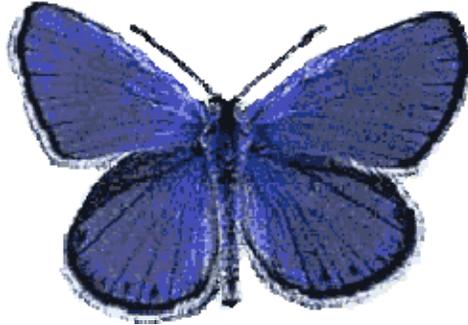


The Wisconsin Karner Blue Butterfly Habitat Conservation Plan
Annual Report of Activities for Calendar Year 2006



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Introduction

The Wisconsin Karner Blue Butterfly Habitat Conservation Plan, approved in September 1999, established a statewide program for Karner blue butterfly conservation in Wisconsin. The Wisconsin Department of Natural Resources (Wisconsin DNR) is authorized to oversee implementation of this plan and the activities described in the associated implementing agreement according to the terms of Federal Fish and Wildlife Permit #TE0100064-4. This permit, issued by the United States Fish and Wildlife Service (USFWS) to the Wisconsin DNR on September 27, 1999, authorizes incidental take of Karner blue butterflies (Karners) according to the terms described therein. Forty organizations currently participate as full or limited partners in the Wisconsin Karner Blue Butterfly Habitat Conservation Plan (HCP). This report summarizes activities conducted by these 40 partners on HCP-covered lands in 2006, the seventh full year of HCP implementation.

Monitoring

Monitoring is a critical component of the HCP, and should demonstrate whether or not HCP partners are conserving Karners and their habitat, while still conducting planned land management and development activities. Each year, HCP partner organizations conduct surveys for Karner Blue Butterflies and/or their host plant, lupine. The year 2005 saw significant changes in the monitoring program. These changes continued for monitoring in 2006.

Late in 2003, it became clear to the partners and the FWS that the original HCP monitoring strategy was not clearly providing needed feedback for an proactive adaptive management strategy. In addition, efficient monitoring became a priority in a time of budget and staff constraints for all partners. The years 2004 and 2005 had seen much progress with respect to improving the HCP monitoring program to better meet the HCP's objectives, while maintaining some well designed basic monitoring procedures. In 2006, many of these adjustments were subsequently implemented; most notably: the inclusion of Cause-Effect monitoring studies of forest management activities; and discontinuing random sampling of sites to identify new habitat for lupine inventory and allowing partners to seek out habitat in areas they feel have the greatest likelihood, and/or sites where they will need to do a pre-management survey.

Trends monitoring was projected to resume in 2006. (*Note: Until this resumes, there is no Appendix A. Trends Monitoring in 2006 in this annual report.*) The Monitoring Improvement Team (MIT) was formed to assess and improve the monitoring components of the HCP. The MIT designed a system to directly study the cause-effect relationships of the conservation measures (management activities) designed for the HCP. This information will directly feed the adaptive management process providing the opportunity for partners to assess the effects of management and confirm or improve how they do conservation. Cause-Effect monitoring began during the 2005 field season and continued in 2006. All partners provided the following monitoring information for 2006: 1) New lupine and Karner sites, and 2) Pre and post management surveys.

Distance Sampling to replace trends monitoring

As suggested by the MIT, trends monitoring was to be redefined to occur in conjunction with recovery monitoring, which would take place on recovery properties where long data sets could be gathered over time. Relative abundance indices had been used to track Kbb trend status. Population estimates would be needed to describe recovery status, so a shift to population estimates was agreed upon. To achieve this goal, a method would need to be identified and agreed upon. The method selected is Distance Sampling; a tool to estimate populations. The method was recommended by USGS and endorsed by the Monitoring sub-team of the Federal Recovery Team and the FWS. Five DNR and two FWS staff attended Distance Sampling training at Indiana Dunes NWR in September 2006. A pilot season would be planned for the 2007 field season at Crex Meadows and Fish Lake State Wildlife Areas to better understand the site sampling and transect design process and integrate the Distance Sampling method into practice.

For more specific details regarding our monitoring activities, please see [Appendix B: The 2006 Monitoring Results Summary Report](#).

Associated Species Surveys

No associated species surveys were reported in 2006.

