

**Environment and Natural Resources Trust Fund
2011-2012 Request for Proposals (RFP)**

LCCMR ID: 013-A1

Project Title: Golden Eagle Research Project

Category: A1. Natural Resource Data and Information: Collection

Total Project Budget: \$ \$93,050

Proposed Project Time Period for the Funding Requested: 3 yrs, July 2011 - June 2014

Other Non-State Funds: \$ 0

Summary:

The Golden Eagle Research Project aims to increase understanding of golden eagles in Minnesota by conducting surveys, tracking winter resident golden eagles and educating the public about golden eagles.

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Location

Region: SE

Ecological Section: Paleozoic Plateau (222L)

County Name: Dakota, Fillmore, Goodhue, Houston, Olmsted, Rice, Wabasha, Winona

City / Township: Southeast

_____ Funding Priorities	_____ Multiple Benefits	_____ Outcomes	_____ Knowledge Base
_____ Extent of Impact	_____ Innovation	_____ Scientific/Tech Basis	_____ Urgency
_____ Capacity Readiness	_____ Leverage	_____ Employment	_____ TOTAL _____%

GOLDEN EAGLE RESEARCH PROJECT

I. Project Statement



The Golden Eagle Research Project aims to better understand the numbers, distribution, habitats, habitat use, migration routes, breeding areas and management needs of the population of golden eagles in Minnesota and educate the public about golden eagles and their habitat needs.

The Golden Eagle Research Project represents ground breaking research on a bird that was not previously thought to be a regular inhabitant of Minnesota. Golden Eagles in North America are primarily found in the western United States and Canadian Provinces. There have been occasional reports of golden eagles from most counties in Minnesota. Hawk Ridge Bird Observatory in Duluth, Minnesota annually reports fall migration counts between 115 – 200 birds.

Surveys coordinated by the Golden Eagle Research Project have reported an apparently regular wintering population using the bluffland subsection of the Paleozoic Plateau in southeast Minnesota. Using satellite telemetry to track birds known to use Minnesota for their winter habitat, the project is discovering the range of this population of golden eagles, the location of breeding territories, the birds’ migration routes, and winter behavior of mated pairs.

Education and outreach to landowners, wildlife managers and the general public is an important component of the Golden Eagle Research Project. Through data collection, educational and conservation efforts, the project hopes to ensure that golden eagles can continue to find suitable winter habitat in Minnesota’s bluffland subsection.

II. Description of Project Activities

Annual Wintering Golden Eagle Survey

Budget: \$

The Golden Eagle Research Project conducts an annual Wintering Golden Eagle Survey. Since 2004, volunteer observers have recorded the consistent presence of golden eagles in Minnesota’s bluffland region. In conjunction with the Wintering Golden Eagle survey, Golden Eagle Research Project co-coordinator and National Eagle Center Education Director, Scott Mehus, offers classes and field trips throughout the winter to help participants learn to identify a golden eagle and see them in their natural environment. Ideally, areas adjacent to the current survey area would be added to include more of the likely wintering habitat for a more complete accounting of Minnesota’s winter resident golden eagles.

OUTCOME	Completion Date
Hire staff to offer Golden Eagle seminars and field trips and coordinate survey	November 2011
Collect golden eagle population data through the annual survey	On-going
Involve 500 people in 2011 Wintering Golden Eagle Survey, seminars and field trips	March 2012
Expand the Wintering Golden Eagle survey area to include likely golden eagle habitat in Houston, Fillmore and Olmstead counties	March 2012

Tracking

Budget (satellite costs, 4 transmitter costs) ...:\$

Researchers plan to release up to six golden eagles with radio tracking devices over the course of the three-plus year project. Already two birds are providing GPS data. The GPS satellite linked transmitters and the associated cost of receiving data from the satellite is the major cost of this part of the project.



