

1.0 Background

Although populations of the Karner blue butterfly (KBB) have been decreasing in other states, the State of Wisconsin has significant populations of the postage-stamp-sized insect. In 1992, the US Department of Interior Fish and Wildlife Service (FWS) added the KBB to its endangered species list. This required the Wisconsin Department of Transportation (WisDOT) to obtain a permit any time either the butterfly or its habitat would be affected by a construction or maintenance project. Since January, 1999 the department has participated in a multi-partner <u>Habitat Conservation Plan</u> (HCP) under an agreement with the FWS who is represented by the DNR. This agreement authorizes an incidental take permit from the FWS, covering WisDOT vegetation management operations, in lieu of individual project-by-project permits.

The DNR <u>Karner blue butterfly website</u> has information on location, guidelines and management protocols, and partner annual reports.

2.0 Species and Habitat Conservation Agreement

The department has agreed to take certain conservation measures in return for the incidental take permit from the FWS. These conservation measures are applied to highway corridors within the high potential range for the KBB, typically upland sandy soil areas in central and northwestern Wisconsin. A prerequisite for the presence of the KBB is the presence of the native wild lupine plant on which the KBB larva exclusively feed.

The department must adhere to the conditions prescribed in the HCP agreement as listed in the following paragraphs to be covered by the incidental take permit.

Appendix A of the agreement specifies that safety mowing will continue to be done in accordance with the HMM 07-05-35, Mowing and HMM 07-10-00, Woody Vegetation Management. In addition, the following language is excerpted from the agreement:

"**Mowing/Brushing -** Mowing for safety will continue to occur at least once annually within 15' of outside shoulders of highways, or to the bottom of the ditch or drainage areas, whichever is less, five feet on inside shoulders of medians and within vision areas described in HMM 07-05-35, Mowing.

Rights-of-way beyond this mow zone varies from 20 to 50 feet or more and will be the main target of KBB management. Spot mowing or brush cutting in this area will only be done between July 15 and April 1 on a two to five year cutting rotation to control woody plants and encourage lupine germination and growth. Exceptions to this may be allowed for spot mowing during the growing season to favor native plants and discourage leafy spurge, Canada thistle and other invasive species," (in accordance with HMM 07-05-05, Control of Noxious, Invasive and Hazardous Plants and HMM 07-05-15, Use of Herbicides).

Protocols for herbicide use, burning and other items can be found at the following locations on the WDNR website at the following links.

- Pesticide Use
- Prescribed burn
- <u>All other protocols</u>

3.0 Karner Blue Butterfly Corridors and Counties

The highway corridors and counties on which management has been implemented in consideration of the KBB are listed below. These corridors either have KBB or significant lupine populations present.

State <u>Karner Blue Butterfly High Potential Range Regulatory Range Map</u>, produced April 15, 2008 by the Forest Landscape Ecology Lab, Dept. of Forest and Wildlife Ecology, University of Wisconsin-Madison.

<u>Specific county range maps</u> – Maps produced 2009 by the Forest Landscape Ecology Lab, Dept. of Forest and Wildlife Ecology, University of Wisconsin-Madison.

Counties

The Karner blue butterfly has been *documented* from part, or all, of the following 19 central and northwest sandy counties of Wisconsin:

- Adams
- Burnett
- Chippewa
- Clark
- Eau Claire
- Green Lake
- Jackson
- Juneau
- Marquette

- Menominee
- Monroe
- Oconto
- Polk
- Portage
- Shawano
- Waupaca
- Waushara
- Wood

In addition, potential habitat occurs in parts or all the following four counties:

- Barron
- Dunn
- Outagamie
- Trempealeau

Highway Corridors

The approximate mileage for each corridor identified by county, excluding urban areas, is listed in the following list.

