

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

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

**State: Wisconsin  
Project No.: E-1  
Segment No.: 36**

**TITLE: Determination of the status of Piping Plovers, Eastern Prairie Fringed Orchid, Prairie Bush Clover, Fassett's Locoweed, and implement recovery management for Karner Blue Butterfly and Fassett's Locoweed.**

**YEARS OF PROJECT: 2006-2007**

**NEED:** 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 list of work activities. A listing of the six different jobs within this Segment follows:

**JOB 1. PIPING PLOVER (*Charadrius melodus*) INVENTORY AND ASSESSMENT OF THEIR PREY BASE AT SELECTED SITES ON THE LAKE SUPERIOR SHORELINE OF WISCONSIN.**

**JOB 2. MONITORING AND SURVEYS FOR EASTERN PRAIRIE FRINGED ORCHID (JOB MONITORING AND ADDITIONAL SURVEYS FOR PRAIRIE BUSH CLOVER (*Lespedeza leptostachya*)).**

**JOB 3. MONITORING AND ADDITIONAL SURVEYS FOR PRAIRIE BUSH CLOVER (*Lespedeza leptostachya*)**

**JOB 4. SURVEYS FOR ADDITIONAL FASSETT'S LOCOWEED SITES (*Oxytropis campestris* var *chartacea*) IN NORTHWESTERN WISCONSIN.**

**JOB 5. KARNER BLUE BUTTERFLY (*Lycaeides Melissa samuelis*) RECOVERY CORDINATION**

**JOB 6. INVASIVE SPECIES CONTROL AT FASSETT'S LOCOWEED SITES IN CENTRAL WISCONSIN.**

**PROJECT LEADER:** Rebecca Schroeder, WI DNR Bureau of Endangered Resources,  
P.O. Box 7921, Madison, WI 53707; (608) 266-5244; Rebecca.Schroeder@ dnr.state.wi.us

**JOB 1. PIPING PLOVER (*Charadrius melodus*) INVENTORY AND ASSESSMENT OF THEIR PREY BASE AT SELECTED SITES ON THE LAKE SUPERIOR SHORELINE OF WISCONSIN.**

**NEED:**

Eighty four beaches on the WI shoreline of Lake Superior have been identified as having potential for use by Piping Plovers for nesting and or foraging. Only a handful of these are surveyed for Piping Plovers on a regular basis. Many potential sites exist and surveys are needed to determine use by Plovers. Also, of the five designated Critical Habitats for Piping Plovers in WI only two are regularly surveyed for use by plovers. Surveys are needed for designated critical habitats and potentially suitable Lake Superior habitat in WI to determine sites that may need further protection or management. Food habits of Piping Plovers have been investigated at one WI site in the late 1980's and this site remains as the most important in the state. A repeat of this previous prey availability work is needed to see if this is limiting plover use on Lake Superior.

**OBJECTIVES:**

1. Identify, Map, and Describe Potentially Suitable Breeding Sites for Piping Plovers on the Lake Superior Shoreline of WI Using 2005 Aerial Photography and Other Available Data.
2. Monitor Piping Plover Designated Critical Habitat in WI for Breeding or Foraging Activity in 2006.
3. Determine Current Use of Selected Sites by Piping Plovers By Field Surveys in 2006.
4. Protect any Sites Found to Have Nesting Activity (USFWS 1988) by Coordinating with Appropriate Land Management Agency(s)
5. Determine Availability of Food Items for Piping Plovers on Long Island/ Chequamegon Point in 2006.
6. Incorporate Site Characterizations and Inventory Findings into NHI databases.

**EXPECTED RESULTS OR BENEFITS:**

1. We will have a complete assessment of all breeding habitat the Lake Superior shoreline.
2. We will be able to thoroughly describe all federally designated critical habitat and document any plover breeding activity.
3. We will be able to identify all know nesting sites in the state for management and protection.
4. We will be able to quantify the quality of nesting sites by comparing prey base with that found at Long Island/ Chequamegon Point.
5. All extant plover nesting sites will be protected.

