

The Wisconsin Karner Blue Butterfly Habitat Conservation Plan

Annual Report of Activities for Calendar Year 2001



Photo: Eric Epstein,
Wisconsin DNR

Submitted to the United States Fish and Wildlife Service May 1, 2002

Prepared by

Sarah K. Carter and David Lentz
Bureau of Endangered Resources and Division of Forestry
Wisconsin Department of Natural Resources

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 No. TE0100064-2. 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. Currently 26 organizations participate as full partners in the Wisconsin Karner Blue Butterfly Habitat Conservation Plan (HCP). In accordance with Section X of the permit, this report summarizes activities conducted by these 26 partners, and two associated programs for private landowners, on lands included in the HCP for calendar year 2001.

Effectiveness Monitoring

Annual surveys were conducted by HCP partners in spring and summer 2001 on randomly chosen effectiveness monitoring sites throughout Wisconsin for 1) presence/absence of lupine (Level 1 surveys), 2) presence/absence of Karners (Level 2 surveys), and 3) relative abundance of Karners (Level 3 surveys). Partners surveyed 163 shifting mosaic sites for presence/absence of lupine, and found lupine present on 63 sites (38.7% of sites surveyed). 174 sites were surveyed for presence/absence of Karners, with Karners present on 65 sites (42.2% of sites containing lupine). 70 sites were surveyed for relative abundance of Karners, with an average density of 6.1 Karners/kilometer on sites containing lupine. Results of 2001 effectiveness monitoring surveys are summarized in Appendix A: 2001 Wisconsin Karner Blue Butterfly HCP Effectiveness Monitoring Results.

Self Monitoring

Nineteen partners conducted self monitoring surveys (e.g. pre-management and post-management surveys) for lupine and/or Karners on their properties during 2001. Partners reported surveying 2,069 sites for lupine, with lupine present on 160 sites. Partners also surveyed

126 sites for Karners, and found Karners on 32 of those sites. Appendix B: Summary of HCP Partner Activities in 2001, contains information on the number of sites surveyed by each partner.

Surveys for Associated Species

The Nature Conservancy conducted surveys for associated species on three of their properties: Quincy Bluff and Wetlands, Chiwaukee Prairie, and Spring Green Preserve. They found *Asclepias ovalifolia*, *Afexia rubranaria* and *Callirhoe triangulata* at each property surveyed for that species. Wisconsin Gas Company also compiled a checklist of associated plants, birds, and butterflies present on nine sites (see Appendix C: Surveys for Species Associated with Karner Blue Butterflies Conducted in 2001).

Certification of Surveyors

The names of surveyors conducting effectiveness monitoring in 2001 were checked against the list of people who have attended one of the three annual effectiveness monitoring training sessions offered by the Wisconsin DNR, to ensure that all surveyors were properly trained on survey techniques (see Appendix D: Certified Surveyors for Karner Blue Butterfly Effectiveness Monitoring). Despite reminders at training sessions in previous years, the surveyor name was still left blank on about 40% of effectiveness monitoring data sheets in 2001. In an attempt to address this and other common mistakes in data recording, we developed new data sheets for Level 1, 2, and 3 Surveys (attached) in 2001. The new forms have well defined spaces for required survey information, and include more detailed instructions on how to properly complete the form. In addition, common problems with data sheets were reviewed at the December 2001 HCP Partners meeting and at a special training session held for Wisconsin DNR field managers in January 2002. All partners were again reminded of these issues when they received their 2002 effectiveness monitoring assignments. Partners will also be notified in May 2002 of which specific issues applied to their organization, to encourage improved data collection and record keeping in future years. At that time, appropriate corrective action will be recommended for all partners that appear not to be in compliance with the HCP protocols requiring the use of certified surveyors (e.g. surveyor not listed in Wisconsin DNR records or unlisted surveyor).

Timing of Karner Blue Butterfly Surveys

Surveys for Karner blue butterflies were conducted by partners during the first and second Karner blue butterfly flight periods according to the effectiveness monitoring protocols. The peak of the first Karner flight period appeared to be about June 11, 2001, and the peak of the second flight period appeared to be approximately 7/24/01 to 8/2/01, as gauged by the number of surveys conducted by HCP partners across Wisconsin on each date (see Figure 1, n = 551). Although most survey dates appear to be relatively consistently grouped around these peak periods, it is to be expected that in a few cases each year variables of personnel, weather, or butterflies will continue to cause a few surveys to fall farther away from the peak flight periods. The Wisconsin DNR had the widest variation in survey dates, which is consistent with their numerous properties located in scattered areas throughout the High Potential Range.

