Environment and Natural Resources Trust Fund 2020 Request for Proposals (RFP)

Project Title: ENRTF ID: 246-FH
Management Strategies to Benefit Minnesota's Forests and Birds
Category: H. Proposals seeking \$200,000 or less in funding
Sub-Category: F. Methods to Protect, Restore, and Enhance Land, Water, and Habitat
Total Project Budget: \$ 196.518
Proposed Project Time Period for the Funding Requested: June 30, 2023 (3 vrs)
Summary:
Engage landowners in forest stewardship and encourage sustainably harvested forest products through the development and promotion of a guide and interactive web application on forestry methods that enhance bird -habitat.
Name: Michael Lynch
Sponsoring Organization: Forest Stewards Guild
Job Title:
Department:
Address: 20164 586th Lane
Mankato MN 56001
Telephone Number:
Email _mike@forestguild.org
Web Address: www.forestguild.org
Location:
Region: Central, Northwest, Northeast

County Name: Aitkin, Beltrami, Carlton, Cass, Clearwater, Cook, Crow Wing, Hubbard, Itasca, Kanabec, Koochiching, Lake, Lake of the Woods, Mille Lacs, Pine, St. Louis

City / Township:

Alternate Text for Visual:

Connection between the tools this project would develop, the practices that would be implemented, and the resulting wildlife habitat, forest products, and a strengthened interest in land stewardship.

Funding Priorities Multiple Benefits	OutcomesKnowledge Base
Extent of Impact Innovation	Scientific/Tech Basis Urgency
Capacity ReadinessLeverage	TOTAL%

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PROJECT TITLE: Management Strategies to Benefit Minnesota's Forests and Birds

I. PROJECT STATEMENT

- + 6.5 million acres of private family forestlands in Minnesota.
- + 81% of private landowners identify wildlife as a primary reason for owning forest lands.
- + 62% of landowners would like to use forest management to improve wildlife habitat; however, only 21% of forestland owners have undertaken forest management in the past 20 years.
- There is an important need to synthesize the existing research on how forest management can benefit wildlife and provide this information to professional forest managers and private land owners to maximize the benefits of sustainable forest management in Minnesota.

For this project, the Forest Stewards Guild (FSG), American Bird Conservancy (ABC), and Natural Resources Research Institute (NRRI) will synthesize data to develop and promote a suite of data-driven forest management techniques and communication tools that: 1) Enhance forest bird habitat, 2) Engage woodland owners in forest stewardship, and 3) Help ensure a sustainable future for Minnesota's forests and associated forest products.

Forest management focuses increasingly on the maintenance of biodiversity, compared to a historic emphasis on timber production alone. This is especially true for many of the state's non-industrial private forestland owners, who decide what happens on roughly 37% of Minnesota's forests. Many of these landowners view their forestlands primarily as habitat for game and non-game wildlife. A variety of management recommendations exist for enhancing game species habitat, but there is an enormous opportunity to increase non-game species habitat through forest management. Currently, there is a lack of data-driven management methodology and tools to communicate with the growing audience of landowners focused on birds and other non-game wildlife. Because Minnesota's forests provide critical habitat for over 100 species of migratory and resident birds, the development of science-based forest stewardship guidelines is essential to ensuring these species' long-term viability.

II. PROJECT ACTIVITIES AND OUTCOMES

Activity 1: Synthesize existing data to develop forest management techniques that BUDGET: \$41,098 improve forest bird habitat.

Description: The project team will analyze large-scale datasets collected over many years by NRRI, including the Breeding Bird Atlas and a 24-year monitoring program on Minnesota's forest bird habitat using classification and regression trees to assess the influence of cover type, succession, and forest management on bird species and communities.

Outcome	Completion Date
1. Existing forest bird data leads to the identification of science-based forest management	Fall 2021
recommendations that can improve habitat for Minnesota's forest birds.	

Activity 2: Develop tools to effectively communicate information.

Description: Based on the data analyzed in Activity 1, the project team will develop tools that will aid in the visualization of outcomes and allow for easy exploration and comparison of multiple management options. Two primary tools will help disseminate information:

1) Web Application: We will develop a web application to make the classification and regression tree model outputs useable and interactive. This tool will serve as a digital forest bird habitat assessment and scenario

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BUDGET: \$101,328



Environment and Natural Resources Trust Fund (ENRTF) 2020 Main Proposal Template

generator. Specifically, the application will allow users to input the current and potential future primary cover type and size class to see the predicted bird species point-count abundance under each scenario. This web application will help users visualize and communicate the impacts of changing cover and succession. It will also allow for easy exploration and comparison of multiple management options.

Field Guides: Field guides will be developed and printed to articulate how these forest management techniques can be implemented in Minnesota's major forest types.

The web application and printed guides will be issued free of charge to users.

Outcome	Completion Date	
1. Develop and host web application.	Summer 2022	
2. Develop and print field guides.	Summer 2022	

Activity 3: Train practitioners at workshops and demonstration sites.

BUDGET: \$54,092 **Description:** The project team will host 6 full-day training workshops using classroom and field-based learning to educate at least 80 practitioners in forest management methods that enhance forest bird habitat. We plan to work directly with some private land owners, but view training professional forestry practitioners who will then interact with hundreds of private landowners through outreach and client relationships as the best way to amplify the impact of this project. We will follow the "Forestry for Birds" model of outreach that has been highly effective in other states at promoting forest stewardship and enhancing bird habitat while adding to the production of local forest products. We will establish 6 demonstration sites to support the field-based learning component and conduct bird surveys to ground-truth avian response to the silvicultural treatments.

Outcome	Completion Date
1. Identify 6 forest management demonstration sites to be used for outreach training.	Fall 2020
2. Conduct bird surveys at silvicultural treatment demonstration sites.	Spring 2023
3. Conduct a minimum of four training workshops targeted at land managers and two	Summer 2023
workshops aimed at private woodland owners.	

