

**FORT McCOY
KARNER BLUE BUTTERFLY
MANAGEMENT**



WHY DOES FORT MCCOY MANAGE KARNER BLUE BUTTERFLIES (KBB)

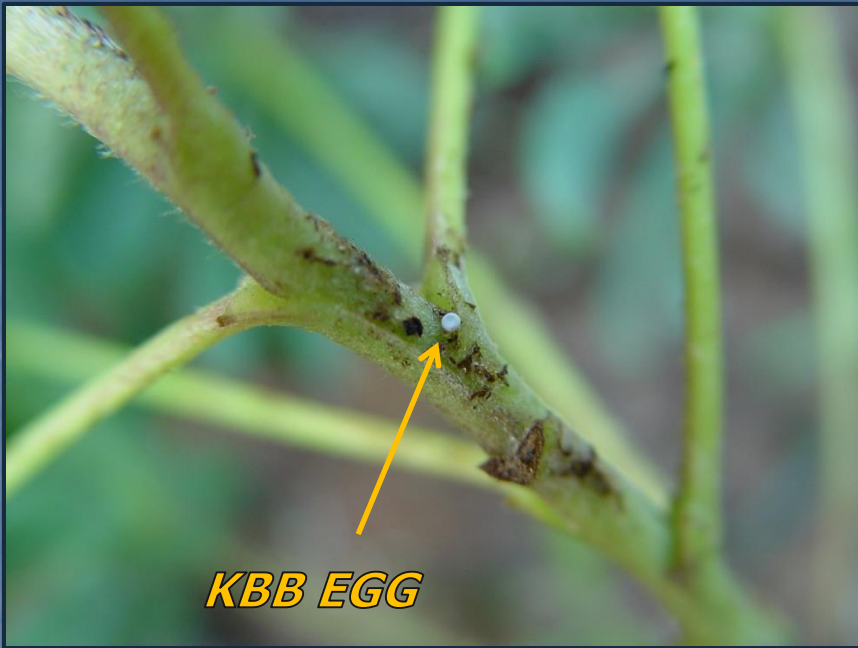
- Congress has mandated that all federal agencies shall utilize their authorities to help conserve endangered species.
- Management Objectives: **MINIMIZE IMPACTS TO MILITARY TRAINING** while at the same time complying with all applicable federal and state laws and regulations.

HISTORY OF KBB MANAGEMENT ON FORT McCOY

- The first KBB was documented on the installation in 1990.
- The KBB was placed on the Federal Endangered Species List on December 14, 1992.
- In February 1993, a Biological Assessment was sent to the U.S. Fish and Wildlife Service (USFWS) summarizing the impacts of land-use activities on the KBB at Fort McCoy.

HISTORY OF KBB MANAGEMENT ON FORT McCOY

- A Biological Opinion was received from the USFWS in March 1994 and concluded that the activities occurring on Fort McCoy were not likely to jeopardize the continued existence of the KBB.
- Fort McCoy drafted its first KBB Management Plan in 1995. This plan has been revised several times with the latest plan being approved in 2012.