OUTCOME	Completion Date
Obtain GPS satellite data from released golden eagles	On-going
Release at least one golden eagle with GPS satellite transmitter in each of the next two winters, up to four golden eagles	March 2013

Trapping

Budget:\$

Individuals or teams lure golden eagles, using traps that protect the health and safety of the bird, to attach the GPS satellite transmitter. Trapping involves significant preparation, equipment and driving time and requires items such as bow nets, blinds, padded leg hold traps, remotes. Compensation for time and mileage is a significant part of the budget for this activity.

OUTCOME	Completion Date
Trap up to four golden eagles known to use Minnesota's Paleozoic Plateau as wintering range	March 2013

Education and Outreach

Budget:\$

Through the National Eagle Center's public programs, the Golden Eagle Research project can reach up to 100,000 annual visitors and share important information about the presence of golden eagles in Minnesota. The Golden Eagle Research Project will continue to work with wildlife managers in the Minnesota Department of Natural Resources and the Upper Mississippi River National Wildlife and Fish Refuge, Winona District to involve these agencies and their personnel in educating the general public.

OUTCOME	Completion Date
Create video of each release of a golden eagle with GPS transmitter	March 2013
Create audio visual presentation and educational materials about golden eagles in Minnesota	March 2013
Educate up to 100,000 annual visitors to the National Eagle Center, Wabasha, MN about golden eagles and their habitat	On-going
Partner with MN DNR at Whitewater State Park and Whitewater State Wildlife Management Area to coordinate a portion of the Wintering Golden Eagle Survey	On-going
Offer at least 2 continuing education classes for area wildlife managers	March 2013
Offer at least 6 public presentations and educational programs at area parks and nature centers in Minnesota	March 2013

Conservation and Habitat Restoration

Budget:\$

The Golden Eagle Research Project encourages appropriate habitat conservation and restoration. The presence of remnant or restored bluff prairies is closely linked with the presence of wintering golden eagles in Minnesota. Conservation efforts related to bluff prairie habitat would have broad positive impacts for many of Minnesota's rare, threatened and endangered species.

OUTCOME	Completion Date
Create programs and educational materials targeted to area landowners to encourage appropriate habitat conservation and restoration	March 2013
Coordinate a habitat restoration project with landowners or wildlife managers	September 2013

III. Project Strategy

Project Team/Partners

The Golden Eagle Research Project is being conducted by the National Eagle Center in partnership with Audubon Minnesota. Project co-coordinators are Scott Mehus, Education Director at the National Eagle Center, Wabasha, MN and Mark Martell, Director of Bird Conservation with Audubon Minnesota. The Golden Eagle Research Project receives support, logistical and/or financial from Minnesota Department of Natural Resources, Wisconsin Department of Natural Resources, as well as the U. S. Fish and Wildlife Service, the Upper Mississippi River National Wildlife and Fish Refuge, Winona District and the Schmidt Foundation.

Timeline requirements

The Golden Eagle Research Project anticipates the trapping and release phase of the project to be three or more years. Data collection will continue five to seven years beyond release of a bird with a transmitter. The education and outreach portions would be on-going into the future, and be updated according to new data collected.

Long-Term Strategy and Future Funding Needs

The long term strategy for the Golden Eagle Research Project is to collect data from up to six golden eagles as they migrate to and from Minnesota as their winter habitat. Already two golden eagles have been providing GPS satellite data. Long-term costs will include satellite fees for receiving GPS coordinates for each bird. Education and outreach components of the project will be on-going.