**APPROACH:**

1. Using 2005 aerial photography and other available GIS data, all beaches greater than 20 m in width on the WI shore of Lake Superior will be mapped and evaluated by staff with expertise in Piping Plovers. This will be done prior to field surveys. Attributes from other data sources such as ownership, land use, etc. will be added as appropriate. Additional

attributes like area and length of the various vegetation zones of each beach will be calculated to help determine which sites will be surveyed.

2. In addition all five sites designated as Critical Habitat in WI will be surveyed for Piping Plover use during staging and breeding seasons (mid May through mid September). GIS coverage of Designated Critical Habitats in WI will be provided by the USFWS.
3. During the breeding season (mid May to mid July, a subset of potentially suitable sites and 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. 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).
4. Invertebrate sampling will be done at the regular WI breeding site (Chequamegon Pt. / Long Island) using methods described by Nordstrom and Ryan, 1987. Specimen preservation, sorting and initial taxonomy will be conducted by a qualified invertebrate taxonomist.
5. 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:**

Most of the surveys will be conducted on beaches on the WI Shoreline of Lake Superior in Douglas, Bayfield, Ashland, and Iron, counties. Additional sites to be surveyed include all five Designated Critical Habitats along the Lake Michigan shoreline in Marinette and Manitowoc counties.

**ESTIMATED COST:** \$ 12,079

**JOB LEADERS:** William Smith and Sumner Matteson, WI DNR Bureau of Endangered Resources

**LITERATURE CITED:**

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.

**JOB 2. MONITORING AND SURVEYS FOR EASTERN PRAIRIE FRINGED ORCHID  
(*Platanthera leucophaea*).**

**NEED:**

Eastern Prairie Fringed Orchid (EPFO), is listed as Endangered by the State of Wisconsin and Threatened by the federal government. This is a perennial orchid that grows in mesic and wet-mesic prairies, southern sedge meadows, and, in limited cases, calcareous fens. This species mostly occurs in the upper Midwest with a couple of outliers in Maine and Virginia. It was historically known from Pennsylvania and New York. Most extant populations of EPFO in Wisconsin occur in southern Wisconsin but there are historical records from as far north as La Crosse and Sheboygan counties. While some of our populations are monitored on a regular basis, a number of sites are seldom or irregularly monitored. Also, there has been a significant amount of habitat restoration work in the Scuppernong area, and as a result there is now a considerable amount of new suitable habitat that should be surveyed. This work is requested in the Eastern prairie fringed orchid recovery plan (US Fish and Wildlife Service, 1999): Obj 4. Conduct field surveys to monitor the status of known populations- 4.1 Monitor populations.

**OBJECTIVES:**

1. Determine the appropriate number of sites to monitor and survey EPFO populations in 2006.
2. Survey potential habitat in the Scuppernong area using Natural Heritage Inventory (NHI) methodology and standard inventory techniques for this species.

**EXPECTED RESULTS OR BENEFITS:**

1. We will obtain a comprehensive survey, including information on health and threats, of known but infrequently observed EPFO populations in southern Wisconsin.
2. We have a more thorough survey of potential habitat in the Scuppernong area.
3. The above survey information, taken with the information from regularly monitored sites, will help us evaluate the need to augment existing populations or re-establish populations at former sites or establish populations at new sites.
4. All of the above information will help with evaluating the status of EPFO for the federal recovery plan.

**APPROACH:**

1. We will use a combination of BER staff and volunteers to accomplish our objectives.
2. Provide monitoring data, including health, ownership information and potential threats on each monitored population.
3. Provide Rare Plant Reporting Forms, GPS points, 7.5' topographic maps, and photographs or other appropriate vouchers for any new populations found.
4. Incorporate data into Biotics, the NHI database.
5. All materials must be submitted by August 30, 2006. Final invoice must be submitted by September 30, 2006.

**LOCATION:**

Most of the have been identified in the federal recovery plan but are surveyed infrequently. There will be an effort for a comprehensive survey on both DNR and TNC properties at Chiwaukee Prairie in Kenosha County this year. Other sites in Rock, Walworth, Waukesha, and Winnebago counties will also be surveyed.

