

Monarch Butterflies: Who Knew?

When I spied this beautiful butterfly enjoying my wildflower garden at our family cottage recently I realized I didn't know much about this species. Now that I am better educated on the subject, I believe monarch butterflies are fascinating. I bet you don't know much of this information.

Monarchs are Generational

This means one butterfly produces multiple generations, with each successive generation behaving differently. The last generation of monarch butterflies migrate to Mexico and then reproduce on their way back north when days lengthen and temperatures warm up. Referred to as summer, or first-generation monarchs, these offspring begin laying eggs at a few days old and only live for a month as adults. Each new generation produced from that original migrant travels farther north, taking three or four generations to get as far as the northern United States and Canada.

Monarchs born early in the summer do not move far using their energy instead to produce as many offspring as possible. However, those that emerge later, referred to as generation four, will migrate to and from Mexico. Unlike the other generations, they do not reproduce right after birth. Instead, when days become shorter and temperatures decrease at the end of the summer, they feast on nectar to prepare for their long journey to southern climates. The delayed maturity of their reproductive organs is called diapause, a condition that lasts until the following spring, after which they begin to mate close to the spot they overwintered down south.

[Monarch Joint Venture](#) sums up the generations of monarch butterflies in this chart:

Generation #	Timing of immature stages*	Timing of adult stages*	Migrates?	Overwinter
1	March-May	April-June	Yes, north in spring	No
2	May-July	June-July	North, through early June	No
3	July-August	July-August	Some movement south	Some
4	July-October	August-April	Yes, south in fall and north in spring	Yes

*Months during which each generation exists.

Migration Patterns and Practices

Monarchs cannot handle cold weather. As the only butterflies that navigate a complicated, two-way migration, when the temperatures dip, they know to head south. Not only do they migrate but they follow very specific routes to do so, traveling up to one hundred miles a day, and up to three thousand miles in total. [Researchers](#) currently believe that these incredible creatures use the position of the sun as well as the magnetic pull of the earth to navigate their routes and direct them. They also take advantage of air currents to ease their travel.

Monarchs living west of the Rocky Mountains migrate to southern California, while those living further east have several routes that merge in central Texas before heading to Mexico. Traveling only during daylight hours, monarch butterflies cluster together to roost at night to stay warm, sometimes as many as ten thousand in one tree! They prefer cedars, firs, and pines whose canopies offer comfortable temperature and humidity levels.



Male vs Female Monarchs

Male monarchs have two black dots on their lower wings while females do not. Males also have wider black stripes at the top than their female counterparts. Therefore, the monarch in my picture is a male.

Milkweed Plants are Necessary for Monarchs

Each generation of monarchs begins its life on a species of the milkweed plant. First generations depend on *Asclepias oenotheroides*, *A. viridis* and *A. asperula* in the south. The other generations rely on *A. syriaca* (common milkweed), *A. incarnata* (swamp milkweed), and *A. tuberosa* (butterfly milkweed).

Conclusions About Monarch Butterflies

Well, have you learned anything? I sure did.

Although I have lots of milkweed planted in the two [butterfly gardens](#) I recently planted, I have no idea what kind of milkweed plants they are. I will investigate. Wherever you live, find and plant the appropriate species of milkweed to help the monarchs continue their cycles.

I now realize that the monarch I saw this week in my garden was a generation four. My camera and I followed its bloom-hopping trek as it competed with the bees for the nectar on the late-blooming asters.

Safe travels buddy!