FLORIDA Wildflower FOUNDATION

Monarchs and Milkweed

What's the problem?

Monarchs have evolved over thousands of years with the native milkweed plants upon which they depend. But habitat loss, wide use of herbicides and genetically modified crops, and frequent roadside mowing have decreased the occurrence of milkweeds (*Asclepias* species) throughout Florida and the U.S. This has contributed to the steep decline of Monarch butterfly (*Danaus plexippus*) populations. Our love and concern for Monarchs has increased interest in milkweed — the butterfly's primary host plant.

How you can help

Homeowners can support Monarchs by planting native milkweeds in their landscapes. There are 21 Florida native milkweed species, three of which are often available at Florida native nurseries.

Butterflyweed (*Asclepias tuberosa*) is the most widely recognized native milkweed. Its showy clusters of bright reddish-orange flowers bloom late spring through fall. It grows 12 to 15 inches high in a bushy form and has coarse lance- or oval-shaped leaves. It grows naturally in sandy habitats, and adapts well to dry landscapes.

Pink swamp milkweed (*Asclepias incarnata*) is found in moderate to moist sunny habitats, where it grows 2 to 4 feet tall. It blooms in summer with very showy light pink- to rose-colored flower clusters. Its fleshy linear leaves grow up to 6 inches.

White swamp milkweed (*Asclepias perennis*) is a shorter bushy plant growing to about 2 feet. Summer flowerheads are small with white to light-pink flowers. Bright green leaves are lance-shaped. It prefers moist to wet soil conditions and can adapt to shady locations.

Why aren't native milkweed plants widely available?

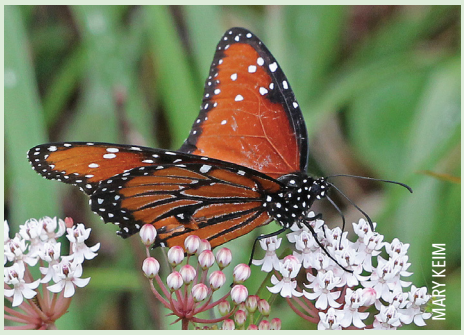
Although these plants are robust in Florida's natural habitats, they can be difficult to propagate using typical horticultural practices. Because native milkweeds are a larval food source, butterfly larvae may devour milkweed foliage before the plants can be brought to market.

What we are doing

Through research and education, the Florida Wildflower Foundation, Florida Museum of Natural History and other partners are working to expand Monarch breeding habitat and increase the commercial availability of native milkweeds.

Did you know?

Queen and Soldier butterflies also use native milkweeds as host plants for their caterpillars. Many other butterflies, native bees, moths and other insect pollinators utilize the blossoms.



Where can I purchase native milkweed plants?

- Visit www.PlantRealFlorida.org to locate a native nursery near you. Several also offer mail-order plants.
- Look for native milkweed plants at regional native plant sales. Many are hosted by Florida Native Plant Society chapters. To find a chapter near you, visit www.FNPS.org.
- Encourage your local garden center to carry native species.

How Tropical milkweed can harm Monarchs

Tropical milkweed (*Asclepias curassavica*) is native to Mexico and Central America. It is widely available at Florida's mainstream nurseries and big box retail centers because it is easy to grow. However, the use of Tropical milkweed can harm the Monarch.

Tropical milkweed

Commercially grown Tropical milkweed plants are often treated with systemic insecticides to keep pests off of them, giving them a better appearance at retail nurseries. These insecticides can be very toxic to Monarch caterpillars that feed on the leaves, increasing mortality rates.

Tropical milkweed has been linked to the higher transmission of *Ophryocystis elektroscirrha* (OE), a protozoan parasite. When OE spores infect milkweed leaves, they can be carried on the bodies of adult butterflies, which spread the infection to other butterflies. Microscopic spores are spread to eggs, and infected larvae may not emerge from the pupal stage or may emerge as very weak adults.

Tropical milkweed remains evergreen and may bloom throughout winter, encouraging migratory Monarch populations to overwinter in Florida and continuously breed. This disruption of their natural life cycle makes them more susceptible to death from food shortages and freezing winter temperatures.

Overwintering Monarchs are also more susceptible to OE, which persists and accumulates in Tropical milkweed throughout the winter. (Native milkweed loses its leaves and goes dormant during the winter, eliminating the presence of OE.)

Although not documented scientifically, the higher concentration of cardenolides toxin in Tropical milkweed may adversely effect Monarchs. The plant has also escaped into natural areas, which may further disrupt migration paths.

The use of Tropical milkweed in landscapes is not recommended. The best way to support Monarchs is to replace it with Florida native milkweed and other native nectar plants.

More information

- Florida Wildflower Foundation: www.FlaWildflowers.org
- Florida Museum of Natural History: www.FloridaMuseum.ufl.edu
- Monarch Joint Venture: www.MonarchJointVenture.org
- Monarch Watch: www.MonarchWatch.org
- Xerces Society: www.Xerces.org/monarchs

Act responsibly

Digging up wild native milkweed and collecting seed can reduce its ability to reproduce.

- Do not attempt to dig up wild native milkweed plants.
- Do not collect wild native milkweed seed unless you have permission from the landowner.
- If you have permission to harvest, take no more than 10 percent of the available seed.

Monarch nectar plants

Plant these native wildflowers along with native milkweed to provide nectar for Monarchs:

Blazing star (*Liatris* spp.)
Snow squarestem (*Melantherea nivea*)
Chaffhead (*Carphephorus* spp.)
Climbing aster (*Symphyotrichum carolinianum*)
White crownbeard (*Verbesina virginica*)
Flattop goldenrod (*Euthamia caroliniana*)
Goldenrod (*Solidago* spp.)
Mistflower (*Conoclinium coelestinum*)
Scorpiontail (*Heliotropium angiospermum*)
Spanish needles (*Bidens alba*)
Yellowtop (*Flaveria linearis*)