KARNER BLUE BUTTERFLY HCP LAND ACQUISITION WISCONSIN SAWYER PROPERTY, WI SUMMARY

Wisconsin Department of Natural Resources (DNR) is submitting a proposal for a Habitat Conservation Plan (HCP) Land Acquisition Grant for a total of \$192,000 for the protection of 97 acres of land by easement or fee title that will assist in the recovery of the Karner blue butterfly (KBB) in Wisconsin.

About \$192,000 will be used to help protect the Sawyer property composed of 97 acres adjacent to the Waupaca Field Station. The Waupaca Field Station and Sawyer properties are part of the Sand Prairie and Oak Barrens complex that the owner of the Waupaca Field Station, Mr. Robert Welch, has been managing for the KBB and a host of other prairie and barrens species for many years. Mr. Welch has been a partner to the U.S. Fish and Wildlife Service and the DNR in these efforts. He had been managing portions of the Sawyer property until Mrs. Sawyer passed away.

Permanent protection of the Sawyer property would continue management of those lands to help recover a KBB metapopulation within the Morainal Sands KBB Recovery Unit (KBB Recovery Plan 2003). Protection of the Sawyer property adjacent to the Waupaca Field Station in central Wisconsin would protect 65 acres of occupied Karner habitat and 32 acres of additional habitat through management. This key property is an important link between Hartman Creek State Park KBB sites and additional sites within the adjacent Emmons Creek State Fisheries Area and Emmons Creek Barrens State Natural Area.

<u>Wisconsin KBB Statewide HCP</u>. The permanent protection of this tract will complement, but not replace required mitigation and/or conservation commitments made by partners to the Wisconsin KBB Statewide HCP. The 40 HCP partners have committed to implement the HCP on a combined total of about 250,000 acres of land in the High Potential Range of the KBB. Partner commitments include conducting land management activities per conservation measures that minimize and avoid harm to the KBB; three partners, the Wisconsin DNR, The Nature Conservancy (TNC), and Jackson County Forestry and Parks Department have made additional commitments to manage a total of 22,985 acres of land for recovery of the KBB (WDNR= 21,665 acres; The Nature Conservancy = 1,150 acres; Jackson County Forestry and Parks = 170 acres). The lands identified for purchase in this proposal are private lands, not HCP *partner lands, and no HCP commitments are associated with these lands*.

Fostering HCP Partnerships

The Wisconsin KBB Statewide HCP has a total of 40 partners that are significant players in the implementation of the conservation plan for the butterfly. The Wisconsin DNR, lead applicant and partner to the HCP owns and manages two state properties adjacent to the Sawyer property. In addition other HCP partners such as the American Utility Company (ATC), and the Waupaca County Highway Department are, or are interested in, assisting with KBB recovery near the Sawyer Tract. In 2005, the Waupaca Field Station adjacent to the Sawyer property served as a KBB mitigation site for a highway project. Thus purchase of this tract would further foster HCP partner participation in KBB recovery efforts.

The HCP partners are the following:

Lead Applicant and Partner:

Wisconsin DNR

Industrial Forests

Johnson Timber Corporation
Plum Creek Timber Company

Stora Enso North America Corporation

Thilmany, LLC

Wausau-Mosinee Paper Corp.

County Forests

Burnett County Forest
Clark County Forest
Eau Claire County Forest
Jackson County Forest
Juneau County Forest
Monroe County Forest
Washburn County Forest

Wood County Forest

Highway Departments

Adams County Highway Dept. Burnett County Highway Dept. Eau Claire Highway Dept.

Town of Foster – Clark Co. Highway Dept.

Juneau County Highway Dept.
Town of Adams Highway Dept.
Town of Lincoln Highway Dept.
Town of Millston Highway Dept.
Town of Quincy Highway Dept.
Town of Swiss Highway Dept.

Waupaca County Highway Dept.

State Departments

WI Dept. of Transportation

WI Dept. of Agriculture, Trade and Consumer

Protection (DATCP)

Utilities:

Alliant Energy Corporation Co., LLC

American Transmission Co.

