

Monarch Butterflies

Caterpillars

Monarchs lay tiny eggs on the undersides of milkweed leaves. The eggs are about an 1/8 of an inch high! They hatch in 3-12 days. A caterpillar is called a larva. After they hatch, they eat their egg shell for nutrients. They eat tons of milkweed and get bigger. This usually lasts 13-21 days. Then, the pupa, (or chrysalis), is formed once big enough. This depends on temperature. The pupa comes from the skin and the caterpillar's exoskeleton falls off. The tiny pupa lasts 10-14 days. When ready, the tissues break down and re-form. The pupa then turns clear and you can see a butterfly wing. This emergence lasts from 30 seconds to 30 minutes.

Butterflies

The monarch was named after King William III. Monarchs don't have the same kind of blood we have. Instead, they have a clear blood called hemolymph. They have compound eyes that can see visual light and ultraviolet light. Monarch caterpillars eat milkweed; adult monarchs drink nectar through a straw-like proboscis. When not using it, they will roll it up under its head. They have strong wings with scales which are kind of like shingles on a house. Scales protect the wings. To prevent rubbing off the scales, you will want to hold the wings by the under side. This won't hurt the butterfly. They are micro-structured and light reflects off of them, making the butterfly shiny. So, how do you tell a female from a male? Well, the male has thinner stripes on his wings and a dot on the hindwings. This is a special gland that releases a scent to attract females. The females have thicker wing stripes, almost like mascara, and no dot. The adult monarch's life span is two to six weeks except for those emerging during September and October; these will then migrate to warmer climate and tend to live six to eight months.

Milkweed

The milkweed is the required host plant for the monarch caterpillars. Milkweed sap contains a cardiac glycoside toxin that monarch caterpillars and butterflies are immune to. This also makes monarchs taste gross to other animals, such as birds, who try to make a meal out of them. Some birds,

such as the spotted towhee, are able to eat monarchs without throwing up after dining!

Home

Monarchs are found throughout North America. So when it's winter and fall, they migrate. Although, the Rocky Mountains are blocking some areas, the ones in the West migrate to California, and the ones in the East migrate down to Mexico. To prepare for the journey, monarchs need a lot of body fat to provide energy. They can glide along using high altitude winds. They can go 3,000 miles and can fly very high! They use a built-in clock and the sun as navigation tools. Imagine having a built in clock in your head! You can find monarchs in big clusters on eucalyptus, coast redwoods, and many more trees. We tag monarchs to see where they go. There are ID tags and colored tags.

How can you help?

You can plant milkweed and nectar gardens so you can see many of the monarchs. You will be amazed!

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