

Natural Heritage Inventory (NHI) Screening Guidance for the Karner Blue Butterfly (KBB)

Introduction

The Karner Blue Butterfly (*Lycaeides melissa samuelis*) is a Federally Endangered and Wisconsin Special Concern Species. The Karner Blue Butterfly High Potential Range (HPR) was developed through a model to identify areas where the probability of the Karner Blue Butterfly occurring is 50% or greater. It **does not** represent the species distribution, rather it represents an area regulated by the USFWS and should be treated like an element occurrence in a review. Element occurrences representing individual KBB observations are also mapped in the NHI Portal. Karners may occur outside of the areas shaded in blue (see Appendix A); however, incidental take outside of the HPR is covered under the Habitat Conservation Plan (HCP), regardless if a KBB EO exists.



Photo by Gregor Schuurman

The HPR includes portions of 19 counties (see Appendix A: Karner Blue Butterfly High Potential Range Map). County specific maps are available on the [Karner website](#) to aid the environmental review process.

Adams	Green Lake	Monroe	Washburn
Burnett	Jackson	Oconto	Waupaca
Chippewa	Juneau	Polk	Waushara
Clark	Marquette	Portage	Wood
Eau Claire	Menominee	Shawano	

Please contact the [Endangered Resources \(ER\) Review staff](#) (or other WDNR permit staff, if applicable) for information on whether other state or federally listed species may occur in the project area. There are a number of rare and listed plants and animals associated with habitats in which the KBB occurs.

Screening Guidance for the Karner Blue Butterfly

Per the U.S. Fish and Wildlife Service's (USFWS) Habitat Conservation Plan (HCP), screening for the Karner Blue Butterfly must be conducted according to the following guidance.

1. Is the project applicant an [HCP Partner](#)?

YES. Please contact the [HCP program staff](#) or visit the HCP's [User Guide](#) to ensure compliance.

NO. Continue to question 2.

2. Is the proposed project within the High Potential Range (HPR)?

Refer to the NHI Portal or the [Karner Blue Butterfly High Potential Range Maps](#) (see Appendix A) to locate your project.



YES. Continue to question 3.

NO. Voluntary avoidance: although coordination with the DNR is not required, project applicants may wish to voluntarily avoid impacts or improve potential KBB habitat.

3. Is suitable habitat for wild lupine (*Lupinus perennis*) present?

Information on land use, soil maps, and site photos may be used to determine if suitable habitat is present. Work with regional staff and biologists, ER Review staff, and/or HCP staff for assistance if needed.

- Suitable habitat includes but is not limited to pine barrens/plantations, oak savannas, sand prairies, utility and road right-of-ways, abandoned agricultural fields, and semi-closed canopy forests.
- Non-suitable habitat includes but is not limited to wetlands, routinely mowed areas, active agricultural fields, and dense forests.

YES. Continue to question 4.

NO. If suitable habitat for wild lupine is not present on or immediately adjacent to the site, the project will likely not impact the Karner Blue Butterfly. Screening requirements are met for the KBB. Place documentation in the project file.

4. Does the project fall under the Voluntary Category of the HCP?

Voluntary Category – Activities in this category are automatically covered by the HCP/Federal Incidental Take Permit (ITP) without further approval.

The Voluntary Category includes:

- Non-commercial Forestry Landowners – forestry landowners with 1000 acres or less, or those with greater than 1000 acres of land where the land is not primarily managed for the purpose of forestry (e.g. managed for recreation, as camps or lake associations).
- Agricultural Community
- Residential (Non-subdivision) Development – permanent take associated with the building of a home or second home and associated structures that are owned or built by the owner for his or her own use are included in this category.

YES. The project falls within the Voluntary Category and is automatically covered for the incidental take of KBB inside of the HPR. Although coordination with the DNR is not required, project applicants may wish to voluntarily avoid impacts or improve potential KBB habitat.

NO. Continue to question 5.

5. Is wild lupine present?

Wild lupine is the obligate host plant for the KBB. Wild lupine can be identified from green-up until July 31st by a qualified professional. Contact the HCP program for a current list of certified surveyors or follow [lupine plant survey protocols](#).

YES. Continue to question 6.



NO. Wild lupine is not present on or immediately adjacent to the site (adult KBBs typically travel up to 200 meters from their home lupine patch in search of nectar), therefore the project will likely not impact the Karner Blue Butterfly. Screening requirements are met for the KBB. Place documentation in the project file.

A note for non-HCP partners: Wild lupine surveys are good for a 5 year period (unless there's site disturbance such as timber harvesting).

6. Is the Karner Blue Butterfly present or assumed present at the site?

Adults are present from late May through late June and again from early July through mid-August depending on a variety of conditions. The [HCP Emergence Model](#) helps predict the flight times for specific geographic areas on the landscape based on current environmental conditions. Generally a project applicant has two options:

- Assume KBB presence (no surveys required)
- Have a certified surveyor conduct KBB surveys during the flight period(s) to determine presence or absence of the butterfly. Contact the HCP or ER Review program for a current list of certified surveyors.

YES. Surveys were conducted and the Karner Blue Butterfly is present at the site, or surveys were not conducted and the Karner Blue Butterfly is assumed to be present at the site. Continue to question 7.

NO. Screening requirements are met for KBB. Place documentation in the project file.

7. Will the project be able to avoid take of the Karner Blue Butterfly?

With the project applicant, consult the USFWS and/or HCP Program to identify modifications that might allow the project to proceed. For example, could the project be moved to a different site? Altered to avoid suitable habitat?

YES. Consultation verifies there will be no take of KBB from the project. Screening requirements are met for KBB. Place documentation in the project file.

NO. Continue to step 8.

8. Incidental take of the Karner Blue Butterfly will occur. The applicant has two options:

- Apply to the HCP to become a partner or a one-time permittee.
- Apply to the USFWS for an individual Incidental Take Permit.

Contacts

For questions regarding the Habitat Conservation Plan and projects that may cause incidental take, contact Karner Blue Butterfly HCP program staff at DNRKarnerBlue@wisconsin.gov.

For questions regarding the review process, contact [Endangered Resources Review Staff](#) at DNRRERReview@wisconsin.gov.

Karner Blue Butterfly NHI Screening Guidance Flow Chart



