

**Environment and Natural Resources Trust Fund  
2019 Request for Proposals (RFP)**

---

**Project Title:**

**ENRTF ID: 015-A**

Minnesotas Imperiled Bats - Protecting the Survivors

---

**Category:** A. Foundational Natural Resource Data and Information

**Sub-Category:**

---

**Total Project Budget: \$** 208,331

**Proposed Project Time Period for the Funding Requested:** June 30, 2021 (2 yrs)

**Summary:**

Winter and summer roost sites, supporting bat species that have been impacted by White-nose Syndrome, will be inventoried and evaluated for their importance to bats surviving WNS.

---

**Name:** Gerda Nordquist

**Sponsoring Organization:** MN DNR

**Title:** MBS Animal Survey Supervisor

**Department:** Ecological and Water Resources

**Address:** 500 Lafayette Road, Box 25

St. Paul MN 5515-4025

**Telephone Number:** (651) 259-5124

**Email** gerda.nordquist@state.mn.us

**Web Address**

---

**Location**

**Region:** Statewide

**County Name:** Statewide

**City / Township:**

---

**Alternate Text for Visual:**

Project title, objectives, photos: evaluate critical hibernation roosts, identify important roost (natural and artificial), engage the public, respond to bat reports. Minnesota's bats need our help to fight WNS.

<input type="checkbox"/>	Funding Priorities	<input type="checkbox"/>	Multiple Benefits	<input type="checkbox"/>	Outcomes	<input type="checkbox"/>	Knowledge Base
<input type="checkbox"/>	Extent of Impact	<input type="checkbox"/>	Innovation	<input type="checkbox"/>	Scientific/Tech Basis	<input type="checkbox"/>	Urgency
<input type="checkbox"/>	Capacity	<input type="checkbox"/>	Readiness	<input type="checkbox"/>	Leverage	<input type="checkbox"/>	TOTAL <input type="checkbox"/> %
<input type="checkbox"/> If under \$200,000, waive presentation?							



**PROJECT TITLE: Minnesota's Imperiled Bats – Protecting the Survivors**

**I. PROJECT STATEMENT**

Minnesota's hibernating bats are fighting for their survival. During winter 2017-2018, bat declines of 70% and 90% were documented in two of our most important hibernacula. Our bats are succumbing to the effects of White-nose Syndrome (WNS) – a devastating disease responsible for the deaths of millions of bats in eastern North America.

Despite intensive efforts to develop a cure for this disease, no treatment has been shown effective in preventing infection by WNS. However, limited evidence suggests that some bats can survive the disease. We can help them by protecting critical habitats, both summer and winter roosts.

Bats are infected at their winter roosts. Survival over the critical winter period depends on protecting bats from unnecessary disturbance. Many winter roosts have not been surveyed in over 30 years. We propose to inventory known hibernacula and identify sites that should be protected or are suitable for employing promising treatments against WNS.

Summer roosts provide winter survivors a chance to recover from the effects of WNS. Locating and protecting important summer bat roosts, especially those used by pregnant females, will support a new generation of bats -- perhaps some resistant to the effects of WNS. Most summer roosts are unknown or have not been evaluated for bat occupancy. We propose to inventory artificial roosts, beginning with those on public lands, and to revisit natural roost sites identified by the Minnesota Biological Survey and those located through ENTRF ML2015. *Endangered Bats, White-nose Syndrome, and Forest Habitat* study.

Minnesotans care about bats and are eager to help. More than 3,000 citizens attended the first Minnesota Bat Festival in August 2017. Citizens continue to provide important information on sick bats and bat colonies to the DNR's Bat Observation Report. We propose to develop outreach and educational opportunities where the public can participate in bat conservation activities.

**II. PROJECT ACTIVITIES AND OUTCOMES [Total request \$208,331 for 2 years]**

**Activity 1: Evaluate winter hibernation roosts for WNS-impacted bats**

Survey bat use of known hibernacula/winter roosts and prioritize sites for protection and/or for application of promising treatments against WNS.

**ENRTF BUDGET: \$77,124**

Outcome	Completion Date
1. Conduct winter assessments of bats in hibernacula	April 2021
2. Develop, implement monitoring of important sites	Ongoing
3. Compile and enter information	June 2021
4. Work with land owners/managers to protect bats during winter	June 2021



**Environment and Natural Resources Trust Fund (ENRTF)**  
**2019 Main Proposal**

**Activity 2: Identify and evaluate summer bat roosts**

Identify and evaluate bat use of natural and artificial summer roosts.