ANR Pipeline Company

Enbridge Energy Company, Inc

Northwestern Wisconsin Electric Co.

Polk-Burnett Electric Cooperative

Wisconsin Gas Company

WI Public Service Corporation

Wisconsin River Power Company

Xcel Energy

Adam-Columbia Electric Cooperative

Oak-Dale Electric Cooperative

Private Organizations

The Nature Conservancy

As noted above under "Summary" partners are responsible for implementation of conservation measures for the KBB while conducting their management activities. The forestry partners strive to implement a shifting mosaic of habitat on their lands to promote conservation of the KBB and its early success ional habitats. Utility and highway partners promote maintenance of KBB dispersal corridors via their mowing programs, and the DNR and TNC work on habitat management and restoration activities. The Wisconsin DATCP serves as liaison with the agricultural community. In addition three of the partners have made additional commitments to manage a total of 22,985 acres of land for recovery of the KBB.

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NEED

Protection (easement or fee acquisition) of the 97 acre Sawyer property will contribute to the recovery of the Karner blue butterfly (KBB) by helping to protect and expand one KBB population in the Morainal Sands KBB Recovery Unit. Federal funds totaling \$192,000 are needed to protect the Sawyer property. This will help recover a large viable KBB metapopulation in the Hartman/Welch/Emmons Creek Complex, a recovery area identified in the KBB Recovery Plan (2003). This will contribute to achieving one of the 13 range-wide recovery goals for Wisconsin.. Permanent protection (e.g. via land purchase) of private land, such as the Sawyer property located in the Emmons Creek/Hartman Creek State Park and Ice Age Trail complex is identified as a Priority 3 Task in the KBB Recovery Plan. Restoration of a larger metapopulation (which this land purchase would help facilitate) allows for more management flexibility and may reduce management and monitoring costs while still providing sufficient assurance that the metapopulation will recover and persist into the future (Appendix F-67 of the KBB Recovery Plan). The KBB Recovery Plan recommends that a large viable metapopulation be composed of at least ten contiguous square miles (6,400 acres) and that 10 % of that area (640 acres) be managed as suitable habitat for the KBB and that suitable habitat patches be sufficiently connected to other suitable habitat. Protection of the Sawyer property will help provide sufficient habitat for restoration of a large viable metapopulation and will be especially beneficial in helping to create very important dispersal corridors to connect KBB habitat patches on that property with other suitable habitat in the Hartman/Welch/Emmons Complex.

Wisconsin supports the largest and most widespread KBB populations within the KBB range; there are about 554 occurrences in 18 counties. The species has been extirpated from much of its historic ranged, thus the status in Wisconsin is critical to its continued survival. Of the 29 recovery populations recommended in the KBB Recovery Plan, 13 (almost half) occur in Wisconsin making Wisconsin a key partner in recovery of the species. The KBB is a disturbance-dependent species adapted to barrens and other early success ional habitats.

An important aspect to implementation of the Karner HCP is to provide additional land acquisition to help assure a balance between habitat gain from management and habitat loss from natural succession. The Karner HCP, with its biological approach, focuses on geographic areas and activities which provide the highest potential to protect and enhance Karner blue butterfly habitat. The HCP is currently refocusing its conservation strategy on recovery of the KBB. Purchase of these lands contributes significantly to that strategy.

OBJECTIVES

The objectives are to permanently protect the 97 acre Sawyer property adjacent to the Waupaca Field Station (Waupaca County), to manage and conserve that property to assist with the recovery of the KBB and other associated savanna/barrens/prairie species. Protection of this property will contribute to establishing one of the 13 KBB metapopulations needed to meet the KBB recovery goals for Wisconsin.