2011-2012 Detailed Project Budget

IV. TOTAL TRUST FUND REQUEST BUDGET - 3 years

<u>BUDGET ITEM</u> (See list of Eligible & Non-Eligible Costs, p. 13)	<u>AMOUNT</u>
Personnel: Coordinator A(300 hours, July-March) Coordinator B (150 hours, July-March) Technicians (3, 300 hours each October-March) Outreach Provider (2, 100 hours each, year round) are hourly at a rate of \$15/hour, no benefits	Project Project Trapping Educational All positions \$ 23,000
Contracts: Satellite data provider fees \$2,200 each x 4 transmitters	ARGOS \$ 26,400
Equipment/Tools/Supplies: Wireless remote controlled bow nets - traps (7) Satellite transmitters (4) cameras (5) Talkies (3) Cross Country skis (2 pair)	RF GPS Trail Walkie Snowshoes (2 pair) \$ 22,280
Acquisition (Fee Title or Permanent Easements):	N/A
Travel: suitable trap sites and set-up sites (1000 miles/year) to and from trap sites (2000 miles/year) Survey routes and field trips (1200 miles/year) Educational outreach programs (1000 miles/year)	Scouting Travel \$ 10,230
Additional Budget Items: animal care and feeding (kennels, food) care for captured birds (hoods) educational publication (2500 4-color brochures) travelling educational display	Prey Equipment to Design and print Design and create \$ 11,140
TOTAL ENVIRONMENT & NATURAL RESOURCES TRUST FUND \$ REQUEST	\$ 93,050

V. OTHER FUNDS

<u>SOURCE OF FUNDS</u>	<u>AMOUNT</u>	<u>Status</u>
Other Non-State \$ Being Applied to Project During Project Period:	\$ -	
Other State \$ Being Applied to Project During Project Period:	\$ -	
In-kind Services During Project Period:	\$ -	
Remaining \$ from Current ENRTF Appropriation (if applicable):	\$ -	
Funding History: The Golden Eagle Research Project has been funded out the the National Eagle Center's general operating budget for the last three years. Two GPS satellite transmitters have been donated by Minnesota DNR. The National Eagle Center is unable to continue this funding without outside support.	\$50-60,000	

Project Manager Qualifications

Scott Mehus is the Education Director at the National Eagle Center in Wabasha Minnesota. Mehus' countless hours in the field have been integral in determining the regular presence of golden eagles in the Minnesota. In 2005, The National Eagle Center began the Wintering Golden Eagle Survey of the Bluffs and Coulee Region of the Upper Mississippi River Watershed to document the golden eagle population. With volunteer observers, Mehus has been able to expand the survey area significantly. In conjunction with the survey, The National Eagle Center offers classes and field trips to help participants learn to identify golden eagles, which are often confused with the similarly sized immature bald eagles.

Project Coordinator responsibilities for the Golden Eagle Research Project:

- Continue to lead and coordinate the Wintering Golden Eagle Survey of the Bluffs and Coulee Region of the Upper Mississippi River Watershed
- Share data and publish reports of the Wintering Golden Eagle Survey
- Recruit volunteers for the survey, including contacting state and local birding and falconry clubs
- Expand the coverage area of the Wintering Golden Eagle Survey of the Bluffs and Coulee Region of the Upper Mississippi River Watershed which would include pre-scouting for these areas
- Organize and direct staff and volunteers to gather observational data on habitat use and prey requirements of Golden Eagles
- Determine strategically prime trapping locations and to determine prey lure possibilities
- Create weekly driving routes for citizen scientists and researchers to traverse through Golden eagle habitat to observe and document wintering golden Eagle habits, behavior and habitat use.
- Locate most advantageous trapping sites
- Originate media contacts and media and press releases fro the Golden Eagle Research Project
- Develop material for The National Eagle Center's website and newsletter and for those agencies interested in such information
- Contact landowners in wintering Golden Eagle habitat and inform them about the project and try to get their involvement with observations and permission to property if it so pertains
- Create educational materials about golden eagles for landowners
- Develop outreach programs on Golden Eagles life history, wintering presence in the river valley and eventually on the results of the research that will be done by the participating agencies
- Create public displays about Golden Eagles for use at the National Eagle Center and other educational facilities

Organization description

The National Eagle Center (NEC) is a permanent interpretive center, focuses on the importance of the bald and golden eagle as an environmental success, cultural and national symbol and their relationship to veterans and active members of the United States of America Armed Forces. The NEC works to relay the history and the culture of the region, as it relates to the Bald Eagle and to its visitors, specifically with the indigenous peoples of the region.

The National Eagle Center's mission is to foster environmental stewardship and community sustainability through our outreach and educational programs which concentrate on Eagles and the Mississippi River watershed. To achieve these goals, the NEC delivers educational programs focused on eagle conservation, stewardship and ecology.