Certification of Surveyors

The Wisconsin DNR verified that all monitoring surveyors had attended a monitoring training session within the last 5 years. Three monitoring training sessions were held in 2006 in Babcock, Black River Falls and Grantsburg. In 2006, 79 people received monitoring training either for the first time or as a refresher. Following the 2006 training sessions there were a total of 392 surveyors that held a current monitoring certification. (*Appendix C: Certified Surveyors for Karner Blue Butterfly Monitoring lists those who received training from 2002- 2006*).

Training is available annually to all partners' staff. The WDNR has been able to provide this training beyond the partners to groups of volunteers who are assisting county highway departments with monitoring, environmental consultants and contracted land maintenance staff who regularly work for partners. When partners received their monitoring training, the Wisconsin DNR urged proper completion of updated monitoring forms and offered technical advice. Monitoring and annual report forms were revised to improve the level of quality and proper form completion and accurate site information. The Wisconsin DNR will continue to encourage improvement and consistency in the survey process through individual contacts, compliance audits, improved training, and other means.

Amendments to Partner Species and Habitat Conservation Agreements (SHCAs)

There were a number of SHCA amendments in 2006. Most were reviewed with the Service and reported at the time amendment agreement. During 2006 it was realized that most amendments of this kind were perfunctory and did not merit coordination between the DNR and the Service. SHCAs are an agreement between the partner and the DNR. As of 2006, it was agreed that minor SHCA amendments will be executed between the partner and the DNR and further reported to the Service in the annual report.

There was one amendment to be reported in this annual report:

<i>Partner Name</i>	<i>Date</i>	<i>Amendment</i>
Polk Burnett Electric Cooperative	09/08/2006	Addition of Cable Plowing for underground cable installation as an activity in Part 3A. Activities; and the inclusion of the Cable Plowing Guideline (Rev. 02) as

		the required conservation measures for this activity.
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Land Transfers

It has become clear that many of our lands within the HCP are quickly changing hands between, into, and out of the HCP umbrella. Six partners completed land transfers in 2006. Partners acquired 986.99 total acres and sold 1590.90 total acres of HCP-covered land in 2006.

Throughout the year of 2006 there has been a net decrease of land by 603.91 acres ([Appendix D: Land Transferred in 2006](#)). As of December 31, 2006, the HCP covered approximately 249,359 acres. This equates to approximately .24 % decrease in 2006 in land included in the HCP under the permit. Since the Incidental Take Permit was issued in 1999 there has been a 5.87% decrease in lands included under the permit.

Acres included at onset of permit 09/27/1999	Acres included as of 12/31/2005	Acres included as of 12/31/2006	Acres increased or (decreased)	Percent change
	249,963	249,359	(604)	0.24 %
264,916		249,359	(15,557)	5.87 %

The HCP partnership is striving to focus implementation with a landscape approach. To deal with extremely fast-paced changes, in 2005 the DNR began to research the appropriate methods to track this land and its changing ownership. Discussion of a lands-database to keep accurate maps and information regarding these lands is becoming a priority in the minds of several partners and the DNR. Tracking these lands is important for the partners, the DNR, and the FWS to determine and strategize conservation, management, and incidental take coverage. In 2005 the WDNR began discussions with UW Madison to expand the KBB predictive modeling project to other GIS projects that include developing a “lands included” information management system.

Disturbance, Land Use, and Land Management Activities

The Karner Blue Butterfly is a species which lives in a disturbance-dependent ecosystem. Therefore, management activities occurring on habitat are necessary to continue the existence of Karner populations. Management activities include mowing along rights-of-way, timber harvests, brush clearing, and prescribed burning to name a few. Some Karners may be incidentally taken through this process; however, it is an important and necessary step to managing its habitat.

Full-Partner Activities:

- ☞ Four full-partners reported land management activity on sites occupied by Karner blues within the High Potential Range (*Appendix F: Disturbance, Land Use, and Land Management Activities Conducted in 2006*). Activities encompassed 1,928.55 acres of habitat. Activities included timber harvest, mowing, brushing, prescribed burning and invasive plant control.
- ☞ There was no permanent take in 2006.