**ESTIMATED COST: \$ 3,000**

**JOB LEADER:** Craig Anderson, WI DNR Bureau of Endangered Resources

**LITERATURE CITED:**

US Fish and Wildlife Service. 1999. Eastern prairie fringed orchid (*Platanthera leucophaea*) recovery plan. Fort Snelling, MN. 62 pp.

**JOB 3. MONITORING AND ADDITIONAL SURVEYS FOR PRAIRIE BUSH CLOVER**  
**(*Lespedeza leptostachya*)**

**NEED:**

Prairie bush clover (PBC) is listed as Endangered by the State of Wisconsin and Threatened by the federal government. PBC is a perennial legume that grows in dry, dry-mesic, and mesic prairies. This species is an endemic that is limited to parts of Wisconsin, Illinois, Iowa, and Minnesota. In Wisconsin, most of the extant populations are in three general areas: southwest/south-central, River Falls, and New Richmond (St. Croix Co.). To help support the federal recovery plan, it is important to have comprehensive, current population data. Ideally, those data could be collected on an established regular basis. Some populations, such as many near River Falls, have not been thoroughly surveyed since they were first found. Others, including Happy Hollow, have only been monitored sporadically. The population near New Richmond is a recent find, and there is more potential habitat in that area that has not been surveyed in the past. We will use a contractor to complete our objectives in west-central Wisconsin and a combination of staff and contractor in southern Wisconsin. The federal *Lespedeza leptostachya* recovery plan (US Fish and Wildlife Service, 1988) recommends this work under the following sections:

Obj 3 Inventory to locate additional populations

31 Search historical sites where PBC has been found and habitat still exists.

32 Identify and search potential new sites.

Obj 4. Monitor population trends at known sites.

Obj 7. Conduct appropriate research

73 Study responses of populations to a variety of potential management techniques.

**OBJECTIVES:**

1. Using standardized protocols, monitor PBC sites in southern Wisconsin.
2. Work with partners to monitor known sites near River Falls.
3. Survey potential habitat in the River Falls and New Richmond areas using Natural Heritage Inventory (NHI) methodology and standard inventory techniques for this species.

**EXPECTED RESULTS OR BENEFITS:**

1. We will obtain a comprehensive survey of PBC populations in south-central and southwestern Wisconsin.
2. Many of the existing PBC populations in Wisconsin are small, but many of those appear to be stable. Several new populations have been discovered in recent years, and there are not enough data currently to establish their trends. A comprehensive survey may assist with determining the viability of these populations.
3. We will be able to more accurately assess potential PBC habitat in west-central Wisconsin, including sites that have not been examined for several years.
4. We will be able to evaluate the health of PBC populations at known sites.

5. All of the above information will help with evaluating the status of PBC for the federal recovery plan.

**APPROACH:**

1. We will use a combination of SNA program and other BER staff, volunteers, and contractors to accomplish our objectives.
2. Obtain and document permission from private land owners to gain access to private land, as needed. Information from the Natural Heritage data base will be used to identify private landowners that will need to be contacted.
3. Provide monitoring data, including health and potential threats, on each monitored population.
4. Provide Rare Plant Reporting Forms, GPS points, 7.5' topographic maps, and photographs or other appropriate vouchers for any new populations found.
5. Incorporate data into Biotics, the NHI database.
6. All materials must be submitted by August 30, 2006. Final invoice must be submitted by September 30, 2006.

**LOCATION:**

Counties: Columbia, Dane, Grant, Green, Iowa, Lafayette, Pepin, Pierce, Rock, St. Croix, and Sauk.

**ESTIMATED COST:** \$ 5,100

**JOB LEADER:** Craig Anderson, WI DNR Bureau of Endangered Resources

**LITERATURE CITED:**

US Fish and Wildlife Service. 1988. *Lespedeza leptostachya* recovery plan. US Fish and Wildlife Service, Twin Cities, MN. 41 pp

**JOB 4. SURVEYS FOR ADDITIONAL FASSETT'S LOCOWEED SITES (*Oxytropis campestris* var *chartacea*) IN NORTHWESTERN WISCONSIN.**

