

Kansas Monarch Butterflies Face Uncertain Future

The monarch butterfly is one of our most familiar and engaging wildlife species. Monarchs bring movement and color to our home gardens, roadsides, and rural pastures as they flutter and glide on the Kansas breeze. They are also important contributors to the pollination of our native wildflowers and garden plants. However, the number of monarch butterflies across the central United States has decreased by more than eighty percent over the last twenty years, and if the current trend continues, these colorful prairie drifters could disappear in Kansas altogether.

Monarchs recognize and specifically choose milkweed plants on which to lay their eggs. Once the caterpillars have hatched, they feed on the leaves, ingesting the natural toxins present in milkweed. As caterpillars eat and mature, the toxins in their system build up to the point that many would-be predators looking for a meal bypass the adult butterfly, heeding their bright orange coloring that warns, "If you eat me, you will feel sick." In recent years, the amount of milkweed growing wild in Kansas has drastically decreased. This reduction results in fewer places to lay eggs, and thus fewer monarch caterpillars and adults.



A closely-related problem for monarch butterflies in Kansas is that the decrease in milkweed has gone hand-in-hand with an equally dramatic overall decline in native wildflowers. Flowering plants produce nectar, which is the adult monarchs' primary natural food source. Heavy reliance on herbicide use in agriculture has been cited by many researchers as a reason for the decline in both wildflowers and monarch numbers in recent years. Many commonly-used herbicides kill not only the weeds in farm fields, but drift over to neighboring wildflowers as well. Simply put, with fewer flowers, monarchs have less food.

One of the most fascinating traits of monarch butterflies is their long migration in the fall. The story actually begins in a forest in the mountains of south-central Mexico, where monarchs that successfully migrated last year spent the winter. When spring arrives, these aging survivors take to the air on faded, ragged wings and fly northward on the final voyage of their lives. As they arrive in northern Mexico and the southern U.S., the females lay eggs on milkweed plants and die shortly afterward. When these eggs hatch and the resulting caterpillars mature, an entirely new generation flies farther north and lays their own eggs. This process repeats throughout the late spring and summer until three to four successive generations have been produced, each farther north than the last. These northward-spreading monarchs live only about four weeks as adults.

The final generation of the year hatches and matures in southern Canada and the far northern reaches of the United States. This group, although identical to the previous generations, will live much longer – up to eight months. It is this generation, the “super generation”, that migrates in the fall. Weighing about the same as a tissue, these delicate animals embark on an epic 3,000 mile journey, instinctively traveling to a place they have never been. Flying alone, they find their way south across the central plains, facing many hazards on their migration route. Although protected somewhat by their toxicity, predators kill monarchs as they work their way south. Many will be struck by cars and trucks. Others will be killed or injured by severe weather such as high wind and hail. All along the way, monarchs must still feed on the nectar produced by flowers, and as summer turns to fall, fewer and fewer flowers are in bloom.

Those individuals that do successfully find their way to the wintering grounds in Mexico rest and recuperate from their journey and wait for warmer weather. The trees in the wintering area often appear to be orange-colored from the huge numbers of monarchs roosting on their branches and trunks. When the next spring finally arrives, these old veterans begin their own final journey northward to lay eggs that will start the cycle all over again.

We can do our part here in Kansas to protect these unique and beautiful members of our wildlife community as they make their northward expansions and southbound migrations. Many different conservation practices can be used alone or together to help give monarch butterflies a fighting chance. Planting dedicated pollinator plots helps create concentrated food sources for monarchs and other beneficial pollinators. Adding recommended milkweed species into these plantings adds vital breeding habitat. Implementing conservation plans that reduce or eliminate herbicide usage protects stands of wildflowers. Managing native rangeland through prescribed burning and responsible grazing practices encourages native wildflower populations to increase and stay healthy throughout the growing season. Even the removal of invasive trees helps monarchs by adding more space for flowers to grow.

Butler County has now been included in a special monarch conservation program that offers enhanced cost share options for landowners and agricultural producers. To learn more about this program and its incentives, please contact the El Dorado NRCS office at 316-321-5803, or drop by 2503 Enterprise Ave. Suite B in El Dorado.

