

What Does a Karner Look Like?

Wing Characteristics:

Under Side:

Orange crescents (at least 4) along outer edge of fore and hind wings — more pronounced on hind wing.



Top Side:



Females

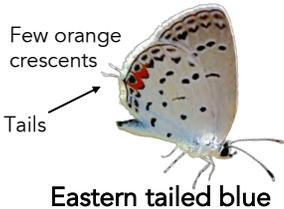
Darker in color, with blue close to the body; orange crescents on the outer edge of hind wings



Males

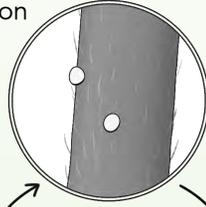
Light blue, without any orange crescents

Don't be fooled by look-alikes!

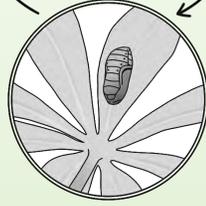


Life Cycle of the Karner Blue Complete Metamorphosis

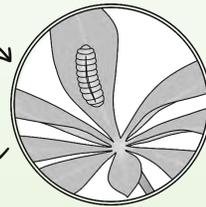
Eggs are laid on stems of wild blue lupine plants.



Adults live for just 3 - 5 days. During this time, they drink nectar from a variety of flowers, mate, and lay eggs.



Pupae start out green and gradually turn dark blue over a period of 8-11 days.



Larvae eat leaves of wild blue lupine for 3-4 weeks. They are difficult to spot because they are the color of lupine leaves.

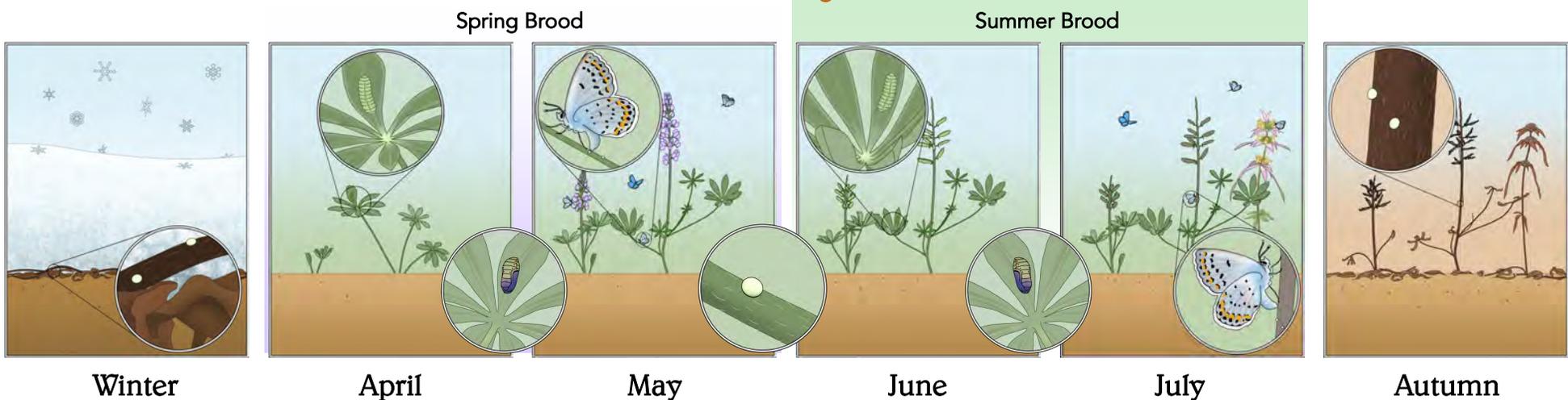
Two generations (broods) of Karners complete their life cycles each year.

Karner Blue Butterfly Facts

- The Karner blue butterfly was first identified as a species by Russian novelist and lepidopterist Vladimir Nabokov in 1944.
- He named it after the hamlet of Karner in the town of Colonie, NY.
- Latin name: *Lycaeides melissa samuelis*
- It was placed on the NY endangered species list in 1977 and on the US endangered species list in 1992.
- They are also found in Michigan, Minnesota, New Hampshire, and Wisconsin.
- It is threatened by habitat loss caused by humans. Climate change may lead to habitat loss in areas that are otherwise protected.
- Larvae can only eat leaves of wild blue lupine.
- Larvae are often "tended" by ants.
- They do not migrate and seldom travel further than 700 feet during their short lifetimes.
- They survive winter as eggs, aided by an insulating layer of snow.



Karner Blue through the Seasons



Karner Blue Conservation

Historically, wildfires kept the habitat in the Albany Pine Bush open and suitable for wild blue lupine. Today, however, any *wildfire* is quickly extinguished to protect private property. The Albany Pine Bush Preserve Commission uses **prescribed fires** that mimic natural wildfires to restore and maintain habitat suitable for wild blue lupine and the Karner caterpillars that eat it.



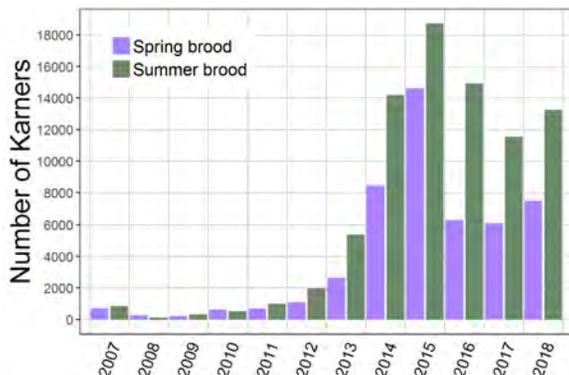
A prescribed fire at the Albany Pine Bush Preserve



Wild blue lupine in Karner blue butterfly habitat

Good News for Karners!

Conservation efforts appear to have put the Karner population at the Albany Pine Bush on the path toward recovery!



Suggested Reading and References

Barnes, J.K. 2003. *Natural History of the Albany Pine Bush: Albany and Schenectady Counties, New York*. New York State Museum, Albany, NY.

US Fish and Wildlife Service. 2015, April 14. *Endangered Species: Midwest Region: Karner Blue Butterfly (Lycaeides melissa samuelis)*. www.fws.gov/midwest/endangered/insects/kbb

U.S. Fish and Wildlife Service. 2003. Final Recovery Plan for the Karner Blue Butterfly (*Lycaeides Melissa samuelis*). U.S. Fish and Wildlife Service, Fort Snelling, Minnesota. 273 pp.



**TAKING OF BUTTERFLIES IS *ILLEGAL*,
UNDER STATE AND FEDERAL LAWS,
WITHOUT A PERMIT!**



For further information about the Karner blue butterfly, the Albany Pine Bush, or volunteer opportunities, please visit www.AlbanyPineBush.org

Karner Blue Butterflies at the Albany Pine Bush



An Endangered Species in a Globally Rare, Nationally Significant, and Locally Distinct Ecosystem



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