**NEED:**

Fassett's locoweed is listed as Endangered by the State of Wisconsin and Threatened by the federal government. This species is a perennial legume that depends on fluctuating lake shores to create and maintain habitat. It is a Wisconsin endemic that is found only in two localized areas: central Wisconsin and at two adjacent sites in northwestern Wisconsin. One of the latter sites (Mountain Lake) is mostly on property owned by the Chequamegon-Nicolet National Forest. Potential habitat in central Wisconsin has been surveyed for Fassett's locoweed in the past. However, there has not been a complementary comprehensive survey of potential sites in the northwest. These activities are required in the Fassett's locoweed recovery plan. (US Fish and Wildlife Service, 1991):

Obj 3. Monitor existing populations.

Obj 4. Resurvey lakeshore with historical populations and those with potential habitat during years of low lake levels.

**OBJECTIVES:**

1. Identify potential Fassett's locoweed sites in the Chequamegon-Nicolet National Forest
2. Survey potential Fassett's locoweed sites using Natural Heritage Inventory (NHI)

- methodology and standard inventory techniques for this species.
3. Survey the known northwestern sites.

**EXPECTED RESULTS OR BENEFITS:**

1. We will have survey information on suitable potential habitat in the vicinity of the known northwestern Wisconsin Fassett's locoweed populations.
2. We will have updated survey information for known sites.
3. Combined with data from survey and monitoring work to be conducted concurrently in central Wisconsin, this information will contribute to the 5-year review of the federal recovery plan goals.

**APPROACH:**

1. Contact private landowners, as needed, to obtain permission to survey their property and document results of private landowner contacts.
2. Collaborate with Chequamegon-Nicolet National Forest western ecologist to identify potential Fassett's locoweed sites.
- 3.
4. Assess habitat for species suitability.
5. GPS the extent and complete WI NHI rare plant reporting forms, including any threats (e.g., invasive species, lakeshore development), for any new populations that are found. Photo-document population.
6. Provide field notes and record negative data for sites that do not have the species present, including reasons why Fassett's locoweed is not present (e.g., no suitable habitat, habitat present but occupied by invasive species).
7. GPS the extent and complete WI NHI rare plant reporting forms for other rare plant species that may be found such as *Astragalus alpinus*.
8. Incorporate data into Biotics, the NHI database.
9. All materials must be submitted by August 30, 2006. Final invoice must be submitted by September 30, 2006.

**LOCATION:**

We will survey Mountain Lake and Pigeon Lake in Bayfield county, and additional seepage lakes that have been identified as having potential habitat in Bayfield County.

**ESTIMATED COST:** \$ 4,250

**JOB LEADER:** Craig Anderson, WI DNR Bureau of Endangered Resources

**LITERATURE CITED:**

US Fish and Wildlife Service. 1991. Fassett's locoweed recovery plan. Twin Cities, MN. 57 pp.

**JOB 5. KARNER BLUE BUTTERFLY (*Lycaeides Melissa samuelis*) RECOVERY CORDINATION**

**NEED:**

The implementation of the Habitat Conservation Plan for the federally endangered Karner blue butterfly is a significant commitment of staff and resources by the DNR and the Land and

Forestry Divisions. The DNR's commitment to this ecosystem management project has already been firmly made. The DNR in the Land and Forestry Divisions has made specific commitments to the federal recovery effort. More broadly, the DNR along with 38 other partners has been very successfully implementing this nationally modeled HCP since September 1999 under the authority of a federal Incidental Take Permit (ITP). In 1999 when the DNR signed the Implementing Agreement, the U.S. Fish and Wildlife Service (Service) suggested that the species would likely be recovered nationally within 8-10 years. Based on this, the DNR and partners subscribed to an HCP with a term of 10 years with a provision to extend the permit if needed. Recently the Service informed DNR that the species was not likely to be recovered in 10 years, and suggested we extend the ITP another 50 years.

The ITP will expire at the end of 2009. Assessing the future of the HCP and a possible extension of the ITP is expected to take a great deal of effort over the next few years. Given we have gained a great deal of knowledge from implementing the HCP, we need to re-evaluate the goals and benefits of this collaborative program and propose a HCP program with an approach, which is consistent with those goals and the values.

