

**REGION 3 ENDANGERED SPECIES
SECTION 6 GRANT PROPOSAL**

**Project Title: Wisconsin Endangered and
Threatened Species
Investigation**

**State: Wisconsin
Project No.: E-8-1**

TITLE: WISCONSIN PIPING PLOVER (*Charadrius melodus*) INVENTORY ON THE LAKE SUPERIOR SHORELINE AND AT CRITICAL HABITAT SITES.

YEARS OF PROJECT: 2009-2011

BACKGROUND: The Wisconsin Department of Natural Resources (WI DNR) has the legislative authority to manage all resident species of fish and wildlife as well as manage wild plants on public lands. The U.S. Fish and Wildlife Service (USFWS) acknowledged this authority and entered into an Endangered Species Cooperative Agreement for the management of all resident endangered and threatened fish or wildlife within the state on September 28, 1976 and for the management of all endangered and threatened species of plants within the state on October 1, 1981. The WI DNR has submitted annual reports on the activities carried out under the authorities granted by these Cooperative Agreements. Based upon these reports the USFWS has renewed the agreements. These cooperative Agreements also qualify WI DNR to be eligible to receive US Endangered Species Act, Section 6 funding. This Project is submitted for consideration for Section 6 funding under the most recent allocation process developed by USFWS Region 3 administration. The WI DNR has decided to fund a variety of work activities with the funding that was allocated to the state of Wisconsin. The USFWS Field Office in Green Bay was consulted during the development of this project.

NEED: In recent years, Piping Plovers have nested on Long Island and Outer Island in the Apostle Islands (Matteson 2007). Continuing surveys are needed to determine use by Plovers, and extensive monitoring of extant nest sites is critical to prevent human encroachment and ensure nesting success. Also, of the five designated Critical Habitats for Piping Plovers in WI only two (Long Island-Chequamegon Point and Seagull Bar) are regularly surveyed for use by plovers. The five critical habitat areas include the following as identified in the Federal Register (Vol. 66, No. 88, Monday 7, 2001): *Wisconsin Point* (Douglas County, Parkland USGS quadrangle map); *Long Island-Chequamegon Point* (Ashland County, Cedar USGS quadrangle map); *Western Michigan Island* (Ashland County, Michigan Island quadrangle map); *Seagull Bar* (Marinette County, Marinette East quadrangle map); *Point Beach State Forest* (Marinette County, Two Rivers quadrangle map). Surveys are needed at designated critical habitats in WI to determine presence/absence of breeding Piping Plovers, and to identify sites that may need further protection or management.

OBJECTIVES:

1. Monitor Piping Plover Designated Critical Habitat in WI for Breeding or Foraging Activity.
2. Determine Current Use of at Least 2 Extant Sites (and possibly more as identified during the breeding season) by Breeding Piping Plovers Through Weekly Field Surveys.
3. Protect any Sites Found to Have Nesting Activity (USFWS 1988) by Coordinating with Appropriate Land Management Agency(s)
4. Incorporate Site Characterizations and Inventory Findings into NHI databases.

EXPECTED RESULTS OR BENEFITS:

1. We will be able to describe thoroughly all federally designated critical habitat and document any plover breeding activity, especially at recently occupied sites at Long Island and Outer Island in the Apostle Islands, Lake Superior.
2. We will be able to identify all known nesting sites in the state.
3. All extant plover nesting sites will be protected.

APPROACH:

1. During the breeding season (mid May to mid July), all designated Critical Habitats will be surveyed by qualified individuals utilizing guidelines outlined in the Federal Recovery Plan (USFWS 1988) and methods described by Stucker and Cuthbert (2004). Nesting areas will be posted as off-limits to human traffic upon discovery of a nest with eggs, and nesting areas will be regularly monitored (no less than 4 days/week) throughout the breeding season from mid-May to late July. Nests with eggs will be protected by the installation of predator exclosures (each consisting of 4 corner posts and 15 m—50 ft—of 5x10 cm—2x 4 in—galvanized welded wire mesh, with clear 18-20 lb test monofilament line strung across the top at intervals of approximately 5-10 cm—2-4 cm—and monitored every 2 days from incubation through fledging or until fate of nest is determined (Rimmer and Deblinger 1990, Stucker and Cuthbert 2004). Chicks will be captured by hand, weighed, banded with one colored plastic leg band and one USFWS aluminum leg band. GPS location(s) of nest(s) will be recorded at time of exclosure installation, banding, or after plover family has moved from the immediate nesting area (Stucker and Cuthbert 2004).
2. As the state's Piping Plover breeding population continues to increase, surveys of critical habitat sites along Lakes Michigan and Superior may result in the discovery of additional nests. For example, if nesting Piping Plovers occur at Wisconsin Point on Lake Superior or at Seagull Bar on Lake Michigan, additional resources would be needed to monitor nesting pairs, protect nest sites, and educate/inform the public. Any additional resources needed during the project period to cover monitoring and protection of additional nests would result in an amendment to the project budget.
3. Surveys will be documented in databases maintained by the WI Natural Heritage Inventory Program and rare species occurrence data will be entered in WI NHI's BIOTICs database.

