent and migratory bird populations have declined by nearly 30 percent since 1970.

Bird Academy: Conservation for Kids

Project Title: Bird Academy: Conservation for Kids Project Manager: Katie Burns, Outreach Coordinator Project Organization: Audubon Minnesota

Today's youth will be the community leaders and natural resource managers of tomorrow. These future leaders will need to be educated and equipped to make informed decisions about conservation needs.

Bird Academy, an Audubon Minnesota program, will take place inside the classroom and, when possible, will transition outdoors. Students will be encouraged to explore their connection to natural resources and science.

Students will take what they learn and communicate solutions to local conservation challenges and they will gain a greater understanding of how their community benefits from conservation efforts.

In collaboration with public schools and other education centers, Audubon Minnesota will engage at least 10,000 students statewide in conservation-focused education programming during this twoyear project.

Bird Academy: Conservation for Kids



Studies show that students are motivated by curiosity and it leads to a deeper and more effective learning experience. Birds live alongside people in every community in the world and students have a natural curiosity to learn about recognizable wildlife they see every day.

Capacity and Readiness – Audubon is a leader in engaging students through experiential learning and its educational programming is a cost-effective way to offer specialized learning not readily-available in the general curriculum. Audubon program staff are equipped with the knowledge and ability to reach schools across the state.

Statewide Impact - Audubon Minnesota will engage at least 10,000 students statewide in conservation-focused education programming beginning from 2021 - 2023.

Equity - We will make programming available to all school districts, to ensure equitable access to these programs, and provide additional support for schools that desire a higher level of engagement.

Scientific Basis – Black Terns, Prothonotary Warblers, Bobolinks, Sharp-tailed Grouse, and Red-headed Woodpeckers are all examples of birds that have faced conservation threats such as significant habitat loss in Minnesota and many have suffered steep population declines.



Photo above: A young student holds prairie grass seeds in her hand. Through Audubon's work, she learned about bluebird migration and how beneficial priairie plants support birds, pollinators, and other wildlife.

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