

## Monarch Fact Sheet

### Life Cycle

Eggs (3-8 days) white or off white, size of pinhead

- Each female lays approximately 700 eggs in a 2-5 week period

Larva (9-14 days)

- The caterpillar is an eating machine that molts through five instar stages barely stopping to rest

Pupa (8-15 days)

- The monarch chrysalis hangs itself by its cremaster from a silken mat they wove
- The hardened shell protects the pupa while its metamorphosis is completed

Adult (2-5 weeks or 2-6 months)

- The only goal of the butterfly is to mate or migrate which it will do 3 – 8 days after emerging

### General

- Monarchs are cold blooded. They must maintain a temperature of approximately 71 degrees in order to fly. This means a butterfly might have to stop midday to warm up in the sun if the temperature drops.
- Male monarchs absorb salt from around natural puddles and they pass this along to the females during mating to provide for the young.
- There are about 4 generations born in a year. The first three generations live for 2-5 weeks with the primary goal of mating. The fourth generation can live for 6-9 months. This generation will migrate and weather the winter in a semi-active form before breeding in the spring.
- Monarchs have a long, black tongue called the proboscis that they use to suck nectar and water out of flowers.
- Monarchs are poisonous in all stages due to their diet of milkweed. As an adult they store most of their poison in their wings. Some bird species such as jays have discovered this and will only eat the abdomen.
- Monarch larva can only eat milkweed. Female monarchs will only lay their eggs on this plant.
- The monarch population has dropped 90% since the 1990's due to habitat destruction.

### Migration

- Monarchs are the only butterfly species that migrates North and South annually like birds.
- Monarchs are cold-blooded and must migrate to survive the cold weather.
- Individuals east of the Rocky Mountains migrate to a fir forest in Mexico. Individuals to the west of the Rocky Mountains migrate to a cypress mangrove in Southern California.
- Not all generations migrate. The generation born in late August and early September will begin migrating immediately upon hatching. The seasonal changes such as day length and temperature are triggers that influence migration.
- The second week in September is the peak migration time in the Capital District.
- Even though the butterflies that migrate South are the great-great grandchildren of the ones who left Mexico the previous Spring, they have been found to migrate to the same winter roosts (often even the same exact tree.)
- Monarch antennae act as photoreceptors, allowing them to track the movement of sun throughout the day.
- These light-sensitive molecules also have a magnetic sensitivity that scientists have proven the monarchs utilize for orientation. This way the butterflies can fly southward on cloudy days.

- A butterfly will actually gain weight as it migrates from stopping to feed on nectar along the way and storing the nutrients as fat in their abdomen. They conserve fuel by riding air currents similar to birds.
- Butterflies overwinter at a site that is cool enough to allow them to slow their bodily functions but allows protection from snows and wind. They also require fog and clouds to provide moisture during the winter.
- Hibernating monarchs will blanket the forest: covering branches, trunk and leaves.
- Monarchs will “wake up” on warm winter days to get water or nectar. If they fall to the ground during hibernation they are usually too cold to fly back up and will generally die.