Limited Partner Activities:

In 2006, the following activities occurred on lupine sites along road side rights-of-way:

- ☞ Eight Limited Partners mowed a reported total of **1153 acres** of Karner blue potential habitat in 2006 along roadsides. Partners surveyed sites for lupine and followed management guidelines, including mowing in late fall with a blade six inches in height for areas where lupine occurred. Limited partners are not required to do Karner blue presence/absence surveys. Therefore, many of these sites are of unknown Karner occupation, but never-the-less partners apply appropriate conservation measures.
- ☞ There was no permanent take in 2006.
- ☞ Other partners, particularly limited partners who manage roadside rights-of-way are being faced with the need to do permanent take or complete, but temporary removal of habitat. Minor ditch repairs to return adequate drainage is a common event. While the habitat may be removed on part of the site, new habitat is replaced. Since the use of the land is returning to KBB habitat and not permanently changed as in paving over habitat, the DNR and Service do not consider this “permanent take”, but simply another type of

“short-term incidental take”. Streamlined procedures for dealing with the more routine types of take in this category, e.g. road shoulder and ditch maintenance and repairs in a more efficient and appropriate system are being piloted and nearing completion by 2006-07. These include a streamlined standardized mitigation guidance and restoration protocols to facilitate easier and faster plan development and will eliminate the need to wait for DNR and FWS approval. Please see ([Appendix E: Limited Partner Activities 2006](#)).

Proactive Conservation Activities

In 2006, 12 partners and numerous small private landowners voluntarily conducted 108 proactive conservation activities on more than 4,370.6 acres of land not yet occupied by Karner blues or on unoccupied acres of occupied sites. ([Appendix G: Proactive Conservation Activities Conducted in 2006](#)). Partners conducted a wide variety of activities to feature and enhance Karner blue habitat, including timber management and harvest, mowing, prescribed burning, trail construction, collection and planting of lupine seed and native plants, and invasive plant control. Land managers undertook these efforts voluntarily, on lands where consideration of Karner blues was not legally required. In many cases, the disturbance management followed existing conservation protocols to enhance the results. The USFWS private lands program is not included in this report, though it plays a vital role in proactive and voluntary conservation for the HCP.

Outreach and Education Activities

As part of their commitment to the HCP, partners have pledged to encourage Karner blue conservation among all land managers in the Karner blue range, including voluntary, non-partner participants. Ten partners reported outreach and education activities in 2006. DNR and other partners supported each other on many activities. An attempt was made to avoid double counting. A respectable estimate of people directly reached is 2,353,383. Many activities indirectly reach many more unknown numbers through socio-environmental research, and the newspaper and TV media. Outreach and education included brochure production and distribution, Newspaper and TV interviews, presentations at festivals and conferences to private landowners, resource professionals and public officials, website development, and one-on-one conversations with neighboring landowners ([Appendix H: Outreach and Education Activities](#)

Conducted in 2006). As in past years, we worked with others attempting collaborative conservation efforts, such as FWS, state agencies, and consultants. Numerous “think tanks” and universities studying innovative conservation activities find the Wisconsin HCP very interesting. Partners hosted several field trips and inter-organizational information presentations. The Wisconsin DNR has encouraged more diligent reporting of outreach activities; many partners have remarked that Karner blue-related outreach has become so routine they sometimes forget to report it.

Highlights of outreach activities

The Karner Blue outreach and education has become second nature. The continued efforts of the partners have created a momentum and an awareness of the plight of the Karner blue butterfly that goes beyond the partners’ direct audiences. Despite all this, the crown jewel of Karners in Wisconsin has become the Karner Blue Festival in Black River Falls, WI. This distinction has made Black River Falls the Mecca of Karnerdom in the state and perhaps the nation.

Karner Blue Festival remains a big event

The Karner Blue Butterfly Festival in Black River Falls continues to be a perennial favorite. Nearly 10,000 people attended thanks mainly to the efforts of the local chamber of commerce and the Bauer Brockway Barrens Committee. The committee is a public/private grass roots community group committed to restoration of area barrens. The Committee provides educational displays, barrens tours and

Karner activities for children of all ages.



Temporary tattoos are always in demand.

An annual highlight of the event is a parade of butterfly-clad floats and marchers.



The 2006 event was honored by two U.S. Fish and Wildlife Service directors joining in the fun from Fort Snelling (Region 3) and Wisconsin's field office.



