

Working Lands for Wildlife Monarch Butterfly 2023 Progress Report

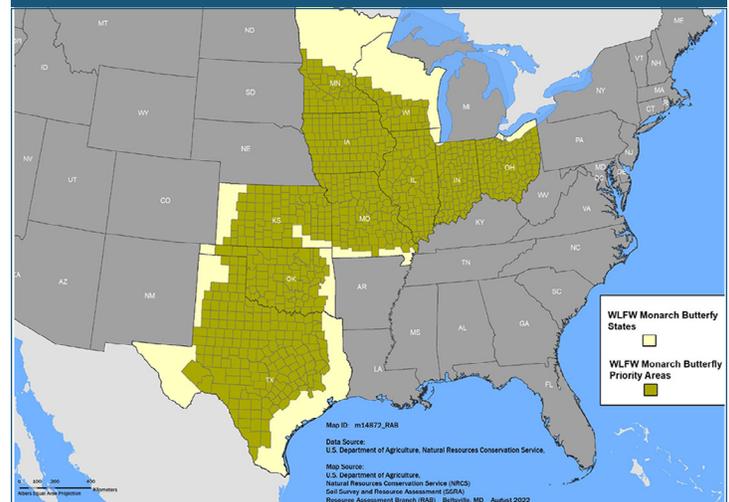
In 2017, the Monarch Butterfly Habitat Development Project was converted into the Working Lands for Wildlife (WLFW) Monarch Butterfly landscape conservation initiative as its ninth national target species. The monarch butterfly (*Danaus plexippus*) is one of the most iconic butterflies in North America and is known in part for its annual multi-generational migration from overwintering sites in central Mexico and coastal California to as far north as Canada. Multiple critical population stressors including the loss and degradation of habitat across the species' range have led to a significant decrease in the number of monarchs in the U.S. over the past few decades. To help address this declining trend, ongoing conservation efforts are focused on establishing and managing monarch habitats in several important regions.

NRCS and the Monarch Butterfly

The agency's primary geographic focus for monarch habitat has been on Illinois, Indiana, Iowa, Kansas, Minnesota, Missouri, Ohio, Oklahoma, Texas, and Wisconsin, the primary eastern monarch migration corridor in a 10-state area of the central U.S. (see map). While monarchs can benefit from more than three dozen NRCS conservation practices, this 10-state effort targets practices at the heart of the eastern migration corridor within the Midwest and Great Plains. In general, the Midwest habitat strategy is focused on the planting of milkweed and nectar-rich plants to support breeding. In the Great Plains habitat strategy, the effort is focused on improving monarch habitat on existing grasslands to support migration.

Specific conservation activities include increasing the abundance of native milkweed plants (*Asclepias spp.*) – the sole source of food for monarch caterpillars – and the availability of native nectar rich flowers throughout the monarch's range. NRCS is working with America's farmers, ranchers, and forest managers on voluntary conservation efforts to combat the decline of monarchs on private lands by establishing new habitat and managing existing habitat for monarchs (see table).

Working Lands for Wildlife Monarch Butterfly States and Priority Areas



Working Lands for Wildlife Monarch Butterfly Applied Acres, Obligations, and Contracts: 2016-2023

State	Applied Amount, Acres	Practice Obligation	Number of Contracts
Illinois	454	\$228,900	62
Indiana	1,945	\$238,862	47
Iowa	15,476	\$280,418	35
Kansas	1,488	\$611,636	57
Minnesota	19,389	\$2,852,427	87
Missouri	38,808	\$997,142	185
Ohio	9,970	\$2,643,372	286
Oklahoma	322,307	\$1,892,121	66
Texas	118,340	\$5,037,805	106
Wisconsin	1,062	\$550,227	90
Total	529,239	\$15,332,910	1,021



Science to Solutions

A study underway with the NRCS Wisconsin State Office, NRCS Science and Technology staff, NRCS' Conservation Effects Assessment Project (CEAP)-Wildlife, and the University of Wisconsin assessed monarch and pollinator habitats and population responses on WLFW Monarch Butterfly conservation sites. Preliminary results demonstrate that easements managed with routine fire and where native seeds are added lead to higher quality prairie plant communities with greater floral resources for pollinators. When there is more milkweed at a site, the number of monarchs increase.

In a study with Oklahoma State University in collaboration with the Monarch Joint Venture, NRCS is monitoring outcomes of WLFW Monarch Butterfly conservation efforts in the Upper Midwest and Southern Great Plains. Project results will inform the use of the WLFW site evaluation tools used to help landowners make informed decisions about how to manage their land. Ensuring the effectiveness of these tools is critical to achieving the anticipated monarch habitat and population benefits of NRCS conservation activities.