**ENRTF BUDGET: \$89,692**

Outcome	Completion Date
1. Identify, compile and evaluate artificial bat roosts.	June 2021
2. Revisit and evaluate known natural roosts	June 2021
3. Compile and enter information	June 2021
4. Collaborate with land owners/manager to annually monitor roost occupancy	June 2021

**Activity 3: Outreach and education about WNS and Minnesota's bats**

**ENRTF BUDGET: \$41,515**

Outcome	Completion Date
1. Maintain and enhance MNDNR WNS website	June 2021
2. Respond to public reports of sick bats and bat colonies	June 2021
3. Provide presentations and outreach events about bats and WNS	June 2021

**III. PROJECT PARTNERS:**

**A. Partners receiving ENRTF funding**

Name	Title	Affiliation	Role

**B. Partners NOT receiving ENRTF funding**

Name	Title	Affiliation	Role

**IV. LONG-TERM- IMPLEMENTATION AND FUNDING:**

The results of this project can stand alone as an updated inventory and assessment of seasonal bat roost sites. The inventory can also serve as a post-WNS baseline for long-term monitoring of bat population recovery and the effectiveness of protection efforts and treatment trials.

**V. TIME LINE REQUIREMENTS:**

The project intends to complete assessments of important seasonal roost sites by the end of the 2-year timeframe. By the end of the grant period, we anticipate having roost count estimates for the most important locations, comparison with past counts, and recommendations for future monitoring of these sites.

**VI. SEE ADDITIONAL PROPOSAL COMPONENTS:**

**A. Proposal Budget Spreadsheet**

**B. Visual Component or Map**

C. Parcel List Spreadsheet – N/A

D. Acquisition, Easements, and Restoration Requirements – N/A

E. Research Addendum (not required at proposal stage) – N/A

**F. Project Manager Qualifications and Organization Description**

G. Letter or Resolution – N/A

**H. Certified Audit or 990 Tax Information – N/A**

## 2019 Proposal Budget Spreadsheet

**Project Title: Minnesota's Imperiled Bats -- Protecting the Survivors**

### IV. TOTAL ENRTF REQUEST BUDGET -- 2 years

BUDGET ITEM	AMOUNT
<b>Personnel:</b> Bats Specialists (2) - 0.4 FTE each for 2 years (74% salaries/26% benefits) Zoology Data Manager - 0.15 FTE for 2 years (77% salaries/23% benefits) Graphics/Web Design Specialist - 0.05 FTE for 2 years (67% salaries/32% benefits)	\$ 122,878
<b>Professional/Technical/Service Contracts:</b>	\$ -
<b>Equipment/Tools/Supplies:</b> Equipment and supplies: hibernacula and summer roost assessment Equipment and supplies: bat netting and banding Equipment and supplies: acoustic surveillance and analysis Equipment and supplies: WNS protection and decontamination Equipment and supplies: preparation of educational materials	\$ 20,000
<b>Acquisition (Fee Title or Permanent Easements):</b>	N/A
<b>Travel:</b> Mileage and seasonal lease of MNDNR vehicles (estimate 10,000 miles) Lodging (estimate 80 motel-nights) Meals while in travel status (estimate 100 days)	\$ 50,000
<b>Additional Budget Items:</b> MNDNR Direct and Necessary Costs (\$15,453) pay for activities that are directly related to and necessary for accomplishing appropriated programs/projects. Direct and necessary costs cover HR support (~\$3,073), Safety Support (~\$637), Financial Support (~\$2,473), Communication Support (~\$1,251), IT Support (~\$6,960), and Planning Support (~\$1,059).	\$ 15,453
<b>TOTAL ENVIRONMENT AND NATURAL RESOURCES TRUST FUND \$ REQUEST =</b>	\$ 208,331