LOCATION: Much of the field work will occur on beaches in the Apostle Islands, Lake Superior, in Ashland County. Additional sites to be surveyed include Designated Critical Habitats along the Lake Michigan shoreline in Marinette and Manitowoc counties, and on Lake Superior in Douglas County.

ESTIMATED COST: FY08-09: \$16,000. FY09-10: \$24,000. FY10-11: \$24,000. Amount requested for each respective FY from Sec. 6: \$12,000, \$18,000, \$18,000.

PROJECT LEADER: Sumner Matteson, WI DNR Bureau of Endangered Resources, P.O. Box 7921, Madison, WI 53707, 608-266-1571; email: sumner.matteson@wisconsin.gov

LITERATURE CITED:

Matteson, S.W. 2007. Conservation of endangered, threatened, and nongame birds. Performance Rep., 1 July 2006 to 30 June 2007. Wis. Dep. Nat. Resour., Madison. 53 pp.

Rimmer, D.W. and R.D. Deblinger. 1990. Use of predator exclosure to protect Piping Plover nests. *Journal of Field Ornithology* 61(2): 217-223.

Stucker, J.H. and F.J. Cuthbert. 2004. Piping Plover breeding biology and management in the Great Lakes, 2004. A report submitted to East Lansing Field Office of the U.S. Fish and Wildlife Service, East Lansing, MI, and the Natural Heritage and Endangered Species Programs, Michigan Department of Natural Resources, Lansing, MI. 30 pp.

U.S. Fish and Wildlife Service. 1988. Great Lakes and Northern Great Plains Piping Plover recovery plan. U.S. Fish and Wildlife Services, Twin Cities, MN. 160 pp.

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Job Schedule: January 1, 2009 -December 31, 2009

<u>Activity</u>	<u>Total Cost</u>
JOB 1. Survey all five sites designated as Critical Habitat in WI for breeding Piping Plovers during May-July.	\$ 3,000.00
JOB 2. Monitor extant nest sites weekly (at least 4 days/week); post Piping Plover nesting areas as off-limits to human traffic; band all chicks; produce educational materials and educate/inform public about plovers.	\$12,500.00
JOB 3. Enter pertinent survey data into the WI Natural Heritage Inventory Program	\$ 500.00
GRAND TOTAL	\$ 16,000
FEDERAL SHARE	\$ 12,000
STATE SHARE	\$ 4,000

Job Schedule: January 1, 2010.-December 31, 2010

<u>Activity</u>	<u>Total Cost</u>
JOB 1. Survey all five sites designated as Critical Habitat in WI for breeding Piping Plovers during May-July.	\$ 4,000.00
JOB 2. Monitor extant nest sites weekly (at least 4 days/week); post Piping Plover nesting areas as off-limits to human traffic; band all chicks; produce educational materials and educate/inform public about plovers.	\$19,500.00
JOB 3. Enter pertinent survey data into the WI Natural Heritage Inventory Program	\$ 500.00
GRAND TOTAL	\$ 24,000
FEDERAL SHARE	\$ 18,000
STATE SHARE	\$ 6,000

Job Schedule: January 1, 2011 -December 31, 2011

<u>Activity</u>	<u>Total Cost</u>
JOB 1. Survey all five sites designated as Critical Habitat in WI for breeding Piping Plovers during May-July.	\$ 4,000.00
JOB 2. Monitor extant nest sites weekly (at least 4 days/week); post Piping Plover nesting areas as off-limits to human traffic; band all chicks; produce educational materials and educate/inform public about plovers.	\$19,500.00
JOB 3. Enter pertinent survey data into the WI Natural Heritage Inventory Program	\$ 500.00
GRAND TOTAL	\$ 24,000
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