Partners estimated that they reached at least **2,353,383** people through educational and outreach activities in 2006 and are eager to contribute more toward education and outreach in the future.

HCP Management and Process Improvement

The Five-Point Plan increases focus on KBB Recovery

The DNR and the other HCP Partners and Participants to Wisconsin's Karner blue butterfly (KBB) conservation program have finite resources available to apply to the KBB. They have realized that in order to finish the conservation program successfully that they must assist in recovery efforts for the species.

Current economic and budget constraints have forced the WDNR and all partners to improve the efficiency of HCP processes. In addition, the HCP Team became aware of the likelihood that the HCP may need to be implemented for a number of additional decades while recovery takes place. Partners are pursuing new approaches to HCP goals that add to the success of the plan while reducing costs and workload. Late in 2005, the DNR developed and proposed an approach that encompasses the needs and conditions for success of the HCP program now and into an uncertain future. The primary goals of this approach are as follows:

THE FIVE POINT PLAN FOR A STATEWIDE HCP

1. **FOCUS** HCP implementation on recovery areas.

2. STREAMLINE PROCESSES
3. IMPROVE PROTOCOLS AND GUIDELINES, i.e. monitoring and management protocols and guidelines.
4. RECOVER the KBB in WI
5. Extend the TERM of the permit: Develop 10-Year ITP RENEWAL proposal

The development and implementation of this 5 point plan took place in 2006.

KBB Predictive Model

During 2004-2006 the DNR pursued the development of a statistical model to predict the occurrence of wild lupine. The model evolved to become a predictor of Kbb occurrence. Final refinements continue with UW-Madison's Department of Landscape Ecology, the DNR's collaborator on the project. A final draft model was completed in 2006.

Monitoring Streamlined

Monitoring was greatly simplified and further focused on important aspects of implementing the HCP and performing conservation of Kbb habitat. *(Please refer to monitoring section of this report for more information.)*

Management Guidelines and Protocols get a facelift

All management guidelines and protocols were revisited. Where information was carried in different HCP documents, the content was checked for consistency and pertinence. Where problems were found, intent was clarified and guidelines and protocols were consolidated. The documents were repackaged into a consistent system for clarity; ease of future amendments and to improve training. These improvements were rolled out in early 2007.

The Wisconsin KBB Recovery effort is revitalized

In 2006 the DNR hired Mr. Bob Hess as the KBB Recovery Coordinator. Bob has a long history of involvement in the KBB HCP, first as a county forest administrator during the early development of the HCP, and later as a DNR forester in the central sands.

A population estimating method was chosen, called Distance Sampling. The first DNR staff to be trained in this protocol attended a workshop in September at the Indiana Dunes NWR. A pilot season to test this method was planned for the 2007 field season.

Implementation Monitoring – Compliance Audits

Compliance Audits are a required condition of the federal Incidental Take Permit TE010064-4 for the Karner Blue Butterfly. Compliance audits as designed for this HCP, serve to fulfill the intent of Implementation Monitoring, which is described in the ESA monitoring guidance for HCP's. The term Compliance Audit originated with the HCP before the ESA guidance describing it was available. The purpose of these audits is to assess the status and conditions of the management strategies and management activities actually being applied, and the degree to which partners comply with their individual conservation agreements.

The audit process (1) validates whether or not partners are honoring their legal commitments, (2) provides opportunities for continuous improvement through one-on-one contact with individual partners and their local staff, and (3) provides valuable information for adaptive management for the HCP partners and the implementation process.

In 2006, audits were performed for 17 partners or DNR properties:

- 2 county forests
- 2 forest industry companies
- 4 DNR properties or area offices
- Wisconsin Dept. of Transportation (DOT)
- 8 limited partner

A summary of HCP compliance audits conducted by the Wisconsin DNR in 2006 is attached as *Appendix I. Wisconsin Karner Blue Butterfly HCP; Compliance Audits –Audit Year 2006 Summary*

If you have questions about this report or would like to receive a copy of it, please contact Dave Lentz (608-261-6451); David.Lentz@Wisconsin.gov. You may request a copy by writing to Wisconsin Department of Natural Resources, Attn: Dave Lentz FR/4 101 S. Webster St., PO Box 7921, Madison, WI 53707-7921.