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### Zoo to You: Monarchs Mark Fall's Arrival

Fall is a wonderful season that many look forward to each year. It seems like most have been preparing for fall for a few weeks now, with autumn décor easily located in stores, and pumpkin spice treats found almost everywhere you look. Technically, fall arrived on September 22nd at 8:54 PM, but for me, I feel like fall has truly arrived once the monarchs return to Garden City.

I grew up in Connecticut where monarchs visited us for a few weeks each summer, but one of the reasons I love living in Garden City is that we get to experience monarchs visiting us twice a year! Each year, monarch butterflies migrate between North and Central America to access the best resources the different habitats have to offer throughout the year. Since Garden City is in the monarch migration route, we are visited by monarchs in both spring and fall.

In spring, monarchs leave their winter habitat in central Mexico and begin flying north in search of flowers in bloom throughout North America as the seasons change. The adult monarchs that start the migration will not return on the southbound journey because once they have reached the southern United States, they will stop to reproduce before the end of their life cycle. The new caterpillars will grow and thrive on milkweed leaves before they metamorphose into an adult butterfly. These new butterflies will journey further north, reaching locations in the central United States, before creating a new generation that will continue the migration north. This cycle of life continues throughout spring and summer as each new generation of monarchs pushes further north. Eventually, temperatures start to decline and the amount of daylight each day will begin to shorten, signaling to the most recent generation of monarch butterflies that it is time to migrate. Even though these adults have never been to Mexico, their instincts tell them to start flying south. Eventually, this single generation of monarchs will travel thousands of miles to reach the forests in Mexico where they will overwinter like their great-great-great grandparents did the year before.

Currently, scientists do not understand details which allow monarchs to migrate each year. How can this one species of butterfly successfully migrate when no other butterfly species can? Unlike other animals that learn the migration route from others of their species that have completed the journey; monarchs somehow innately know the route to travel. Unfortunately, scientists might not have the time needed to crack the secret of monarch migrations.

Time is running out to understand monarch migration better because their populations have been shrinking due to habitat loss. In Central America, the few forests that provide the ideal habitat for monarchs

to overwinter are being impacted by land development in surrounding areas. In addition, milkweed, an important food resource for monarch caterpillars, is being removed from the landscape because it is considered by many to be a pest plant. Without milkweed, monarch caterpillars cannot consume the toxin that makes them poisonous to predators. Habitat loss has had a continual impact on monarch populations and last year their numbers had shrunk by almost one-third from the year before.

If their population continues to shrink, it is a real possibility that monarch butterflies could become extinct. In 2014, the U.S. Fish & Wildlife Service was petitioned to protect the monarch butterfly under the Endangered Species Act. This decision cannot be made overnight and requires a review process which is planned to wrap up in 2019.

Just because monarchs are not currently listed as endangered doesn't mean there is no way to help; visit [monarchwatch.org](http://monarchwatch.org), and you'll discover a variety of resources related to monarch conservation. A simple way to help is by creating a monarch waystation in your yard. By adding pollinator and monarch-friendly plants around your home or neighborhood, you can ensure that migrating monarchs have appropriate food to eat and plants to lay their eggs on when migrating. If we each make small changes around our homes, then we will be closer to providing future generations of Garden City the opportunity to enjoy the monarch migration each fall.