In 1999 the Department began implementing a HCP that has proven very complex and costly to implement. At that time, there were gaps in knowledge. Since that time we have gained a lot of knowledge about the Karner in Wisconsin:

What we know now that we didn't know or were uncertain about in 1998-1999:

- The Kbb in WI is not in jeopardy. Kbb populations are believed sustainable and persist as a result of traditional and continuing management on the working landscape. We have discovered many more Kbb populations,
- Apparently, the Kbb will not be recovered range wide by 2007-2009; and may not be recovered in 50 years.
- Until recovery and down listing occur, many resources are being spent and other opportunities of greater conservation need are being foregone to perform regulatory compliance for a species that is in reality not endangered in Wisconsin.
- A final recovery plan has been published since the DNR made the HCP commitments. The DNR disagrees with the recovery plan, yet our concerns have not been sufficiently addressed.
- New Service guidance on HCPs that was not available when this HCP was written has since been published.
- This KBB HCP approach to E/T species conservation has been widely accepted as a national model.
- The economy and budget constraints are much different than in 1999.
- The ultimate success is range wide species recovery.

**OBJECTIVE:**

In order to demonstrate recovery in Wisconsin we need a coordinator to facilitate taking the following steps.

1. Demonstrate KBB is in reality recovered in WI due to its persistence in the State based on historic and traditional on-going management of the land.
2. Develop recovery implementation plans that describe the long-term management plan being committed to by the DNR which describes how the DNR will maintain sustainable KBB populations.
3. Document, or continue to develop data supporting KBB down listing for the WI KBB



- population segment.
4. Coordinate the efforts of DNR property managers whose lands have been committed to the KBB recovery effort. Work with the property managers to address needs for implementation of the KBB recovery plan.

**EXPECTED RESULTS OR BENEFITS:**

The recovery coordinator would collaborate with the HCP coordinator to direct monitoring activities of HCP partners on lands where KBBs are present and have populations that contribute to the overall recovery of the species. We would no longer have partners repeatedly looking for Karners where they do not exist.

Coordination would redirect available resources to other conservation and partnering opportunities that result from reduction of management and regulatory constraints or result from down listing or de listing the KBB in WI.

The coordinator would work with the USFWS and the HCP partners to extend the TERM of the IT permit: Develop 10-Year ITP RENEWAL proposal to:

- Include a provision in the HCP/ITP, that after an additional 10 years of implementation of conservation programs under the HCP/ITP, with an additional focus on recovery that non-recovery area lands are given incidental take authority through the "voluntary" category inclusion.
- Redraft Articles of Partnership to emphasize (include) and define partners' recovery goals.
- Amend HCP and Implementing Agreement, where necessary, to capture recovery direction commitments.

**APPROACH:**

Hire a half-time coordinator to manage the tasks listed in the previous sections. The Section 6 funding would provide half the salary and supplies (travel and office) for one year (1040 hours). Many of the activities would take longer than one year, however, and it is anticipated that additional Section 6 funding would be directed toward this work between 2006 and 2009. The recovery coordinator would work closely with the HCP coordinator, the HCP assistant coordinator and the HCP data coordinator.

**LOCATION:**

The position would be housed in the Bureau of Endangered Resources in Madison, WI.

**ESTIMATED COST:** \$30,000

**JOB LEADER:** Rebecca Schroeder, WI DNR Bureau of Endangered Resources.

**JOB 6. INVASIVE SPECIES CONTROL AT FASSETT'S LOCOWEED SITES IN CENTRAL WISCONSIN.**

**NEED:**

Fassett's locoweed is listed as Endangered by the State of Wisconsin and Threatened by the federal government. This species is a perennial legume that depends on fluctuating lake shores to

create and maintain habitat. It is a Wisconsin endemic that is found only in two localized areas: central Wisconsin and at two adjacent sites in northwestern Wisconsin. There is a continuing need to ascertain population trends at the few existing sites. These trends are influenced by, among other factors, lake levels and the amount of habitat available, level of disturbance, and competition with invasive species. Long-term goals for the central Wisconsin locations in Portage and Waushara counties are:

- a. Create a life table and/or matrix model for the Pickerel and Plainfield Lake populations in order to predict future population trends;
- b. Relate the trends to population growth of invasive species and lake level.
- c. Survey populations at other known extant sites.
- d. Survey sites that have records of extirpated populations.

