

The Wisconsin Karner Blue Butterfly Habitat Conservation Plan
Annual Report of Activities for Calendar Year 2002



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Prepared by

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Introduction

The Wisconsin Karner Blue Butterfly Habitat Conservation Plan, approved in September of 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 implementing agreement according to the terms of Federal Fish and Wildlife Permit #TE0100064-3. 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 (Karner blues) according to the terms described therein. 30 organizations currently participate as either full or limited partners in the Wisconsin Karner Blue Butterfly Habitat Conservation Plan (HCP). This report summarizes activities conducted by these 30 partners and two associated private landowner programs on HCP-covered lands in 2002.

Effectiveness Monitoring

HCP partners surveyed effectiveness-monitoring sites randomly selected from the Karner Blue High Potential Range. Surveys were conducted on three levels: Level 1 surveys determined presence/absence of lupine (shifting mosaic sites only); Level 2 surveys determined presence/absence of Karner blues at sites containing significant lupine in the previous two monitoring seasons (shifting mosaic and permanency of habitat sites included); and Level 3 surveys determined relative abundance of Karner blues at sites in the Level 2 site pool.

Level 1 surveys of 225 sites revealed significant lupine present at 66 sites (29.3% of sites surveyed). Level 2 surveys of 230 sites revealed Karner blue presence at 95 sites (49.5% of sites containing significant lupine at the time of the survey). Level 3 surveys suggested a detection rate of 18.0 Karner blues per kilometer of transect at sites containing significant lupine at the time of the survey (6 to 8-ft. observation distance from transect line). Results of 2002 effectiveness monitoring surveys are summarized in *Appendix A: 2002 Wisconsin Karner Blue Butterfly HCP Effectiveness Monitoring Results*.

Self Monitoring

28 partners conducted self-monitoring surveys (e.g., pre-management and post-management surveys) for lupine and/or Karner blues in 2002. Partners surveyed 1,102 sites for lupine and found lupine present on 519 sites. Partners surveyed 359 sites for Karner blues and found Karner blues on 113 sites. Self-monitoring results are summarized in *Appendix B: Summary of HCP Partner Activities in 2002*.

Associated Species Surveys

The Wisconsin DNR and ANR Pipeline conducted surveys of nectar plants and "tender" ants at Mill Bluff State Park and on ANR properties (*Appendix C: Surveys for Species Associated with Karner Blue Butterflies Conducted in 2002*).

Certification of Surveyors

The Wisconsin DNR verified that all effectiveness monitoring surveyors had attended one of three annual effectiveness monitoring training sessions (*Appendix D: Certified Surveyors for Karner Blue Butterfly Effectiveness Monitoring*). When partners received their effectiveness monitoring assignments, the Wisconsin DNR urged proper completion of updated monitoring forms and offered technical advice. The Wisconsin DNR also contacted partners in May 2002 to address individual concerns in data collection and record keeping. The Wisconsin DNR will continue to encourage improvement and consistency in the survey process through form clarifications, individual contacts, improved training, and other means.

Timing of Karner Blue Butterfly Surveys

Partners conducted Karner blue butterfly surveys during the first and second flight periods as prescribed by the effectiveness monitoring protocols. Most survey dates appear tightly clustered in two groups, suggesting the occurrence of peaks in the adult population (*Figure 1*). The

Wisconsin DNR had the widest variation in survey dates, which is consistent with their numerous scattered properties throughout the Karner Blue High Potential Range.

Land Transfers

Seven partners acquired 3,295 total acres and sold 3,708 total acres of HCP-covered land in 2002 (net decrease of 413 acres). Many transfers were between partners (*Appendix E: Land Transferred in 2002*). As of 2002, the HCP covered approximately 251,900 acres.

Disturbance, Land Use, and Land Management Activities

Four 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 2002*). Activities encompassed approximately 2,100 acres of habitat and included timber harvest, mowing and control of invasive plants. The Wisconsin DNR continues to ensure partners' compliance with HCP protocols governing pre- and post-management surveys and appropriate documentation. Partners are contacted individually regarding specific concerns or inconsistencies in reporting, and corrective action is recommended if appropriate. All partners reporting land management on occupied sites in 2002 had completed appropriate pre-management surveys. The USFWS approved the use of pre-management surveys from representative sites at DNR Glacial Lake Grantsburg properties due to the extensive Karner blue habitat found there (*Figure 2*).