KBB EGG



***KBB LARVAE WITH
ANT ATTENDANTS***



KBB FEMALE



KBB MALE

WILD LUPINE – THE HOST PLANT FOR THE KBB LARVAE



NECTAR SOURCES FOR ADULT KBBS



LEADPLANT



DOTTED MINT

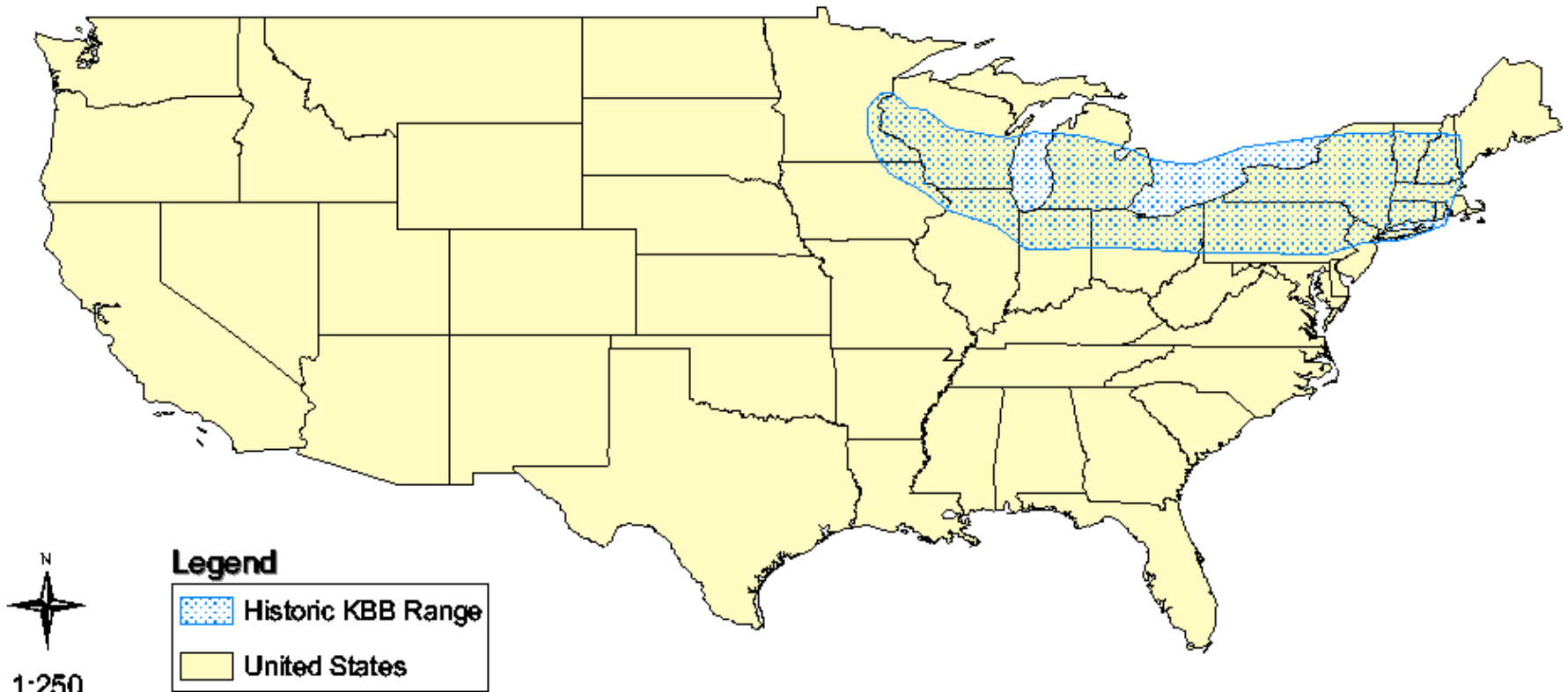


BUTTERFLY WEED



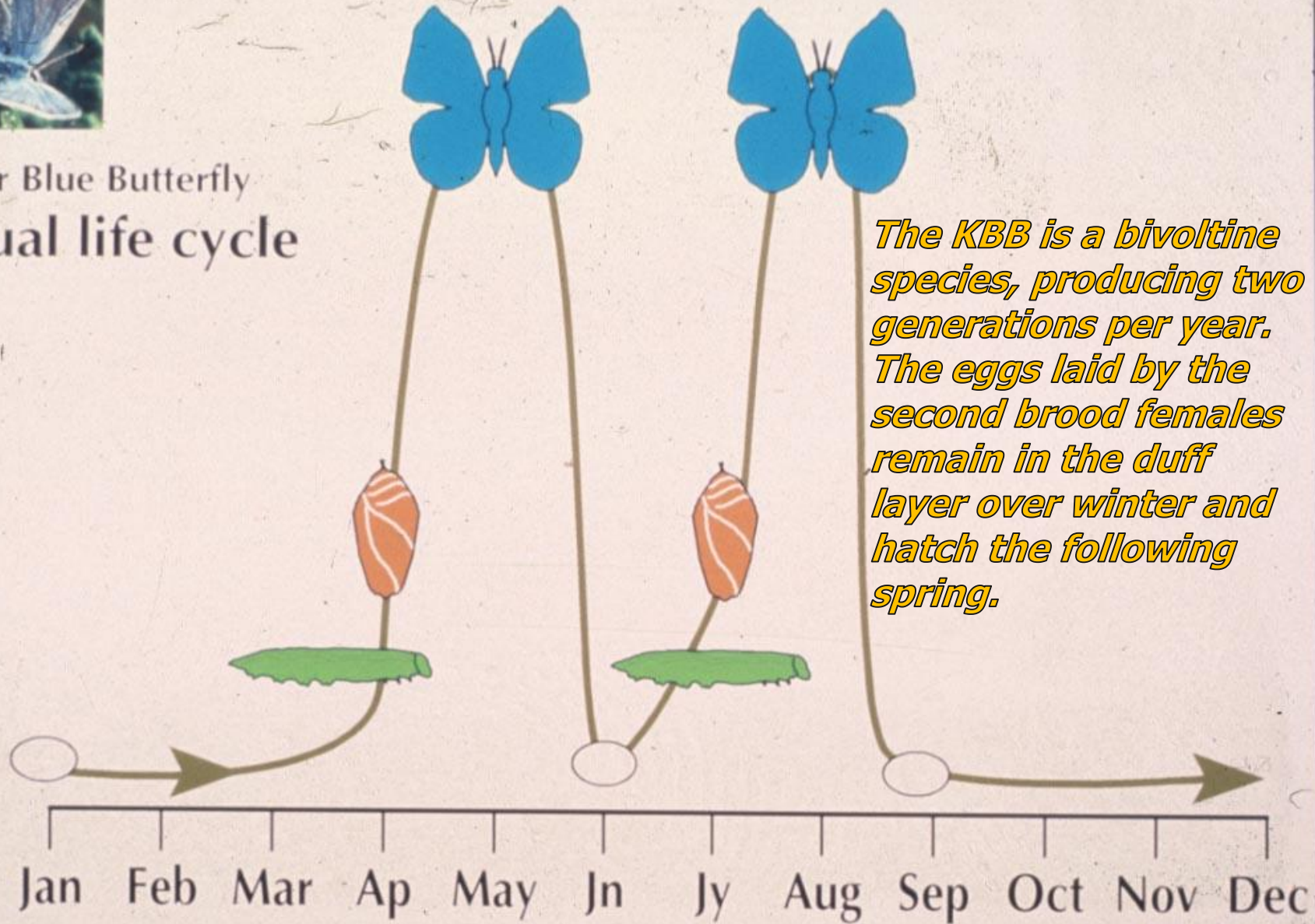
SUNFLOWER

The largest remaining populations of the KBB occur in Wisconsin, Michigan and New York.





Karner Blue Butterfly Annual life cycle



KBB POPULATION MONITORING: Straight-line transect surveys (Distance Monitoring) are utilized to estimate KBB numbers. Surveys are conducted at 23 sites biennially during both the spring and summer flights.



KBB HABITAT MAPPING: Surveys to map the location of wild lupine on Fort McCoy are completed every 10 years. The latest survey was completed in 2014, with approximately 3,100 acres of wild lupine mapped outside the impact area.



KBB PRESENCE/ABSENCE SURVEYS: Surveys to document the presence or absence of KBBs within mapped wild lupine patches are conducted every ten years. Surveys indicate that approximately 95% of the wild lupine patches are used by KBBs.



KBB LARVAE FOUND DURING A PRESENCE/ABSENCE SURVEY

KBB HABITAT MANAGEMENT: The majority of management activities involve a reduction in the canopy and shrub layer to promote the growth of wild lupine and plants that adult KBBs feed/nectar on. This is accomplished through timber sales, mowing, shredding, prescribed burning, and herbicide applications.



KBB HABITAT AREA BEFORE AND AFTER A SHREDDER WAS USED TO REMOVE SMALL TREES.