Dr. Kama Almasi (UW-SP) will focus on the first two goals, and BER staff will complete the latter two. This proposal would cover the first year of a longer term project conducted by Dr. Almasi.

These activities are requested in the Fassett's locoweed recovery plan. (US Fish and Wildlife Service, 1991):

Obj 2. Develop and initiate management activities for each site which are necessary to population maintenance.

#### **OBJECTIVES:**

1. Survey sites for invasive species type and extent.
2. Survey sites that have historically had populations using Natural Heritage Inventory (NHI) methodology and standard inventory techniques for this species.
3. Survey other extant known sites.

#### **EXPECTED RESULTS OR BENEFITS:**

1. We will have updated survey information for known sites.
2. We will have a better idea if the historical sites have been extirpated.
3. Combined with data from survey and monitoring work to be conducted concurrently in central Wisconsin, this information will contribute to the 5-year review of the federal recovery plan goals.
4. We will have a good beginning to understanding population trends, especially as they relate to invasive species and water level fluctuations.

#### **APPROACH:**

1. Collaborate with Dr. Kama Almasi (UW-SP) to define monitoring protocols for Fassett's locoweed and predict future population trends.
2. Implement the accepted monitoring plan.
3. When flowering begins in mid-May, mark a subset of the flowering adult population to determine rate of flowering and seed set.
4. As seedlings begin to emerge, mark the new cohort with permanent marker (to be determined) to follow over their lifetime. As the lake level recedes, mark a subset throughout the summer. Estimate population at the two sites
5. GPS locations of patches and/or marked plants
6. Survey both sites for invasive plant species
7. Estimate population/patch size for invasive plant populations
8. Survey other extant populations noting the proportion of adult, juvenile, and seedling plants. GPS extent of Fassett's locoweed. Complete and submit rare plant reporting forms for each site. Take particular note of invasive species and other threats.

9. Survey sites that historically were known to have Fassett's locoweed. If populations are relocated, follow documentation procedures outlined above.
10. Incorporate rare plant data into Biotics, the NHI database.
11. All materials must be submitted by August 30, 2006. Final invoice must be submitted by September 30, 2006.

**LOCATION:**

Pickerel Lake, in Portage county and Plainfield Lake, Second Lake, Sherman Lake, Huron Lake, Weymouth Lake, Mud Lake, and Shumway Lake in Waushara.

**ESTIMATED COST: \$5,750**

**JOB LEADER:** Craig Anderson, WI DNR Bureau of Endangered Resources

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**PROJECT TITLE:** Wisconsin Endangered and  
Threatened Species  
Investigation

**State:** Wisconsin  
**Project No.:** E-1  
**Segment No.:** 36

**TITLE:** Determination of the status of Piping Plovers, Eastern Prairie Fringed Orchid,  
Prairie Bush Clover, Fassett's Locoweed, and implement recovery management for Karner  
Blue Butterfly and Fassett's Locoweed.

**Job Schedule:** D.O.A.-December 31, 2007

<u>Activity</u>	<u>Total Cost</u>
JOB 1. PIPING PLOVER INVENTORY	\$ 12,079
JOB 2. MONITORING EASTERN PRAIRIE FRINGED ORCHID	\$ 3,000
JOB 3. MONITORING PRAIRIE BUSH CLOVER	\$ 5,100
JOB 4. SURVEYS FASSETT'S LOCOWEED SITES IN N.W. WI	\$ 4,250
JOB 5. KARNER BLUE BUTTERFLY RECOVERY	\$ 30,000
JOB 6. INVASIVES CONTROL AT FASSETT'S LOCOWEED SITES	\$ 5,750
<b>GRAND TOTAL</b>	<b>\$60,179</b>
<b>FEDERAL SHARE</b>	<b>\$ 45,134</b>
<b>STATE SHARE</b>	<b>\$ 15,045</b>

✓ (75,076)

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