The validity of pre-management surveys has been extended to a minimum of five years. Validity may be extended to eight years if a partner can justify that the presence/absence of Karner blues or habitat remains unchanged on their property.

No HCP partner reported permanent take of Karner blue habitat (*Appendix B: Summary of HCP Partner Activities in 2002*).

Proactive Conservation Activities

In 2002, 18 partners and numerous small private landowners conducted proactive conservation activities on more than 5,975 acres of land not occupied by Karner blues or outside of the Karner Blue High Potential Range (*Appendix G: Proactive Conservation Activities Conducted in 2002*). Partners conducted a wide variety of activities to feature and enhance Karner blue habitat, including timber management and sales, mowing, prescribed burning, collection and planting of lupine seed, and control of invasive plants. In many cases, land managers undertook these efforts voluntarily, on lands where consideration of Karner blues was not legally required. The USFWS private lands program supported several of these activities.

Outreach and Education Activities

18 partners conducted outreach and education activities in 2002, sometimes working in conjunction with the USFWS private lands program. Outreach was diverse in scope and depth, ranging from widespread distribution of videos and brochures to one-on-one conversations with neighboring landowners (*Appendix H: Outreach and Education Activities Conducted in 2002*). As in past years, partners made a special effort to engage interested citizens in on-the-ground conservation through field trips and volunteer work parties at restored grassland sites like Quincy Bluff and the Bauer Brockway Barrens. Partners estimate that they reached 1,999,700 people through educational and outreach activities in 2002.

Improvements in Reporting Procedures

The Wisconsin DNR continues to incorporate suggestions for reporting improvement from all partners and the USFWS. The current report form includes clear instructions for completing the form and specific entries for each piece of information required. The quality of annual reports and surveys submitted has dramatically improved since major reporting improvements were implemented in 2001. Many partners have also taken advantage of electronic reporting.

Compliance Audits

Compliance audits, required under the Federal incidental take permit, assess the status and conditions of HCP land management, assure partners' compliance with their individual conservation agreements, and help identify opportunities for adaptive management. The primary focus of the audit process is continuous improvement. One-on-one meetings provide valuable opportunities to train and give feedback to partner staff.

The Wisconsin DNR conducted 20 audits in 2002, auditing about 1/3 of the partners. Partner performance was improved since 2001, especially in reporting accuracy and protocol use, though there were some problem areas. Generally, partners lacked a clear understanding of how their management activities applied and conformed to specific HCP guidelines. Also, some partners seemed to struggle with self-monitoring requirements, and many felt the prescribed burn protocol was too inflexible for larger and interconnected habitat complexes (*Appendix I: 2002 Karner Blue HCP Compliance Audits Summary*). The Wisconsin DNR and USFWS must continue to work with partners to ensure their efforts and commitments to the HCP translate into real conservation.

HCP Management and Process Improvement

Throughout HCP implementation, partners have gained added insights into applied conservation methods. Several adaptive management changes have been introduced or are being developed, including refinements in reporting, training, monitoring protocols and more diversified combinations of mowing and prescribed burning. Extension of pre-management survey validity was an important improvement of the survey process. More streamlining is needed to allow land managers discretion in managing the landscapes with which they are intimately familiar.

If you have questions about this report or would like to receive a copy of it, please contact Peter Moreno (608-266-5241; Peter.Moreno@dnr.state.wi.us) or Dave Lentz (608-261-6451; David.Lentz@dnr.state.wi.us). You may request a copy by writing to Wisconsin Department of Natural Resources, Attn: Peter Moreno, ER/4, 101 S. Webster St., PO Box 7921, Madison, WI 53707-7921.

