Media Kit



August 2016

A monarch butterfly perches on an aster flower.



Photos courtesy of the Missouri Department of Conservation

Intro

Twenty years ago, it wasn't uncommon to look up and see monarch butterflies flying overhead. Fluttering to and fro, they delighted us with their aerial acrobatics.

Today, you have to look a lot harder to find those butterflies. That's because monarch populations are on a rapid decline — 90 percent by some counts.

A number of factors have contributed to the monarch's decline, including habitat loss and climate change, but one of the biggest is loss of milkweed in the Midwest. Milkweeds, herbaceous perennials with fireworks-like clusters of flowers, are the only plant on which the monarch will lay its eggs, and it is the only plants the monarch larvae will eat. Without milkweeds, there would be no monarchs.

And monarchs are important. They are a food source for a number of other creatures, including spiders, ants and wasps, which feed on butterfly eggs, and mice, voles and certain birds — which are in turn a source of food for other animals higher up on the food chain. A healthy butterfly population is a sign of a healthy ecosystem.

Missourians for Monarchs was established in 2015 after a state summit of agencies, non-governmental organizations, businesses and landowners — all committed to preserving and replenishing monarch populations.

Our aim is to educate, engage and empower Missourians to take measures to conserve and replenish monarch populations, whether it's through individual or collaborative efforts. Together, we can once again fill the skies with monarch butterflies.

Missouri Monarch and Pollinator Conservation Plan

The Missourians for Monarchs Collaborative has taken flight in an effort to restore monarch and pollinator populations.

Monarch butterfly (*Danaus plexippus*) populations have declined significantly due to a variety of factors including habitat loss, climate change and perhaps most significantly, a lack of milkweed plants. Milkweeds are the only plants on which the monarch lays eggs, and the only plant monarch caterpillars eat. Missouri is a particularly important state for monarchs because it lies within the spring and fall migratory path and is a major breeding area during the spring. With combined efforts from Missourians, our region could provide enhanced habitat for these insects.

After a state summit in 2015 with stakeholders representing diverse fields such as conservation, agriculture, academia and utilities, a formal collaborative called Missourians for Monarchs was formed.



Monarch caterpillar.

Photos courtesy of the Missouri Department of Conservation

Mission Statement

Our mission is to engage Missourians to increase and sustain habitat for monarch butterflies and pollinators through citizen involvement, and to seek ways for partners, communities and agencies to coordinate similar efforts.

Vision Statement

Our vision is that Missourians will learn to appreciate the importance and value of monarch butterflies and pollinators, and will work to conserve healthy habitats that support robust populations of these species statewide.

The Missouri Monarch and Pollinator Conservation Plan outlines strategies and goals for sectors including agriculture, business, not-for-profit, education, land management, agencies, conservation, landownership and volunteers, with the goal of replenishing populations over the next 20 years. It should be noted that although this collaborative is making a purposeful effort for monarchs, other important pollinators such as honeybees and native bees are included in this plan. An annual statewide report will be released to update the public on accomplishments.

Priority Focus Areas for Missourians for Monarchs

- 1. Prioritize habitat areas to include state lands, large private acreages and corridors that connect fragmented habitats.
- 2. Increase the general public's understanding of the plight of pollinators, value of ecosystem services to human well-being, and how citizens can participate in sustaining and increasing populations.
- 3. Improve availability of seeds and plants, coordinated site identification, consistent messaging, mapping of results, and changing the "aesthetic eye" of the average citizen also are foundational for the efforts of the collaborative.
- 4. Missourians for Monarchs' intention is to work toward a Missouri 20-year habitat objective of 385,000 acres (19,000 acres per year) of additional pollinator habitat with 200 milkweed stems per acre. This objective is in concert with the U.S. Fish and Wildlife Service's 20-year national plan to develop 7 million acres of habitat with 1.25-1.5 billion milkweed stems.

A monarch caterpillar shedds its skin to reveal the chrysalis.









