

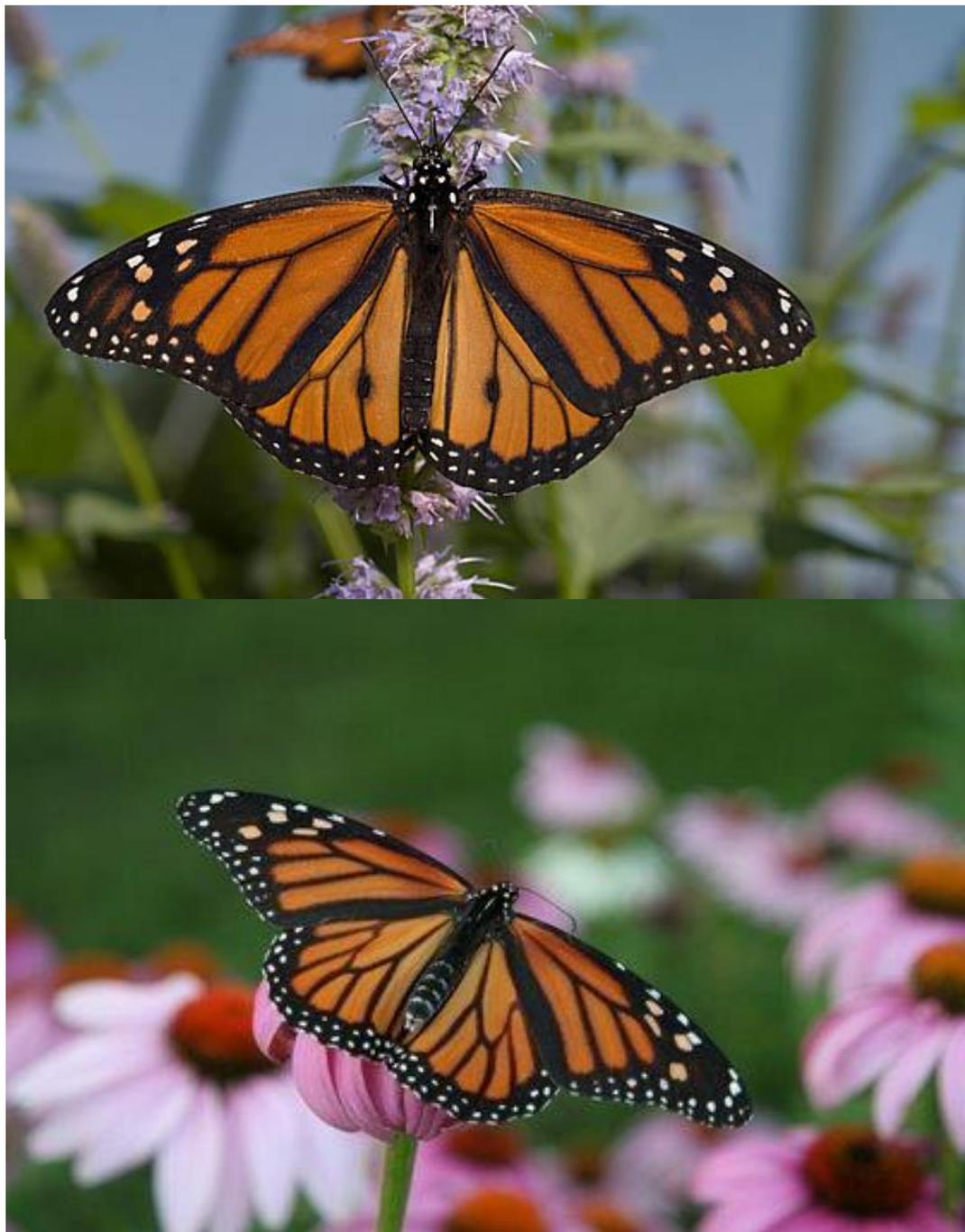
The Marvelous Monarch

A peak at the most famous of all
butterflies

The most well-studied of butterflies is the monarch butterfly, *Danaus plexippus*. Although many species of butterfly migrate, monarchs are the only one known that has a two-way trip over such long distances.



The Monarch ranges from southern Canada south throughout the US. Males are bright orange and sport a raised black spot on the HW called an androconial patch. The ancestral function of this patch is to hold a pheromone used in courtship. Females are duller orange with thicker darker veining.





Female monarchs lay their ova (eggs) on milkweed plants, *Asclepias* sp. The caterpillar is distinctly patterned in black, white and yellow stripes and possesses two pair of filamentous tentacles, one near the head and the other near the tail end.