Adams

- STH 21 from the Juneau County line east to Wautoma, 50 miles; Juneau, Adams, Waushara counties
- STH 13 north from CTH E to STH 73, 25 miles; Adams, Wood counties
- STH 73 from STH 13 southeast to Wautoma, 26 miles; Wood, Adams, Waushara counties

Burnett

- STH 77 from Danbury east to the county line, 15 miles; Burnett Co
- STH 35 from Danbury south to Siren, 14 miles; Burnett Co
- STH 70 from STH 35 east to the county line, 16 miles; Burnett Co

Chippewa

• STH 29 from CTH T near Chippewa Falls west to I94, 9 miles; Chippewa Co

Eau Claire

- USH 12 from Augusta west to Eau Claire, 19 miles; Eau Claire Co
- STH 27 from Augusta north to CTH D, 10 miles; Eau Claire Co
- I94 from the Eau Claire County line northwest to the first Eau Claire exit, 14 miles; Eau Claire Co
- USH 12 from Eau Claire northwest to STH 29, 5 miles; Eau Claire Co

Jackson

- STH 54 from Black River Falls to Port Edwards, 47 miles; Jackson, Wood counties
- USH 12 from I94 north of Tomah to Black River Falls, 22 miles; Monroe, Jackson counties
- USH 12 from Black River Falls north to Hwy 10, 22 miles; Jackson Co
- STH 27 south of Black River Falls to STH 71, 14 miles; Jackson Co
- I90-94 from the Mauston northwest to Black River Falls, 40 miles Juneau, Monroe, Jackson counties

Juneau

- STH 173 from Valley Junction to STH 80, 21 miles; Juneau, Monroe counties
- USH 12/STH 16 from Camp Douglas northwest to I90 near Tomah, 10 miles; Monroe, Juneau counties
- STH 21 from the Juneau County line east to Wautoma, 50 miles; Juneau, Adams, Waushara counties
- STH 58 from I90-94 north to STH 80, 10 miles; Juneau Co
- I90-94 from the Mauston northwest to Black River Falls, 40 miles Juneau, Monroe, Jackson counties
- USH 12/STH16 from Mauston north to Camp Douglas, 15 miles; Juneau Co

Marquette

- STH 22 from Montello north to Wautoma, 15 miles; Marquette, Waushara counties
- STH 23 from USH 51 east to Montello, 7 miles; Marquette Co

Monroe

- STH 173 from Valley Junction to STH 80, 21 miles; Juneau, Monroe counties
- USH 12 from I94 north of Tomah to Black River Falls, 22 miles; Monroe, Jackson counties
- USH 12/STH 16 from Camp Douglas northwest to I90 near Tomah, 10 miles; Monroe, Juneau counties
- STH 21 from Angelo east to I94, 14 miles; Monroe Co
- STH 21 from I94 east to the Juneau County line, 9 miles; Monroe Co
- I90 and STH 16 from the Sparta exit east to Tomah/I94, 16 miles (wide R/W between both highways); Monroe Co
- I90-94 from the Mauston northwest to Black River Falls, 40 miles Juneau, Monroe, Jackson counties

Portage

- STH 54 from Wisconsin Rapids east to Plover, 11 miles; Portage, Wood counties
- STH 54 from USH 51 southeast to Waupaca, 19 miles; Portage Co
- USH 10 from Stevens Point east to Waupaca, 19 miles, Portage Co
- STH 66 from Stevens Point northeast to Rosholt, 9 miles; Portage Co

Waushara

- STH 21 from the Juneau County line east to Wautoma, 50 miles; Juneau, Adams, Waushara counties
- STH 22 from Montello north to Wautoma, 15 miles; Marquette, Waushara counties
- STH 152 from Wautoma to Mt. Morris, 6 miles; Waushara Co
- STH 73 from STH 13 southeast to Wautoma, 26 miles; Wood, Adams, Waushara counties

Wood

- STH 80 from I90-94 to Dexterville, 32 miles; Juneau, Wood counties
- STH 54 from Black River Falls to Port Edwards, 47 miles; Jackson, Wood counties
- STH 54 from Wisconsin Rapids east to Plover, 11 miles; Portage, Wood counties
- STH 173 from Babcock to Nekoosa, 9 miles; Wood Co
- STH 13 north from CTH E to STH 73, 25 miles; Adams, Wood counties
- STH 73 from STH 13 southeast to Wautoma, 26 miles; Wood, Adams, Waushara counties