EXPECTED RESULTS OR BENEFITS

Benefits to Recovery of the Karner Blue Butterfly

KBBs are present on the Sawyer property. A KBB survey on about 1/3 of the Sawyer habitat conducted in 1994 revealed 85 adults first flight and 71 adults second flight. KBB counts on the Sawyer and Waupaca Field Station properties usually exceed 200-400 KBB depending on spring versus summer flights and seasonal conditions.

Protection of the Sawyer property will contribute to the recovery of the KBB by providing permanent protection and management of land important to the creation of a large viable KBB metapopulations in the Morainal Sands Recovery Unit (as noted in the Summary). If the Sawyer property is not protected the land would be developed into home sites or succeed to forested land, with associated adverse impacts to the extant KBB population on that site and adjacent properties in the Hartman/Welch/Emmons Recovery Area Complex. See also the discussion under "Need" above.

Benefits to Unlisted Species

The 97 tract of Sawyer property lies adjacent to the Waupaca Field Station; the two properties support a blend of sand prairie and oak barrens on rolling, sandy soils characteristic of glacial moraines and ground moraine of central Wisconsin. The oak forest/barrens contain scattered Hill's oak, black oak, and white oak. American hazelnut and lead plant dominate the shrub layer while sand prairie species dominate the understory with big blue-stem, Indian grass, June grass, poverty oat grass, wild lupine, bastard-toadflax, cream wild indigo, flowering spurge, yellow flax, pale penstemon, sand primrose, and bird's-foot violet. The aster family is well represented with four species of aster, four of goldenrod, and two species of blazing-star. The Waupaca Field Station together with the Sawyer tract supports a KBB population and also has an extremely diverse Lepidoptera component including a diverse moth fauna. Table 1 provides information on rare species found within the 97 acre Sawyer tract that is in the Natural Heritage Inventory database. The 97 acres for sale contains 1/4 mile road frontage and if not acquired by the Department the property could be sold for home sites. Much of the land surrounding the Waupaca Field Station is owned by the DNR, either at Hartman Creek State Park or Emmons Creek Fisheries Area. Hartman Creek State Park has two subdivisions growing along its boundaries and Emmons Creek Fisheries Area has new houses being built around its margins. The parcel contains barrens habitat and alder swamp along Emmons Creek.

Table 1. Rare Species found on the Sawyer Property and recorded in the DNR Natural Heritage Inventory database

Scientific Name	Common Name	S Status	F Status	<u>Date</u>	Group	#EOs
Oporornis formosus	Kentucky Warbler	SC/FL	LE	1988-06-18	Bird	1
Atrytonopsis hianna	Dusted Skipper	SC/N		2002-05-31	Butterfly	1
Callophrys henrici	Henry's Elfin	SC/N		2003-05-13	Butterfly	1
Callophrys irus						
Chlosyne gorgone	Gorgone Checker Spot	SC/N		1994	Butterfly	1
Erynnis martialis	Mottled Dusky Wing	SC/N		1991-05-28	Butterfly	1
Erynnis persius	Persius Dusky Wing	SC/N		2003-05-13	Butterfly	1
Hesperia metea	Cobweb Skipper	SC/N		1994	Butterfly	1
<u>Lycaeides melissa</u> <u>samuelis</u>	Karner Blue	SC/FL	LE	1998-07-29	Butterfly	2
Grammia phyllira	Phyllira Tiger Moth	SC/N		1993-08-20	Moth	1
Schinia indiana						
<u>Papaipema</u> <u>beeriana</u>						
Emydoidea blandingii	Blanding's Turtle	THR		2001-06-06	Turtle~	1

Uncommon plants found in the area include prairie dandelion, northern rock sandwort, small fringed gentian, stout blue-eyed grass, prairie fame flower, and blunt-lobed grape-fern.

Vertebrate Species of Greatest Conservation Need that are (or historically were) significantly associated with oak barrens communities and found on the Sawyer property are brown thrasher, vesper sparrow, wood turtle, and Blanding's turtle.

Species moderately associated with oak barrens and found on the Sawyer property are northern harrier, black-billed cuckoo, whip-poor-will, red-headed woodpecker, field sparrow, grasshopper sparrow, and western meadowlark.

