Common name: **Monarch butterfly** Genus Species: ***Danaus plexippus***

Photo credit: Renee Zernitsky, mohonkpreserve.org

Description: The monarch adult is a large orange-red butterfly with black wing veins and black wing margins with two rows of white spots. Monarch caterpillars are distinctive, too: they are about 2"long at maturity, ringed along the length of their body with a combination of black, white, and yellow bands and have two long thin filaments on the thorax and one on the abdomen.

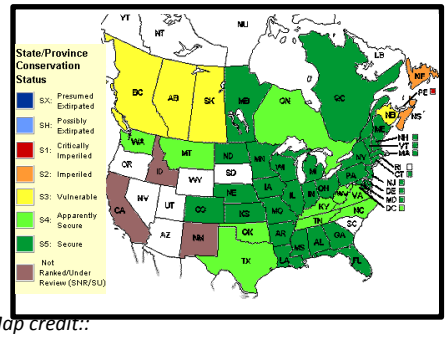
Habitats: Monarchs occur almost anywhere that milkweeds grows, including old fields, meadows, marshes, prairies, savannas, pastures, roadsides, and gardens.

Phenology highlight: The often spectacular southward migrations are triggered by shortening days and start in late August in Canada and later southward.

Species facts

- Milkweeds (*Asclepias* species) are critical for the survival of the monarch species because female monarchs lay their eggs on these plants which provide food for the growing caterpillars after they hatch.
- Monarch butterflies pollinate milkweeds and many other flowering plants.
- It appears that virtually all North American monarchs overwinter in one of two areas: certain high altitude Mexican conifer forests or along the coast of California in conifer or eucalyptus groves.

Photo credit: Carl Mueller, mohonkpreserve.org



Map credit::

Why observe this species? The monarch is easily the most familiar butterfly in North America. In North America its phenology is affected by conditions in very separate overwintering and breeding areas. North American monarch populations are widely monitored and have been declining sharply in recent years. Climate change and widespread loss of habitat, mainly reduction in milkweed populations, are implicated as primary causes.

Tip for observing this species: You can record the abundance (number) of individual monarchs you see in each phenophase.

For more information about phenology and the New York Phenology Project (NYPP), please visit the NYPP website (www.nyphenologyproject.org) and the USA-NPN website (www.usanpn.org).

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Monarch butterfly (*Danaus plexippus*)

Note: **Even if you did not see a particular animal species, record that data.** Knowing when an animal is not present or when an animal is not in a given phenophase is just as important as knowing when it is.

Active adults
One or more adults are seen moving about or at rest.

Flower visitation
One or more individuals are seen visiting flowers or flying from flower to flower. If possible, record the name of the plant or describe it in the comments field.

Photos needed! Help fill in this empty photo box on this species profile. Contact New York Phenology Project (nyphenologyproject.org) to submit photos. Thank you!

Migrating adults
Multiple adults of the same species are seen flying steadily in a uniform direction without stopping.

Mating
A male and female are seen coupled in a mating position, usually end to end. This can occur at rest or in flight.

Active caterpillars
One or more caterpillars (larvae) are seen moving about or at rest. When seen on a plant, if possible, record the name of the plant or describe it in the comments field.

Caterpillars feeding
One or more caterpillars are seen feeding. If possible, record the name of the species or substance being eaten or describe it in the comments field.

Chrysalis Though not a recorded phenophase, the green chrysalis is part of the monarch life cycle. A mature caterpillar creates its chrysalis, goes through metamorphosis inside, and emerges as an adult butterfly.

Threats to monarchs The primary threats to the monarch butterfly include the loss of milkweed—the key plant that monarch caterpillars need to survive—from agricultural and natural areas, degradation of overwintering sites, and climate change.

Phenophases not pictured: ***Dead adults; Dead caterpillars; Individuals at a feeding station****; and* ***Individuals in a net***

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