

## 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

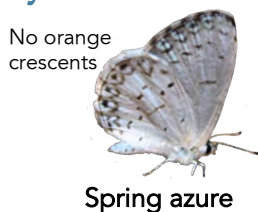
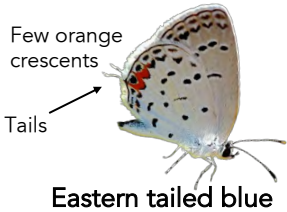
Darker in color, with blue close to the body; orange crescents on the outer edge of hind wings



#### Males

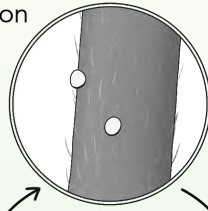
Light blue, without any orange crescents

### Don't be fooled by look-alikes!

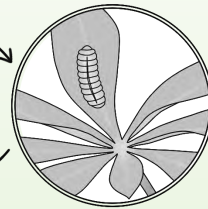


## Life Cycle of the Karner Blue Complete Metamorphosis

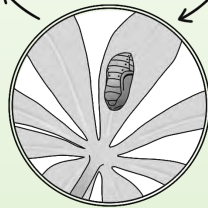
**Eggs** are laid on stems of wild blue lupine plants.



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



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



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

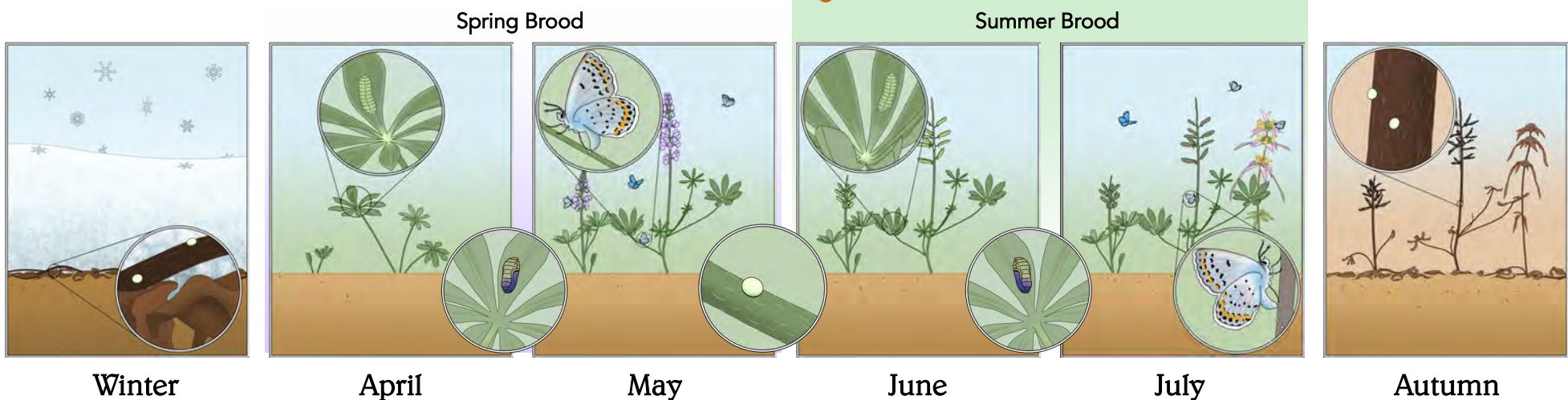
Two generations (broods) of Karners complete their life cycles each year.

## 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.



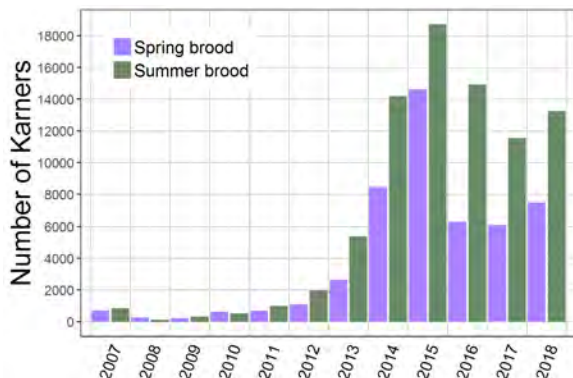
A prescribed fire at the Albany Pine Bush Preserve



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](http://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](http://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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