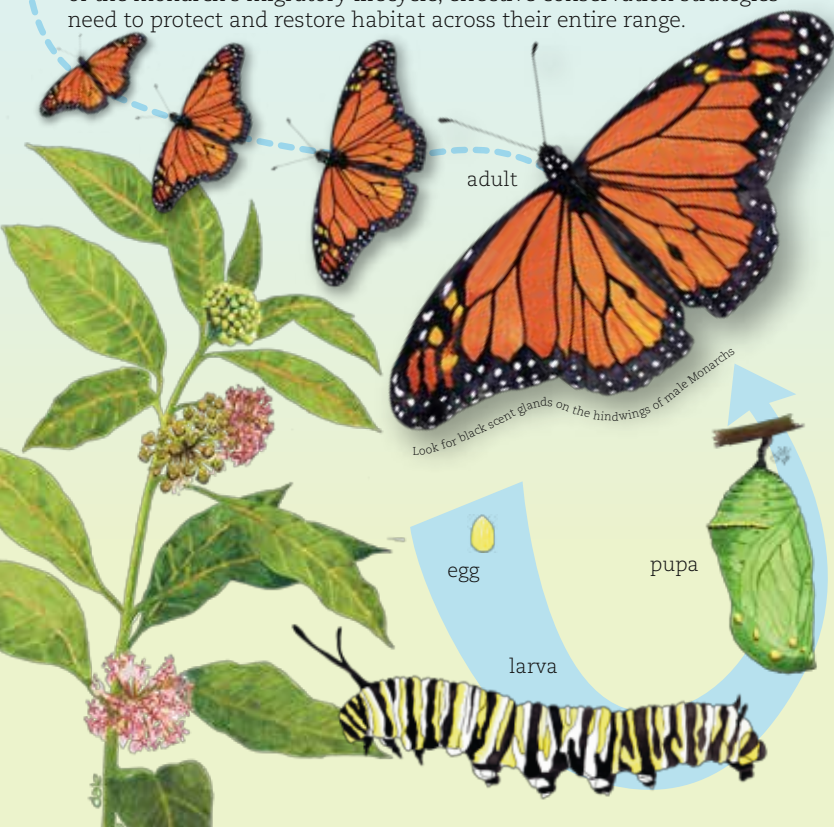


Monarch Butterflies

Eastern United States

During spring and summer, monarchs breed throughout the U.S. and southern Canada. In the fall, adults of an eastern population migrate to Mexico, flying up to 3,000 miles. In the western U.S., monarchs migrate to scattered groves along the coast of California. The following spring, these butterflies leave their overwintering sites and fly northward in search of host plants on which to lay their eggs. Female monarchs lay eggs on milkweeds and a few other plants in the dogbane family. As monarchs spread across North America, several generations of butterflies are produced. In Florida, some non-migratory individuals remain and breed year-round.

Sadly, population monitoring at overwintering sites in Mexico and California has documented a steady decline. Monarchs are threatened by loss and degradation of habitat, natural disease and predation, adverse weather and the ongoing decline of native milkweeds. Because of the monarch's migratory lifecycle, effective conservation strategies need to protect and restore habitat across their entire range.



Milkweeds

Asclepias tuberosa Butterfly Milkweed

Habitat well-drained soils: prairies, fields, roadsides, waste areas

Larval host plant, adult nectar source. Plants and seeds available from several vendors.

Asclepias purpurascens Purple Milkweed

Habitat dry to moist, well-drained soils: roadsides, thickets, open woods, woodland margins, prairie openings

Larval host plant, adult nectar source. Plants and seeds available from limited vendors.



Monarchs & Milkweeds

In addition to providing a food source for monarch larvae, the showy flowers of milkweeds offer abundant, high quality nectar to many pollinators including bees, butterflies and hummingbirds. The handsome plants can also add interest and beauty to any landscape. Milkweeds are named for their milky latex sap, which contains alkaloids and cardenolides, complex chemicals that make the plants unpalatable to most animals. Milkweeds have fleshy, pod-like fruits that split when mature, releasing seeds. Each milkweed seed is attached to fluffy hairs, known as pappus, silk, or floss, that aid in wind dispersal.

Intensifying agriculture, development of rural lands and the use of mowing and herbicides to control vegetation have all reduced the abundance of naturally occurring milkweeds. This has resulted in a substantial loss of critical resources available for monarchs throughout much of the eastern United States. As a result, the North American Monarch Conservation Plan recommends planting native milkweed species to help restore breeding habitat. Sites of any size or location can help, from urban parks, schools and home gardens to commercial developments, municipalities and rural roadsides.