Land Transfers

Nine partners reported transferring land in 2001, encompassing approximately 5,783 acres (see Appendix E: Land Transferred in 2001, for details of each transfer). As a result of these transfers, there are now approximately 252,299 acres currently included for coverage under the HCP.

Disturbance, Land Use, and Land Management Activities

Nine partners reported land management activity on sites occupied by Karner blue butterflies within the High Potential Range. Activities encompassed approximately 1,556 acres of habitat and 48.3 miles of trails (see Appendix F: Disturbance, Land Use, and Land Management Activities Conducted in 2001). Activities conducted included timber stand management and sales, mowing, control of invasive plants, and many others. In some cases, pre-management surveys were not conducted, or were conducted more than two years before the management activity occurred. Partners that appear not to be in compliance with the HCP protocols governing pre- and post-management surveys will be contacted individually, and corrective action will be recommended if appropriate. The duration of validity of pre-management surveys is currently in consideration by the HCP Implementation Oversight Committee and the USFWS. No permanent

take of Karner habitat was reported by any HCP partner (see Appendix B: Summary of HCP Partner Activities in 2001).

Proactive Conservation Activities

Documentation of proactive conservation activities has only been requested from partners in the last two years. In 2001, fifteen partners and the USFWS private lands program conducted proactive conservation activities on more than 4,581 acres of land either not occupied by Karners or outside of the High Potential Range of Karners (see Appendix G: Proactive Conservation Activities Conducted in 2001). Partners conducted a wide variety of activities, including timber stand management and sales, mowing, prescribed burning, collection and planting of lupine seed, and control of invasive plants. These activities testify to the proactive, participatory nature of all HCP partners. Partners are conducting many management activities to enhance or feature Karners and their habitat, even in locations where they are not required by the HCP to consider Karners in their management actions.

Outreach and Education Activities

As in past years, a highlight of partners' activities is the many outreach and education activities conducted by eighteen different partners, along with two cooperating programs, the Wisconsin DNR private lands program and the USFWS private lands program. The scope of activities conducted by partners ranged from one-on-one conversations with private landowners to displays viewed by many thousands of people at the Ducks Unlimited Great Outdoors Festival. Activities also reached a variety of audiences, from Ecological Society of America conference attendees to local middle school children (see details in Appendix H: Outreach and Education Activities Conducted in 2001). As in past years, partners also reached out to the public through mass media outlets such as radio shows and newspaper articles; some examples of written information produced and/or distributed by partners in 2001 are attached to this report. Partners estimate that they reached nearly two million people¹ through these educational and outreach activities in 2001.

Improvements in Reporting Procedures

In response to requests from partners, and in an attempt to address problems with reporting that occurred in earlier years, the Wisconsin DNR updated the annual report form in 2001, incorporating input and suggestions from all partners. The new form (attached) includes clear instructions for completing the form, as well as specific entries for each piece of information required for the report (including the newly requested information on proactive conservation activities). Partners were also able to fill out and submit the form electronically this year, and many partners took advantage of this opportunity. We hope to continue to make improvements to the annual report process that will streamline the process and contribute to more accurate reporting of the many activities partners conduct each year that benefit Karner and their habitat.

In a few cases, partners submitted supplemental information in addition to the annual report form. The report on land management and proactive conservation activities for one Wisconsin DNR property, the Glacial Lake Grantsburg unit, was submitted in the form of a GIS map (attached). The map provides clear and specific information on all land management and proactive conservation activities conducted on this very large property, for which conventional reporting methods would be tedious and less informative. Two other HCP partners submitted maps detailing specific locations of land transfers or land management activities, because it was impractical for these right-of-way partners to describe the lands involved by conventional township, range, and section designations. These maps are available upon request from the Wisconsin DNR (see below for contact information).

HCP Management and Process Improvement

An adaptive management plan, including identification of trigger points and recommended changes to the effectiveness monitoring protocol that would allow us to gain more valuable data for use with the proposed trigger points, was submitted to the USFWS prior to May 1, 2001, as required by Section W of the Incidental Take Permit. We look forward to receiving a formal response from USFWS regarding this proposal, so that we can continue to improve the adaptive management process for the Wisconsin Karner Blue Butterfly Habitat Conservation Plan.

If you have questions about this report or would like to receive a copy of it, please contact Sarah Carter (608-264-6039; cartesk@dnr.state.wi.us) or Dave Lentz (608-261-6451; lentzd@dnr.state.wi.us). You may also request a copy by writing to Wisconsin Department of Natural Resources, Attn: Sarah Carter, ER/4, 101 S. Webster St., PO Box 7921, Madison, WI 53707-7921.

1) amended (DOT, 2-12-03)