

# Working Lands for Pollinators

Habitat for Monarch Butterflies

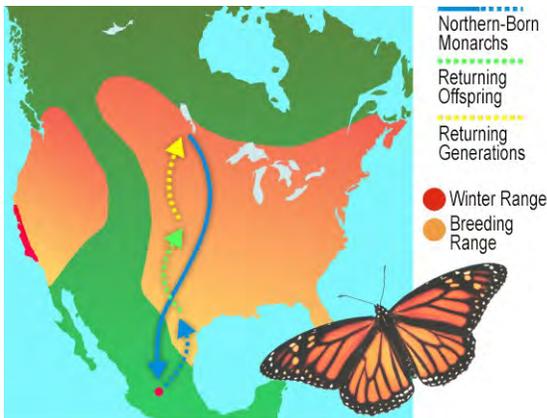


## Monarch Butterflies

The distinctive orange and black monarch butterfly is one of the most recognizable insects to people living in Michigan. Monarchs have a fascinating life cycle, as caterpillars they feed exclusively on the milkweed plant and each fall they migrate to find a warmer climate. Monarchs found in Michigan, and most other areas east of the Rocky Mountains overwinter in Mexico.

The complete migration from Michigan to Mexico and then back again happens over the course of a year covering the lifespan of 3 to 4 generations of butterfly. The third or fourth northern-born generation of Monarch is the most long-lived, up to 8 months compared to about 50 days for the previous generations. This most northern born generation makes the seasonal flight south in the fall having never visited their winter habitat before. During the winter they cluster together in trees and are relatively inactive before flying north in the spring to lay their eggs.

## The Monarch Migration



Revised from map created by the Living Prairie Museum; Winnipeg, Manitoba

## Declining Population

Researchers have observed a steep decline in the number of monarch butterflies reaching their winter hibernation grounds in Mexico and California. From an estimated 700 million monarchs migrating to Mexico in the 1990s, researchers estimate their numbers have declined more than 80 percent. A similar decline was observed for western monarchs hibernating in California.



Adult monarchs need flowering plants throughout the growing season for food.

A number of threats are likely responsible for the decline in monarch butterfly numbers. The major threats are loss of habitat in both their northern and southern ranges, pesticides and climate change. In the north, milkweed is less abundant due to habitat loss and the proliferation of herbicide resistant crops. In its southern winter range, forest habitat is being lost to logging and development.

## Pollinators

More than 80 percent of the world's plants need pollinators to survive, including many that provide the food we eat. But today, many pollinators are in trouble.

That's why the USDA Natural Resources Conservation Service works with private landowners to create habitat for pollinators on farms, ranches and in forests. Improving existing and providing new habitat for pollinators has become a major focus for NRCS in working with our many partners and private land owners

## How to Help

In Michigan, creating and improving pollinator habitat is something any landowner can do to benefit monarchs. Including the proper species of milkweed in pollinator plantings provides the required food source for monarch caterpillars. Once the adult monarch emerges from its chrysalis it will need a source of nectar throughout the growing season. Planting a variety of flowering plants that bloom at different times from spring to fall will ensure a food source for adult monarchs.



Monarch caterpillars require milkweed plants for food.

Pollinator habitat can be established almost anywhere from urban and suburban lawns to field borders and any other uncultivated farmland. Allowing flowering crops like alfalfa to bloom before harvesting provides a food source for pollinators as well. Judicial use of pesticides and herbicides and avoiding areas with pollinator habitat is important in conserving monarchs, pollinators, and other beneficial insects.

## NRCS Assistance

Local NRCS conservationists can provide technical assistance for establishing pollinator habitat. In addition, eligible landowners may be able to receive financial assistance to offset the cost of establishing or improving pollinator and monarch habitat.

In 2018, NRCS will target financial assistance for improving monarch butterfly habitat through the **Monarch Habitat Initiative**:

### Conservation Practices:

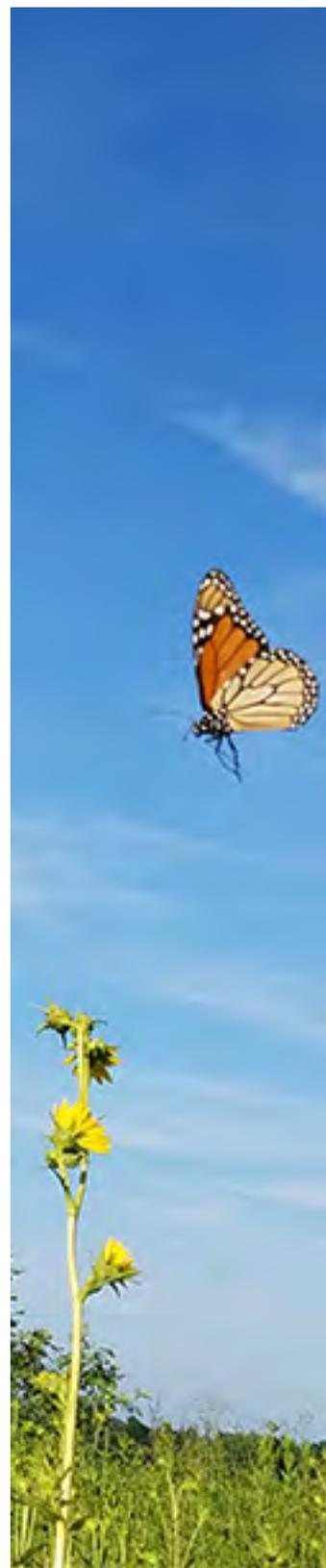
Brush Management  
Conservation Cover  
Early Successional Habitat Development/  
Management  
Field Border  
Prescribed Burning  
Riparian Herbaceous Cover  
Upland Wildlife Habitat Management

### Supporting Conservation Practices:

Fence (for livestock exclusion only)  
Firebreak  
Herbaceous Weed Control  
Integrated Pest Management (for adjoining crop or pasture only)  
Wetland Wildlife Habitat Management

### Other Monarch Resources

- Michigan State Michigan Pollinator Initiative - <https://pollinators.msu.edu/>
- Michigan's Managed Pollinator Protection Plan, Michigan Department of Agriculture and Rural Development - [www.michigan.gov/mdard/](http://www.michigan.gov/mdard/)
- Michigan Department of Natural Resources, Monarchs in Michigan - [www.michigan.gov/dnr](http://www.michigan.gov/dnr)
- Save the Monarch Butterfly - U.S. Fish & Wildlife Service - [www.fws.gov/savethemonarch/](http://www.fws.gov/savethemonarch/)
- Save Our Monarchs Foundation - [www.saveourmonarchs.org](http://www.saveourmonarchs.org)
- Monarch Joint Venture - [monarchjointventure.org](http://monarchjointventure.org)
- Xerces Society - Great Lakes Region - <https://xerces.org/pollinators-great-lakes-region/>
- Pollinator Partnership - [www.pollinator.org](http://www.pollinator.org)



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