While native milkweeds are crucial for monarchs, commercial sources of plants and seeds remain limited. The Florida Museum of Natural History, the Xerces Society for Invertebrate Conservation, Butterfly Conservation Initiative and the Monarch Joint Venture are working to help raise awareness and produce reliable sources of native milkweed. Inventory is expected to increase steadily over the next several years, to meet demand for home gardens and habitat restoration projects across the region.

Ask for native milkweeds at your local retail garden center! Be sure to ask for plants that have not been treated with pesticides, which may make them toxic to monarchs and other insects.



Asclepias incarnata Swamp Milkweed

Habitat moist to wet soils: swamps, marshes, wet prairies, pond margins, roadside ditches

Larval host plant, adult nectar source. Plants and seeds available from several vendors.



Asclepias exaltata Poke Milkweed

Habitat rich soils: woodlands, woodland margins

Larval host plant, adult nectar source. Plants and seeds not currently available.



Asclepias syriaca Common Milkweed

Habitat well-drained soils: fields, roadsides, prairies, pastures, waste areas

Larval host plant, adult nectar source. Plants and seeds available from limited vendors.

Asclepias verticillata Whorled Milkweed

Habitat dry to moist soils: prairies, pastures, roadsides, fields, open woods

Larval host plant, adult nectar source. Plants and seeds available from limited vendors.



Butterfly Larvae & Host Plants

Red Admiral *Vanessa atalanta*
False Nettle *Boehmeria cylindrica*



Eastern Tiger Swallowtail *Papilio glaucus*
Tuliptree *Liriodendron tulipifera*



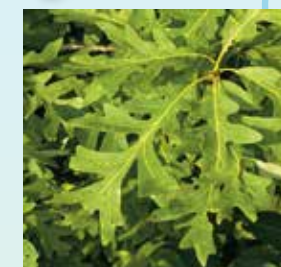
Spicebush Swallowtail *Papilio troilus*
Sassafras *Sassafras albidum*



Checkered White *Pontia protodice*
Virginia Peppergrass *Lepidium virginicum*



Silver-Spotted Skipper *Epargyreus clarus*
Black Locust *Robinia pseudoacacia*



Banded Hairstreak *Satyrium calanus*
White oak *Quercus alba*



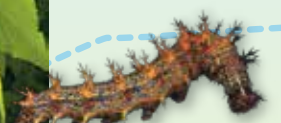
Little Yellow *Pyrisitia lisa*



Gray Hairstreak *Strymon melinus*
Partridge Pea *Chamaecrista fasciculata*



Hackberry Emperor *Asterocampa celtis*



Question Mark *Polygonia interrogationis*
Common Hackberry *Celtis occidentalis*



Spring Azure *Celastrina ladon*
Flowering Dogwood *Cornus florida*



Giant Swallowtail *Heraclides crespontes*
Common Pricklyash *Zanthoxylum americanum*



Black Swallowtail *Papilio polyxenes*
Golden Zizia *Zizia aurea*

Red-spotted Purple *Limenitis arthemis astyanax*
Black Cherry *Prunus serotina*



Coral hairstreak *Satyrium titus*



Viceroy *Limenitis archippus*
Black Willow *Salix nigra*



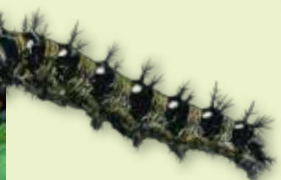
Harvester *Feniseca tarquinius*
 larvae are predaceous on many species of **Woolly Aphids** including *Neoprociphilus aceris*.

Silvery Checkerspot *Chlosyne nycteis*
Blackeyed Susan *Rudbeckia hirta*

Morning Cloak *Nymphalis antiopa*
American Elm *Ulmus americana*



Pipevine Swallowtail *Battus philenor*
Virginia Snakeroot *Aristolochia serpentaria*



American Lady *Vanessa virginiaensis*
Woman's Tobacco *Antennaria plantaginifolia*



Great Spangled Fritillary *Speyeria cybele*
Common Blue Violet *Viola sororia*



Henry's Elfin *Callyphrys henrici*

Redbud *Cercis canadensis*

Florida Museum of Natural History
 UF Cultural Plaza
 3215 Hull Road
 Gainesville, FL 32611-2710
 352-846-2000
 www.flmnh.ufl.edu



This educational resource was developed by the Florida Museum of Natural History in cooperation with the U.S. Forest Service (www.fs.fed.us), Xerces Society for Invertebrate Conservation (www.xerces.org) and Butterfly Conservation Initiative (www.butterflyrecovery.com).

THE XERCES SOCIETY
 FOR INVERTEBRATE CONSERVATION

© 2013 Florida Museum of Natural History
 Design and Illustration by Dale Johnson
 Photography by Jaret Daniels, Peg Urban, T. Allen