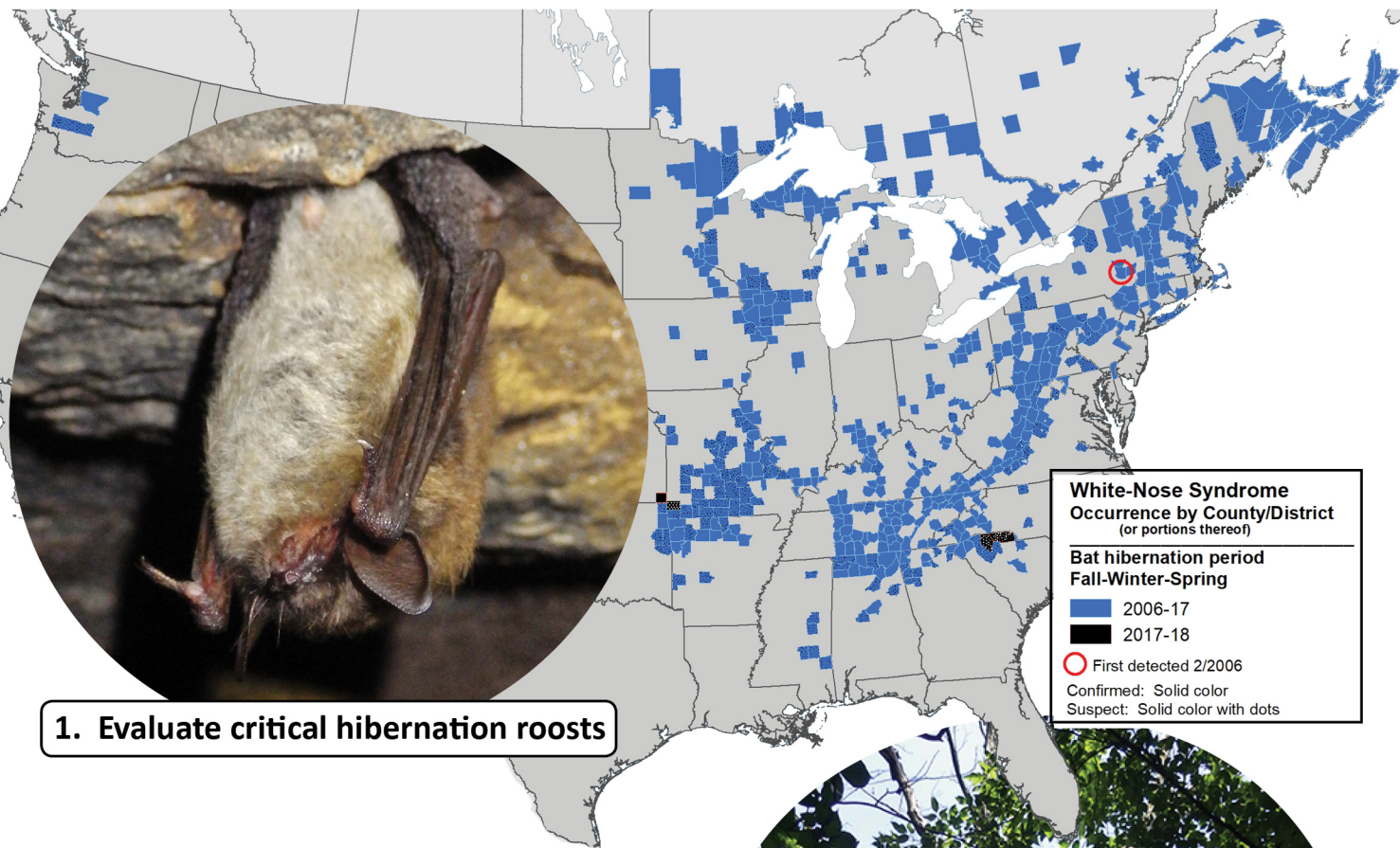
### V. OTHER FUNDS *(This entire section must be filled out. Do not delete rows. Indicate "N/A" if row is not applicable.)*

SOURCE OF FUNDS	AMOUNT	Status
<b>Other Non-State \$ To Be Applied To Project During Project Period:</b> USFWS Aid to States WNS Grant (will apply for)	\$ 20,000	<i>pending</i>
<b>Other State \$ To Be Applied To Project During Project Period:</b> Project Manager salary and expenses Field survey and interpretive assistance by MNDNR State Park Staff (salaries, equipment)	\$ 40,000	<i>secured</i>
<b>In-kind Services To Be Applied To Project During Project Period:</b>	N/A	
<b>Past and Current ENRTF Appropriation:</b>	N/A	
<b>Other Funding History:</b>	N/A	



# PROJECT TITLE: Minnesota's Imperiled Bats – Protecting the Survivors

## *Minnesota's Bats Need Our Help to Fight White-nose Syndrome*



1. Evaluate critical hibernation roosts

2. Identify important summer roosts (natural and artificial)



3. Engage the public, respond to bat reports



## **F. Project Manager Qualification and Organization Description**

Project Manager: Gerda Nordquist, Animal Survey Supervisor  
Affiliation: Department of Natural Resources, Minnesota Biological Survey  
Mailing Address: 500 Lafayette Road, Box 25, St. Paul, MN 55155-4025  
Work Phone: 651-259-5124  
Email: [gerda.nordquist@state.mn.us](mailto:gerda.nordquist@state.mn.us)

### Qualifications:

Gerda Nordquist has supervised animal surveys for the DNR's Minnesota Biological Survey since 1990 and has overseen the wild bee surveys since the beginning in 2013. The past and proposed bee surveys are the first statewide surveys to document bee species and their associated habitats in Minnesota. In her capacity as the Animal Survey Supervisor for the Minnesota Biological Survey, she has demonstrated her ability to manage budgets, direct staff, coordinate with partners and prepare project work plans, updates and final reports.

### Project Responsibilities:

Gerda Nordquist will provide overall project direction.

### Organization Description:

The Minnesota Biological Survey collects, interprets and provides biological data on native plants, native animals, native plant communities, and landscapes. The Minnesota Department of Natural Resources works with citizens 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.