

Monarchs are some of the most recognizable butterflies in our area, because of their bright orange and black coloring. Many people love monarchs because of these beautiful colors. But they're also important pollinators, since the adults visit different types of flowers to find nectar. They also have a fascinating life cycle – the monarchs that we see here in late August are getting ready to migrate over 3,000 miles south, to Mexico. Over the past few decades, researchers have become concerned about monarchs, because their population has been shrinking. Just this past July, monarchs became listed as an endangered species.

Monarchs from the northeastern U.S. spend the winter in central Mexico. In the spring, these adults migrate northward to the southern U.S. Here, they lay eggs on milkweed plants, and then die. When these eggs hatch, the caterpillars feed on the milkweed, before pupating and then emerging as adults. This next generation flies farther north, as far as southeastern Canada. There are several summer generations of monarchs, each lasting about 2-3 weeks. The monarchs that emerge in August are called the 'supergeneration' - they will migrate all the way back to Mexico – a place they've never seen – and spend the winter there, before heading north to start the cycle over. They use the angle of the sun to help guide their way, and according to research at the University of Massachusetts Medical School and Worcester Polytechnic University, they also have a magnetic compass in their antennae to help find their way.

It's hard to know exactly how many monarchs there are, but it's clear that their populations are shrinking. There are different ways to track and monitor them, and you can even help with some of these. Researchers tag individual monarchs and record where they are found. They also survey populations at summer breeding grounds and in overwintering sites in Mexico. The International Union for the Conservation of Nature estimates that the monarch population has declined between 22% to 72% in just the past 10 years. There are probably several causes: increased pesticide use in the U.S. has decreased the amount of milkweed, which is the only species on which the monarch lays eggs, and they're the only thing caterpillars eat. Researchers with the World Wildlife Fund and other organizations have found that the area in which monarchs spend the winter in Mexico can be as small as about 8 acres. This makes it very vulnerable to habitat destruction. Climate change is also causing strong storms that kill monarchs, and might cause monarchs to migrate north from Mexico too early in the spring, before nectar plants are blooming to feed them.

This all sounds pretty gloomy. But there are a few things that you can do to help monarchs. You can plant milkweed and other pollinator plants in your yard, or help your town plant a pollinator garden. You can avoid using herbicides and pesticides in your garden – these can kill milkweed and monarchs. You can also join a community science project, where you help collect information about monarch populations. This involves everything from reporting monarchs that you see while on a walk or in your yard, to learning how to tag monarchs. You can find links to a few community science projects below.

## Community Science Projects

- [Journey North](#)
  - Report observations of monarchs at all life stages
- [Monarch Watch](#)
  - Tag monarchs
- [Monarch larva monitoring project](#)
  - Monitor monarch larvae
- [Integrated monarch monitoring program](#)
  - Monitor milkweed, nectar plants, and monarchs

## References

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