III. PROJECT PARTNERS AND COLLABORATORS:

A. Partners receiving ENRTF funding

Name	Title	Affiliation	Role
Michael Lynch	Lake States Projects Coordinator	Forest Stewards Guild	Project Co-coordinator
Shawn Graff	Great Lakes Region Director	American Bird Conservancy	Project Co-coordinator
Alexis Grinde	Wildlife Ecologist	Natural Resouces Research Institute	Project Co-coordinator

IV. LONG-TERM IMPLEMENTATION AND FUNDING: The American Bird Conservancy (ABC) has made a commitment to the Great Lakes Region and has successfully secured multi-year grants from the Natural Resources Conservation Service, Minnesota Outdoor Heritage Fund, and National Fish & Wildlife Foundation to undertake forest management activities that support the habitat needs of threatened and endangered birds. These grants are not directly related to the proposed project but laid a strong foundation for the proposed work. This project also builds off the collaborative work the Forest Stewards Guild (FSG) has undertaken in developing "Forestry for the Birds" programs in several other states using a variety of funding sources over the past decade. It also builds off the Natural Resources Research Institute's long-standing reputation as a resource for bird expertise and natural resource management-driven research. The printed materials and trained practitioners resulting from this project will not require continued funding to have a long-lasting impact after the grant period. However, ABC and FSG are developing a fundraising strategy that identifies additional partners and potential funders to promote implementation of the information developed in this project. Additionally, FSG has made a commitment to the ongoing maintenance and web hosting of the online application.

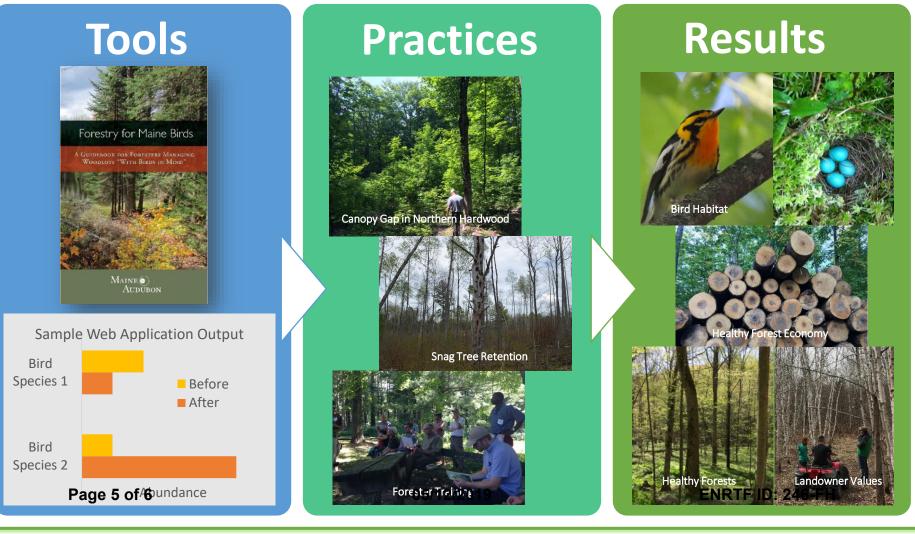
Attachment A: Project Budget Spreadsheet Environment and Natural Resources Trust Fund M.L. 2020 Budget Spreadsheet Legal Citation: Project Manager: Michael Lynch Project Title: Forest Management Techniques to Maintain Minnesota's Breeding Birds Organization: Forest Stewards Guild Project Budget: \$196,518 Project Length and Completion Date: June 2023



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Management Strategies to Benefit Minnesota's Forests and Birds

- Synthesize existing data to develop **tools** that connect forest managers and landowners with science-based **silviculture** techniques to enhance forest bird habitat
- Connect timber management and wildlife habitat objectives
- Train foresters and woodland owners to see forest bird habitat opportunities



Project Management Qualifications:

About the Forest Stewards Guild:

Since its founding in 1995, the Forest Stewards Guild has worked to promote ecologically, economically, and socially responsible forestry as a means of sustaining the integrity of forest ecosystems and the human communities dependent upon them. We have professional members from California to Maine and operate programs throughout the United States. The FSG and our members understand the value of good silvicultural recommendations and have been involved with the development of several successful 'Forestry for the Birds' projects throughout the county. We have the experience, resources, and capacity to deliver a similar project in Minnesota that enhances migratory songbird habitat, engages woodland owners in forest stewardship, and helps ensure a sustainable future for Minnesota's forests and associated forest products. More information can be found at: www.forestguild.org

The Forest Stewards Guild's Administrative Headquarters is: 2019 Galisteo St., Santa Fe, NM 87505

About the Michael Lynch:

Michael Lynch is the Lake States Projects Coordinator for the Forest Stewards Guild and will be the project manager and content co-developer for this project. Michael holds a B.A. from Gustavus Adolphus College with majors in Biology and Environmental Studies and a M.S. in Biological Integration from the University of Minnesota. Prior to working for the Forest Stewards Guild, Michael worked with the MN DNR, WI DNR, Minnesota Forest Resources Council, Sugarloaf: The North Shore Stewardship Association, and the USDA Forest Service. Throughout his career as a natural resources professional, Michael has worked at the intersection of ecological, economic, and social concerns related to natural resources and developed a variety of integrated solutions that balance these multifaceted resource needs. Michael has coordinated the development of several publications in the region and lead numerous training workshops. Michael will be supported by the FSG national staff as needs and skills merit.

Michael is based at our Minnesota Field Office in Mankato, Minnesota and can be contacted at (608)449-0647 or <u>mike@forestguild.org</u>