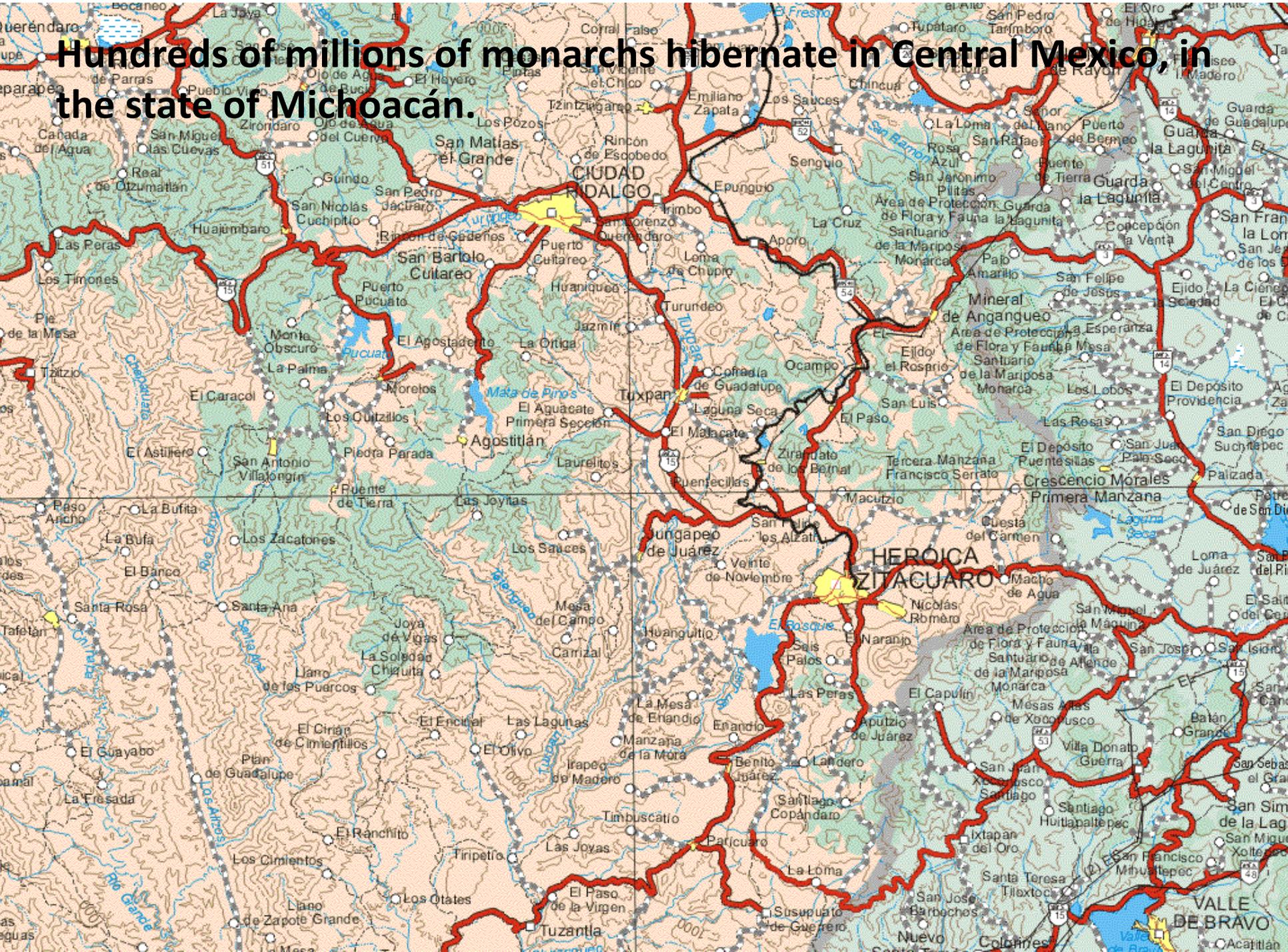
Female monarchs meticulously search for and inspect actively growing or flowering milkweeds (with the exception of *A. tuberosa*) in order to lay their ova on. Females will usually lay on the new growth and under leaves.



The larval stage lasts about three weeks. It will molt four times before the final molt into the pupal stage. The chrysalis is a lovely shade of jade green with a black and metallic gold band plus numerous gold spots. The pupal stage lasts about two weeks.



Hundreds of millions of monarchs hibernate in Central Mexico, in the state of Michoacán.





The monarchs hibernate on oyamel fir trees on the southern sides of the mountains where they are protected from cold northern winds carrying rain and sleet. They normally arrive in early November (around November 2nd , El Dia de la Mort) and stay till the end of February.



A threat to monarchs is the deforestation that results from people's using the trees for lumber or cooking fuel. This allows freezing rains to reach far into the sanctuaries and kill off butterflies.



One of the latest threats to the monarch migration phenomenon is the widespread usage of GMO grain crops. These crops have been designed to withstand certain herbicides such as Round-up. Farmers use these herbicides to kill weeds off in the crop rows. Unfortunately it will also kill milkweeds, the only host for monarch caterpillars to breed on.

What the average person can do is plant milkweeds, both native and tropical, in their gardens. The butterflies will find them and breed on them.