Figure 1

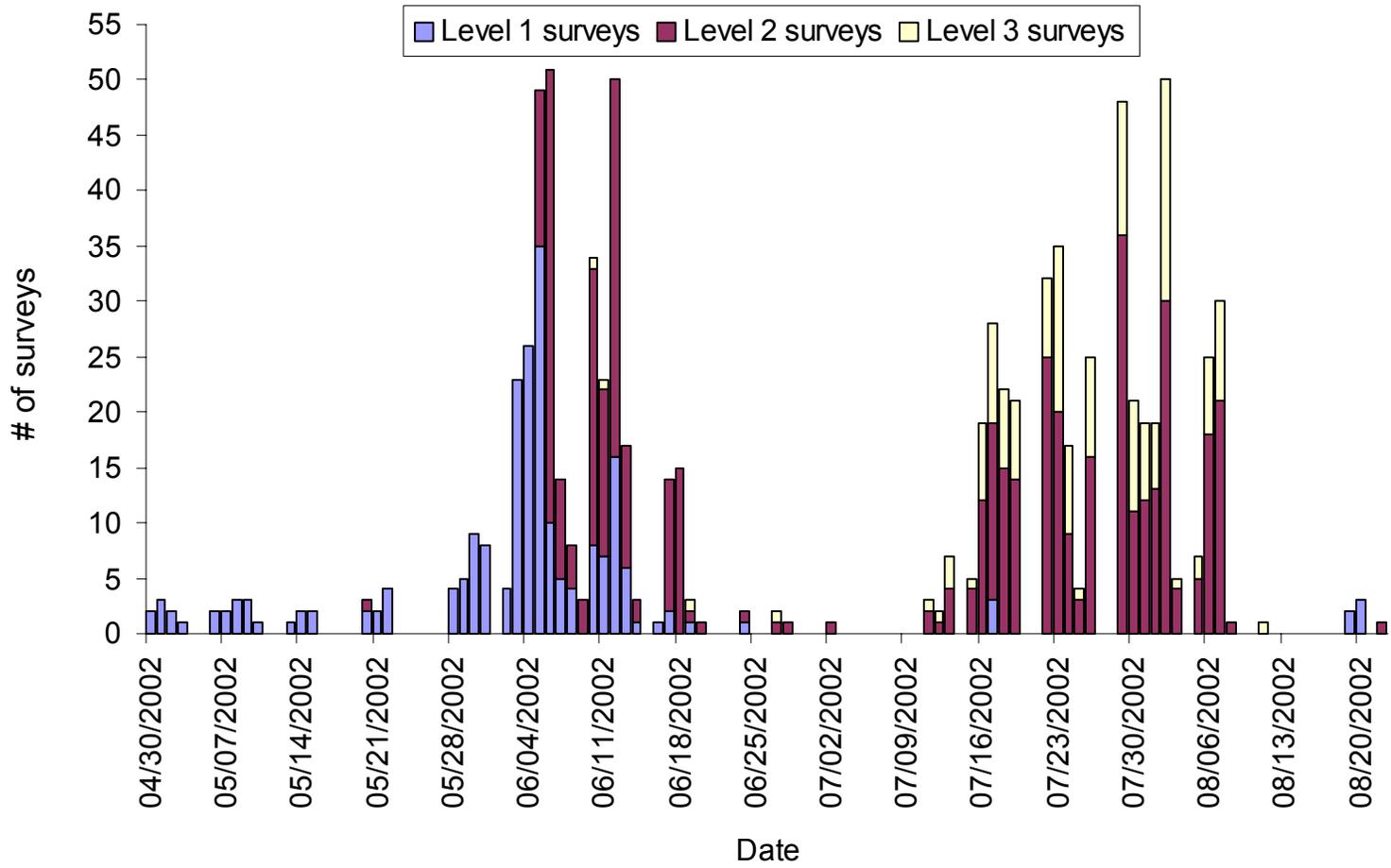
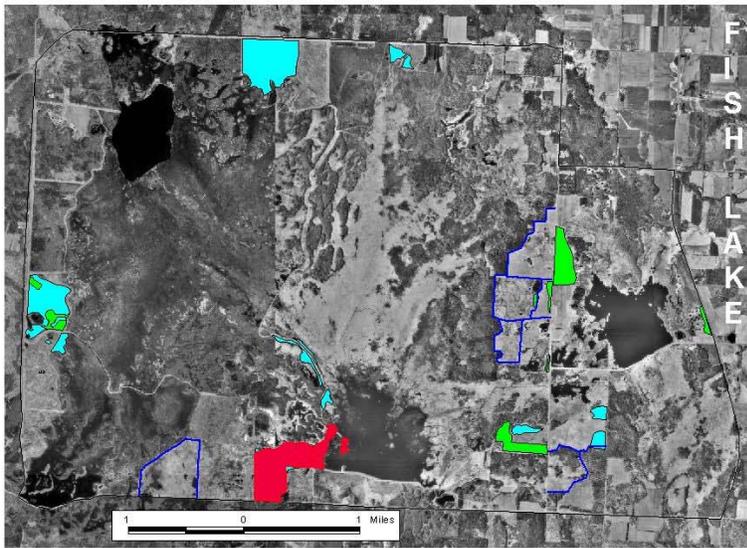
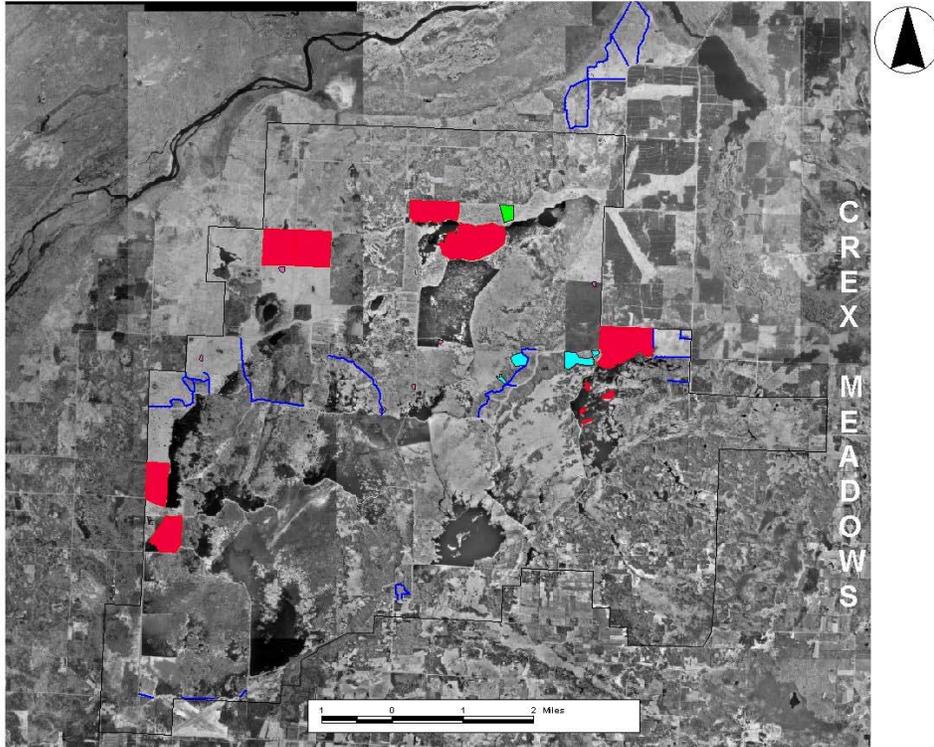


Figure 2

2002 Karner Blue Butterfly Management Activities
Glacial Lake Grantsburg Work Unit



- Management Activities
 KBB Survey Points (91)
 Rotovated 20.9 mi of firebreak
 Heavy brush mowing (9 sites or 127ac)
 Shearing (16 sites or 417ac)
 Mow STG dancing grounds (12.1 ac)
 Prescribed bums (14 units or 1201ac)



- KBB Survey Points
- PARKING LOTS
- Grass
 - Gravel

- Trails mowed
- Walking trails mowed
- Rotovating
- 50' firebreak mowed

- 100' firebreak mowed
- Wick herbicide application
- Heavy brush mowing
- Grass seed harvesting

- Shearing
- STG dancing grounds mowed
- Prescribed burning