Additional wildlife species of interest found on the area include great blue heron, Northern goshawk, red-shouldered hawk, wood thrush, clay-colored sparrow, mourning warbler, Cerulean warbler, Cooper's hawk, and bobolink.

The Sawyer property contains a portion of Emmons Creek, a recently designated state legacy stream due to the only inland anadromous brown trout population in Wisconsin. Emmons Creek Barrens State Natural Area is adjacent to the Sawyer parcel.

Ecosystem Benefits

Protection of the Sawyer property will significantly benefit the restoration and management of the prairie/savanna/barrens ecosystem present on the complex of lands owned by the DNR (Hartman Creek State Park and Emmons Creek State Fisheries Area) and Mr. Welch (Waupaca Field Station) in central Wisconsin. The remaining savanna ecosystem in the Midwest is critically small, with only about 0.02 percent of the pre-settlement savanna habitat remaining today. Savanna is considered a globally imperiled ecosystem. Mr. Welch has been managing the Waupaca Field Station and Mrs. Sawyer's property for KBBs and other rare barrens species since the 1990. The U.S. Fish and Wildlife Service's Partners for Fish and Wildlife Service Program has assisted Mr. Welch on management of the two properties for several years.

Protection of the property will protect the area from threats due to development and also allow for easier access and management of the adjoining state properties that are being managed with prescribed burning and other methods (invasive species removal). Further, as noted above, protection of the property will not only benefit the KBB, but a host of other rare species associated with savanna and prairie habitat.

Michael Bergum, Hartman Creek State Park Superintendent, is involved with habitat work to benefit KBB on the DNR land. This project would make the corridor between the state park and fishery area more viable. This proposal has his full support and encouragement.

APPROACH

The Department and Bob Welch were contacted by the Sawyer estate that were interested in selling all or a portion of their property. It has been managed for Karner blue butterflies since 1990. The estate representatives sold the property to Bob Welch and Deb Martin who had the first right to purchase the property. They are interested in selling an easement or selling outright fee title to the Department of the entire Sawyer parcel that they acquired.

Wisconsin's cost share (25%) will be from Knowles-Nelson Stewardship Fund, a State of Wisconsin ten-year bonding program that provides land acquisition funds for the DNR, local units of government, and conservation organizations (land trusts).

Upon approval of funding and signing an offer to purchase, the Department will secure Natural Resource Board approval and Governor approval. This request is only for the land costs and not associated acquisition/easement costs.

Management responsibilities on easement land will be retained by the Waupaca Field Station with oversight and involvement of the DNR. The Department will manage land acquired by fee title.

The property will be designated as part of the Emmons Creek Barrens State Natural Area. It will be recorded on the deed that there is a permanent federal and DNR interest in the acquired property.

If the identified tract could not be acquired additional land would be acquired that would meet the guidelines of the grant.

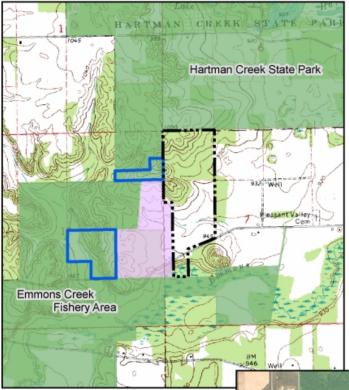
LOCATION

The Sawyer property is located in Waupaca County (T21N-R11E, Section 7) in central Wisconsin.

ESTIMATED COSTS - 97 acres

Estimated acquisition cost \$256,000 **Federal Share (75%)** \$192,000 State Share (25%) \$ 64,000

PROJECT MANAGER: Mark Martin, Bureau of Endangered Resources, (608) 266-8916



Sawyer Parcel Waupaca County 97 acres

T21N-R11E, Sec. 7





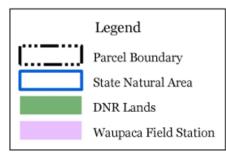


Figure 1