Photos courtesy of the Missouri Department of Conservation

FAQs

What is a monarch?

Monarch butterflies are easily recognized by their orange and black wing pattern with white dots around the border. Monarchs live for six to eight months and are able to continue because of their 3,000-mile migration pattern. Monarch butterflies cannot survive cold winters and instead roost in areas of Mexico and along the Californian coast. Missouri monarchs usually overwinter in Mexico. In a phenomenon that has baffled scientists, monarchs somehow know to return to the same oyamel fir trees their ancestors roosted in.

When the monarchs return, females lay their eggs on milkweed plants, which are the only plant caterpillars eat before they metamorphose into a chrysalis, and then an adult butterfly. Missouri lies in this flyway migration pattern. By enhancing habitat with more milkweed plants for monarch caterpillars to eat and a variety of native wildflowers that supply nectar for adults, working together Missourians can play a key role in increasing monarch populations.

An adult monarch butterfly emerges from the chrysalis.











Why is our region vital to monarch repopulation efforts?

In the spring, monarchs return to their breeding areas to lay eggs on milkweed plants. Missouri falls in this breeding ground and is host for the new generation that will migrate in the fall. Without the proper milkweed habitat, the cycle and population is at risk.

To what degree have monarch populations decreased?

Over the past 20 years, monarch populations have decreased significantly. Populations in the overwintering sites since 1994 to 1995 has been downward with data for 2015 to 2016 showing a modest increase. In the 1990s, up to 1 billion monarchs made the migration. In 2013 to 2014, the population dropped to 33 million, representing a 90 percent decrease from the 20-year average. Imagine if the human population of Missouri dropped by 90 percent. That would mean the only remaining cities would be the size of Jackson County.

What factors have contributed to monarch decline?

Many factors have challenged monarch populations including habitat loss in the United States and Mexico, recent droughts, climate change, land usage, and poorly timed mowing and herbicide applications. A significant decline in nectar sources and milkweed in monarch breeding areas including Missouri are also a major threat. The decline in various milkweed species is particularly troublesome as they are essential for monarch survival.

Why is milkweed so important?

Milkweeds are the only plants on which monarch butterflies lay eggs, and the only plants monarch caterpillars eat. When the caterpillars and adults eat these perennial plants, they also ingest toxins that protect them from predators. Milkweed are pollinated mainly by large bees and wasps. This shows how important biodiversity is. Monarch Watch estimates that about 2.2 million acres of milkweed is lost in the United States each year. Without milkweed, there would be no monarchs. Native Missouri species include but are not limited to: Swamp (Marsh) Milkweed (Asclepia incarnata), Prairie (Sullivant's) Milkweed (A. sullivantii), Whorled Milkweed (A. verticilla), Common Milkweed (A. syriaca), Green Milkweed (A. viridis) and Butterfly Milkweed (A. tuberosa).

What other flowers are important for monarchs?

Because the adult monarch butterflies need nectar-rich flowers for fuel, it is important to provide plants in addition to milkweed. Native plant species are a good start because they also provide ecosystem services to other pollinators and wildlife. Asters, goldenrod, Joe-Pye weed, cardinal flower, purple coneflower, salvia, bergamot, blazing star and rattlesnake master are a good place to start. To see a full list for Missouri's region, check out Grow Native! or Monarch Watch websites.

Why do monarchs matter to us?

Missouri is an important region for monarchs. We have a responsibility to help repopulate this migratory pollinator. Monarchs are used to understand metamorphosis, mimicry, migration and coevolution. They are indicative of our relationship to the environment around us and represent the beauty and importance of diversity in nature. When we lose biodiversity, humans lose part of the ecosystems that help support us. Sustainable ecosystems are diverse ecosystems. Without a fully functioning ecosystem, we lose the services that help sustain life. We receive various foods, clean air, healthy soil, stable weather and continued species diversity thanks to pollinators.

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