

**Environment and Natural Resources Trust Fund (ENRTF)  
2010 Work Program**

**Date of Report:** December 14, 2009  
**Date of Next Status Report:** January 30, 2011  
**Date of Work program Approval:**  
**Project Completion Date:** June 30, 2012

**I. PROJECT TITLE: Minnesota Breeding Bird Atlas – NRRRI/U of MN**

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**Location:** Statewide

**Total Trust Fund Project Budget:** \$372,000

The total appropriation for this project will be split between Audubon Minnesota and the Natural Resources Research Institute at the University of Minnesota Duluth as outlined below. Audubon Minnesota will submit a separate workplan for their part of the project.

<b>To NRRI – U of Minnesota Duluth</b>	<b>Trust Fund Appropriation:</b>	\$	161,000
	<b>Minus Amount Spent:</b>	\$	0
	<b>Equal Balance:</b>	\$	161,000

<b>To Audubon Minnesota</b>	<b>Trust Fund Appropriation:</b>	\$	211,000
	<b>Minus Amount Spent:</b>	\$	0
	<b>Equal Balance:</b>	\$	211,000

**Legal Citation: M.L. 2010, Chap. 362, Sec. 2, Subd. 3(c)**

**Appropriation Language:**

\$372,000 is from the trust fund to continue development of a statewide survey of Minnesota breeding bird distribution and create related publications, including a book and online atlas with distribution maps and breeding status. Of this appropriation, \$211,000 is to the commissioner of natural resources for an agreement with Audubon Minnesota and \$161,000 is to the Board of Regents of the

University of Minnesota for the Natural Resources Research Institute. The atlas must be available for downloading on the Internet free of charge.

## **II. PROJECT SUMMARY AND RESULTS:**

The Minnesota Breeding Bird Atlas is a comprehensive, statewide survey of the breeding distribution of Minnesota's birds. Final products will include a book and on-line atlas, containing detailed distribution maps, data on species breeding status, and a summary of historical species information. Access to the information will be provided to the public as well as conservation agencies and organizations.

Years 3 and 4 of this six-year project will focus on data collection, review, and organization. Data will be collected at the Township level by volunteers recruited and trained by project staff and by paid, specially trained observers conducting limited, standardized point counts. Combined, these methods will provide the most complete picture to date of the overall distribution of all bird species as well as relative abundance estimates and detailed breeding habitat analysis for a majority of the breeding bird species of Minnesota. By the end of this work period we anticipate having some information from all Townships in the State including "hard-to-access" townships in the BWCA and the northern peatlands, and should have completed sampling in 75% of the Townships.

Data entry and access along with project updates and information will be handled through our website and the data management system we maintain with Cornell University. The appropriation will be split with \$211,000 going to Audubon Minnesota to oversee project results 1 – 3 and \$161,000 going to the Natural Resources Research

## **III. PROGRESS SUMMARY AS OF**

## **IV. OUTLINE OF PROJECT RESULTS:**

### **Result/Activity 1: Volunteer and Staff Training and Management**

Audubon Minnesota will oversee this Result using their portion of the appropriation. A separate workplan submitted by Audubon details this part of the effort.

### **Result/Activity 2: Data Collection**

Audubon Minnesota will oversee this Result using their portion of the appropriation. A separate workplan submitted by Audubon details this part of the effort. NRRI personnel with expertise in geographic information systems will participate in many aspects of this portion of the project, including interaction with the Cornell Laboratory of Ornithology on the data management system.

### **Result/Activity 3: Data Management and Analysis**

Audubon Minnesota will oversee this Result using their portion of the appropriation. A separate workplan submitted by Audubon details this part of the effort. NRRI personnel will continue to collaborate with Audubon and participate in coordination of

this effort.

**Result/Activity 4: Point Count Data Collection**

**Description:** This work will be overseen by the Natural Resources Research Institutes at the University of Minnesota-Duluth. Up to ten paid seasonal field surveyors, primarily graduate and undergraduate students will conduct counts in townships of Minnesota and the remote and hard-to-access areas of the state, including the Boundary Waters Canoe Area Wilderness (BWCAW) and the remote peatlands of Koochiching, Beltrami, and St. Louis Counties. By the end of year 4 approximately 80% of the point counts conducted by these specially trained seasonal staff will be completed for the entire state of Minnesota, including those in the BWCAW and other remote locations. A standard protocol has been developed and tested for the gathering of these data. These systematic counts will provide uniform and standardized distribution and abundance data on bird species across the entire state. We anticipate that some of these remote locations will require specialized travel such as the use of helicopters, boats, canoe, and extensive hiking in remote areas. These individuals will also gather data in the same fashion as the volunteers to supplement the data in all the townships, but especially in most of the remote, inaccessible townships where volunteers are unlikely to cover.

