



Karner Blue Ecology

A DNR factsheet supporting Wisconsin's Statewide
Karner Blue Butterfly Habitat Conservation Plan



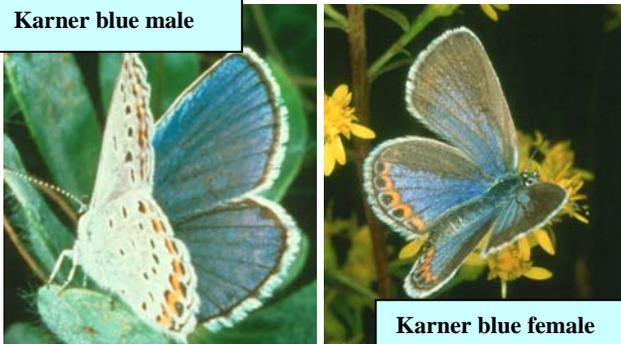
KARNER BLUES AND KARNER BLUE HABITAT

In Wisconsin, the Karner blue butterfly (*Lycaeides melissa samuelis*) usually occupies open prairies and recently cleared areas containing a plant called wild lupine. This plant is widespread in Wisconsin's Central and Northwest Sands and other areas where sandy soils are found. The pale green caterpillar of the Karner blue butterfly feeds exclusively on the leaves of the wild lupine. Areas without wild lupine nearby generally do not support Karner blue populations.

In Wisconsin, wild lupine germinates in mid-April, its spikes of violet-blue flowers bloom by mid to late May, and its seed pods mature to brown or black before bursting in late June or early July.

About the size of a small postage stamp, adult Karner blues can be identified by the bands of orange spots on the underside edge of their wings. The wing top sides of male butterflies are deep sky blue, while those of the female are darker blue and brown with orange spots on the edges of both hind wings.

Karner blue male



Karner blue female

LIFE CYCLE OF THE KARNER BLUE

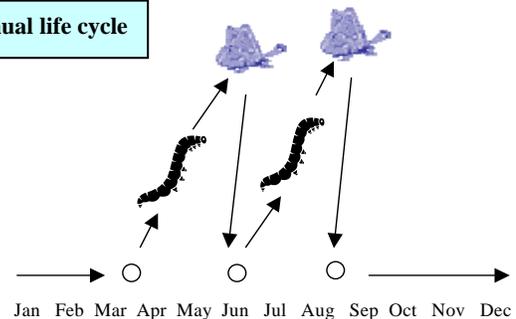
Karner blue butterflies produce two short-lived generations each year, one in the spring and one in the summer. The eggs laid by the second generation overwinter on or near wild lupine plants before hatching the following April to produce the first caterpillars of the year.

The caterpillars feed on wild lupine leaves for about three weeks, often accompanied by ants that protect the caterpillars and collect a sugary solution secreted by the caterpillars' bodies. Around mid-May, the caterpillars attach themselves to a firm surface and pupate. In late May, adult butterflies emerge from their pupal stage and begin to feed on the nectar of wildflowers.

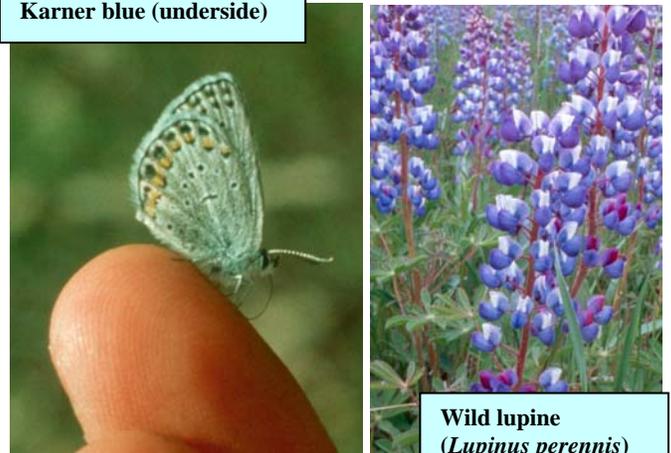
Shortly after emerging, the adult butterflies lay eggs on or near wild lupine to produce a second generation. The second generation of eggs hatches quickly and develops into adulthood by mid-July. The adults of the second generation lay eggs for the following year by mid-August.

Karner blue butterflies do not migrate like monarch butterflies. They remain in Wisconsin throughout the year, in one life stage or another.

Annual life cycle



Karner blue (underside)



Wild lupine
(*Lupinus perennis*)

For more information, contact the HCP Coordinator at 608-261-6451 or visit

<http://dnr.wi.gov/forestry/karner/>

Photos: Thomas Meyer (Karner blue male and female); Ann Swengel (Karner blue underside); Mike Engel (wild lupine)