



Flight of the Monarch Butterflies

Monarch butterflies are among the most beautiful and most identifiable butterflies. Most of us can distinguish a monarch from other butterflies because of its beautiful yellow and black colors and its larger size. Watching monarch butterflies has become a passion for people who understand their migration habits.

Monarchs start out as eggs that are laid on milkweed leaves, the basic food for monarchs. The eggs hatch as caterpillars or larvae that feed on the leaves and quickly grow in the next two weeks. This molting process takes place four times. The milkweed acts as a protection from predators that would otherwise eat the caterpillars. Milkweed is poisonous to other insects and birds but not to monarchs.

From the caterpillar stage, monarchs form a chrysalis or pupa that is quite colorful. Look for a green and gold speckled tube-like object under the leaves. In another two weeks, the butterfly that grows inside the chrysalis will kick its legs downward and break out of the shell. Then it pumps liquid into its wings and they inflate. Monarchs have a wingspan between $3 \frac{3}{8}$ to nearly 5 inches wide. Females have thicker veins on their wings than males. A dark spot on the hind-wing tells you it is a male. The butterflies drink liquid by dipping their proboscis into flowers.

The reproducing monarchs repeat this process from three to seven times in the warm months in the northern regions, living from two to six weeks. Then as the weather turns cold, most of the non-reproducing monarchs, or the last monarchs born before winter, begin the long migration to the south. North American monarchs migrate to Central Mexico, traveling about 50 miles per day. Tens of millions of them cover huge groves of eucalyptus and pine in a mountain forest. No other butterfly is known to do this. These butterflies live about 9 months during the migration and return to the north. They lay eggs all along the return trip.

In Mexico the butterflies are thick and fill the forests with as many as 4 million per acre. Branches of the trees are golden with their color. Eleven butterfly refuges have been discovered where a single-species of pine tree becomes the nighttime nesting area for the butterflies.

The Mexican government is trying to protect the butterflies whose habitat is threatened by the needs of humans for lumber and farmlands. The town of Angangueo invites the public to view the monarchs to strengthen the argument that the butterflies need the forests to remain intact for their winter stay. The Butterfly Days celebration brings in 10,000-20,000 visitors each weekend in the winter months.