# Now is the time for Monarch migration

## **Monarch Butterfly Facts**

#### Courtesy of www.defenders.org

Wingspan: 3.7 to 4.1 in (94-104mm)

Weight: .72 to .25 oz (7.1-21 grams)

Lifespan: 6-8 months **Diet** 

In their larval stage monarch caterpillars feed almost exclusively on milkweed and as adults get their nutrients from the nectar of flowers. The monarch will always return to areas rich in milkweed to lay their eggs upon the plant. The milkweed they feed on as a caterpillar is actually a poisonous toxin and is stored in their bodies. This is what makes the monarch butterfly taste so terrible to predators.

#### **Behavior**

Monarchs can travel between 50-100 miles a day; it can take up to two months to complete their journey to winter habitats.

Millions of monarch butterflies make the trip down to Mexico to roost for the winter. During the migration tens of thousands will land on a single tree in certain areas along their migratory path. Monarchs can produce four generations during one summer. The first three generations will have life spans from 2-6 weeks and will continue moving north. During this time they will mate and have the next generation that will continue the northward migration. The fourth generation is different and can live up to nine months.

### Range

Wherever there is milkweed there will be Monarch butterflies. The monarch is widely distributed across North America, from Central America northwards to southern Canada, and from the Atlantic to the Pacific coasts. Three geographically distinct populations make up the total North American range of the species, one each both east and west of the Rocky Mountains, and one Central American. Monarchs that live west of the Rocky Mountains will migrate to southern California for winter while monarchs that live east of the Rockies will migrate to Mexico.

#### **Climate Change**

Monarch butterflies cannot fly if their body temperature is less than 86 degrees.

It is predicted that one of the many effects of climate change will be wetter and colder winters. If they are dry, monarchs can survive below freezing temperatures, but if they get wet and the temperature drops they will freeze to death. As the world warms, suitable habitat will begin to move northward resulting in a longer migration. This means the monarchs may be forced to adapt and produce another generation to reach further north. It is uncertain whether they will be able to do so. Therefore, few monarchs may be able to make the longer trip back to Mexico for winter.

Other threats to the monarch include habitat loss and loss of milkweed which they depend upon as larva to survive. Illegal logging remains a problem today in Mexico in protected areas and is devastating monarch winter habitat. For those who love butterflies, September is the month to watch for masses of migrating monarchs in Kansas. The weather has cooled, and many people are seeing this regal butterfly in backyards, parks, and in the field. This familiar and popular insect species displays migratory behavior much like that of birds. Navigating on instinct, every monarch east of the Rocky Mountains flies toward a specific area of central Mexico to spend the winter.

Amazingly, several generations separate the southward-migrating monarchs from those that flew north the previous spring, so they do not have elders to guide them on this 1,000- to 3,000-mile journey. The monarchs that live north of Kansas begin moving south in late August. The trigger for their trek south is thought to be the declining angle of the sun as the days get shorter, and this "sun compass" also guides them as they travel.

As the migrating monarchs progress south, local monarchs join them, making the group larger. The observed peak for the Topeka-Kansas City area typically falls about the second or third week in September. The peak for the Wichita area may be a week or so later. On the right day in the right location, careful observers may see hundreds or even thousands of monarchs moving in a south-southwesterly direction on their journey to Mexico. During resting periods, tree branches may be so loaded with monarchs that branches bend and appear to be covered with orange and black leaves. Those lucky enough to have seen this display have witnessed one of nature's marvels.

Don't expect to see such gatherings in the same place every year. Monarch movement is strongly affected by prevailing weather patterns, so their migration routes vary annually. A good way to attract monarchs and help them refuel on their fall migration is to plant September-blooming plants around home. Asters, sunflowers, goldenrod, and sedum provide blossoms with nectar monarchs need.

The right habitat nearby may even attract overnight roosts of monarchs. They cease flying in the evening and look for sheltered sites in trees to cluster together for the night. These sites often have an easterly exposure, so the monarchs can warm up quickly in the morning sun and resume migration. Such overnight roosts are, in miniature, just like what may be seen at



their over-wintering site in Mexico, where acres of trees are so blanketed with butterflies that the branches of trees bend low with their weight.

Monarchs head back north again in March, but they are seldom the same ones that went south the previous September. It is the first generation of their descendants, and they begin arriving around the second week of April. Nor are those that begin the migration the same butterflies that complete the spring migration. Spring migrating monarchs may only fly a few hundred miles, then lay eggs and die. These eggs hatch into caterpillars, pupate, complete metamorphosis into butterflies, and continue the migration. Thus, the spring migration is often a leapfrog of generations moving as far north as Canada. Some may end their northward migration in Kansas, as well, laying eggs and producing more monarchs throughout the summer in the Sunflower State.

Because the spring flight north is a dispersal with the purpose of laying eggs on newly emerging milkweed rather than the mass retreat from winter that occurs in the fall, large numbers of monarchs are not seen in spring.

For more information on monarch butterflies, including where to look for monarchs and their amazing migration, contact the Monarch Watch program at the University of Kansas online at www.monarchwatch. org.

