



Frac Sand and the Karner blue Connection



KARNER BLUE BUTTERFLY

The Karner blue butterfly (*Lycaeides melissa samuelis*) is a Federally Endangered Species. Listed in 1992, the Karner blue butterfly (Kbb) is more widespread in Wisconsin than other states. The Karner caterpillar feeds only on wild lupine (*Lupinus perennis*). Areas without wild lupine nearby generally do not support Karner populations. Lupine is a sun-loving plant that grows in well-drained **sandy soils** of the Central and Northwest Sands in Wisconsin. Other State Endangered & Threatened species often co-occur with Karners. To determine if any of these species are a concern for your project, contact Endangered Resources <http://dnr.wi.gov/org/land/er/review/> prior to any fieldwork.



FRAC SAND AND KARNER BLUE HABITAT

It is no coincidence that the Karner range almost perfectly **overlaps** with the frac-sand range in Wisconsin. Essentially, Karner blues may occur wherever there is frac sand and suitable habitat (wild lupine).

PROJECT PLANNING

Frac sand mining companies need to be aware of the potential for Karners early in their planning process due to the limited survey window for wild lupine and adult Karners. If the project is within one of the 19 counties listed below, refer to the detailed Karner blue High Potential Range (HPR) maps found at <http://dnr.wi.gov/forestry/karner/>.

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

If the project is within the High Potential Range, work with qualified personnel to determine if wild lupine is present. Wild lupine surveys are best conducted from green up April/May through July 31st. If wild lupine is present, determine if Karners are present. Surveys for adult Karners can only be conducted from June - early August by certified personnel. Contact Jennifer.Bardeen@Wisconsin.gov of the DNR's Karner blue Habitat Conservation Plan for a list of certified agents. If the project may affect Karners, consider joining the Karner blue Habitat Conservation Plan described below.

KARNER BLUE BUTTERFLY HABITAT CONSERVATION PLAN

The DNR with technical assistance from the U.S. Fish and Wildlife Service (USFWS) developed the Wisconsin Statewide Kbb Habitat Conservation Plan (HCP) with partners in the forest industry, utility industry, Wisconsin Departments of Transportation and Agriculture, and conservation community. In 1999, the USFWS issued an Endangered Species Act incidental take permit to the DNR that allows the DNR to administer the permit. The permit authorizes take of Kbb's per conservation measures and protocols identified in the HCP on land owned and managed by HCP partners. This allows the forty-one current HCP Partners to work in areas where Kbb's are present. Inclusion in the DNR's HCP is a more streamlined approach than applying directly to the USFWS for a separate permit.

CONTACT

For additional information on the Karner Blue Butterfly Habitat Conservation Plan, please contact the HCP Program David.Lentz@Wisconsin.gov (608) 261-6451 (desk), (608) 220-1112 (mobile); or Jennifer.Bardeen@Wisconsin.gov (608) 267-0794 or visit <http://dnr.wi.gov/forestry/karner/>.