**Summary Budget Information for Result/Activity 4:**

**ENRTF Budget:** \$ 161,000  
**Amount Spent:** \$ 0  
**Balance:** \$ 161,000

<b>Deliverable/Outcome</b>	<b>Completion Date</b>	<b>Budget</b>
1. Data gathered for an additional 40 % of Minnesota townships or a total of 80 % over four years.	June 30, 2012	\$141,000
2. Data entered and error-checked for 60 % of Minnesota townships.	June 30, 2012	\$10,000
3. Preliminary tables and figures on the relative distribution and abundance of MN breeding birds.	June 30, 2012	\$10,000

**Result Status as of January 31, 2011:**  
**Result Status as of July 31, 2011:**  
**Result Status as of January 31, 2012:**  
**Final Report Summary:** August 1, 2012

**V. TOTAL ENRTF PROJECT BUDGET: \$372,000**

**Personnel:** \$ 222,700  
**Contracts:** \$ 61,000  
**Equipment/Tools/Supplies:** \$ 5,300  
**Travel:** \$ 83,000

**Explanation of Capital Expenditures Greater Than \$3,500:** We have requested \$40,000 in the budget for helicopter services (competitively bid) and \$6,000 for BWCAW outfitter services. These two items may be absolutely necessary in order to successfully and safely sample the large number of townships in Minnesota that are inaccessible by vehicle, boat, bike, or on foot. The summer of 2010 will be our first year in attempting to sample the inaccessible townships of Minnesota both in the BWCAW and in the Red Lake Peatland region. In the summer of 2010, we will attempt to do this without helicopters or the use of outfitters in order to save money and invest in more individuals to do the sampling. Depending on these results, we may request a modification to the budget. A consideration is the efficiency with which we can sample these inaccessible areas. Even though one individual was able to sample 3-4 townships per morning in areas with good road access, in these inaccessible areas our goal is to sample one township per morning. Hence, we will need to evaluate our efficiencies in cost per township of effort using different modes of transportation.

## **VI. PROJECT STRATEGY:**

### **A. Project Partners:**

Audubon Minnesota – Mark Martell, Project Manager, \$211,000

Natural Resources Research Institute – Univ. of MN Duluth – Gerald J. Niemi, \$161,000

### **Other Partners – Not receiving Funds**

Bell Museum of Natural History - Dr. Scott Lanyon

Minnesota DNR Division of Ecological Resources

U.S. Fish and Wildlife Service

Minnesota Ornithologists' Union

### **B. Project Impact and Long-term Strategy:**

The Minnesota Breeding Bird Atlas will provide the first time-specific survey of all the breeding birds in the state. This information will be available to land and resource managers, the public, and policy makers providing an invaluable resource as future events such as global warming require a response. Information can continue to be collected by partners and others providing a unique and robust view of Minnesota's birds.

### **C. Other Funds Proposed to be Spent during the Project Period: \$80,000**

Audubon Minnesota - \$20,000

Minnesota Ornithologists' Union - \$20,000

U.S. Fish and Wildlife Service - \$20,000

MN DNR - \$20,000

**D. Spending History:** LCCMR ML 2008 sub 5d - \$270,000, Audubon- \$30,000, USFWS- \$50,000, Minnesota Ornithologists' Union- \$20,000, MN DNR - \$20,000

**VII. DISSEMINATION:** Information will be available at: [www.mnbba.org](http://www.mnbba.org), at the end of the anticipated 6-year project we will publish a hardcover atlas.

**VIII. REPORTING REQUIREMENTS:** **Periodic work program progress reports will be submitted not later than:** January 31, 2011, July 31, 2011, January 31, 2012. **A final work program report and associated products will be submitted between June 30 and August 1, 2011 as requested by the LCCMR.**

**IX. RESEARCH PROJECTS:**

Attachment A: Budget Detail for 2010 Projects - Summary and a Budget page for each partner (if applicable)												
Project Title: Minnesota Breeding Bird Atlas												
Project Manager Name: Mark Martell												
Trust Fund Appropriation: \$ 372,000												
1) See list of non-eligible expenses, do not include any of these items in your budget sheet												
2) Remove any budget item lines not applicable												
2010 Trust Fund Budget	Result 1 Budget:	Amount Spent (date)	Balance (date)	Result 2 Budget:	Amount Spent (date)	Balance (date)	Result 3 Budget:	Amount Spent (date)	Balance (date)	TOTAL BUDGET	TOTAL BALANCE	
	Volunteer and Staff Training and Management			Data Collection			Data Management and Analysis					
<b>BUDGET ITEM</b>												
<b>PERSONNEL: wages and benefits</b>	\$49,567	\$0	\$49,567	\$49,567	\$0	\$49,567	\$49,566	\$0	\$49,566	\$148,700	\$148,700	
Project Manager (\$23,000 estimated) 16% FTE												
Program Coordinator (\$117,000 estimated), 100% FTE												
Administrative Support (\$8,700 estimated), 8% FTE												
<b>Contracts</b>												
<b>Professional/technical</b>												
Website Management and Update							\$4,000		\$4,000	\$4,000	\$4,000	
Data Management System (Cornell Lab of Ornithology)							\$5,000		\$5,000	\$5,000	\$5,000	
<b>Other contracts</b>												
Workshps/Meetings	\$5,000		\$5,000							\$5,000	\$5,000	
<b>Printing/Mailing</b>	\$3,500		\$3,500							\$3,500	\$3,500	
<b>Supplies</b>												
Field Supplies (maps, GPS units for volunteer surveyors)				\$2,800		\$2,800				\$2,800	\$2,800	
<b>Travel expenses in Minnesota</b>	\$3,500		\$3,500	\$38,500		\$38,500				\$42,000	\$42,000	
Staff Travel (\$7,000 est)										\$0	\$0	
Volunteer Travel (\$35,000 est)										\$0	\$0	
<b>COLUMN TOTAL</b>	<b>\$61,567</b>	<b>\$0</b>	<b>\$61,567</b>	<b>\$90,867</b>	<b>\$0</b>	<b>\$90,867</b>	<b>\$58,566</b>	<b>\$0</b>	<b>\$58,566</b>	<b>\$211,000</b>	<b>\$211,000</b>	