

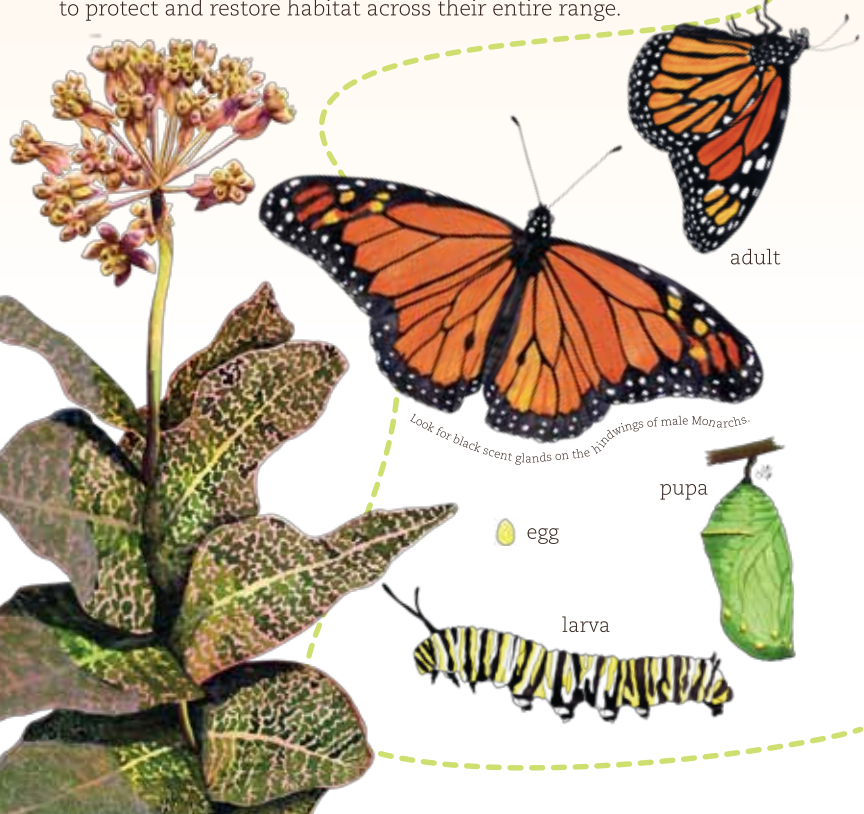
# Monarch Butterflies

are one of our most beloved animals — an insect that makes an amazing annual migration.



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 monarch's migratory lifecycle, effective conservation strategies need to protect and restore habitat across their entire range.



## Milkweeds

### *Asclepias tuberosa* Butterflyweed

**Habitat** dry soils: open woods, fields, roadsides

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



### *Asclepias incarnata* Swamp milkweed

**Habitat** moist to wet soils: swamps, wet woods, roadside ditches, pond margins

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

### *Asclepias perennis* Aquatic milkweed

**Habitat** moist to wet soils: swamps, wet meadows, roadside ditches

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



### *Asclepias humistrata* Pinewoods milkweed

**Habitat** dry soils: sandhills, pinelands, dry, sandy woods

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



### *Asclepias verticillata* White milkweed

**Habitat** dry to moist soils: open woods, shaded roadsides

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



## Monarchs & Milkweeds



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.

In addition to providing a food source for monarch larvae, the showy flowers of milkweeds offer abundant, high quality nectar to pollinators including bees, butterflies and hummingbirds.

Intensifying agriculture, development of rural lands and the use of mowing and herbicides to control vegetation have all reduced milkweeds in the landscape. As a result, the North American Monarch Conservation Plan recommends planting native milkweed species to restore breeding habitat.

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.

The non-native tropical or scarlet milkweed, *Asclepias curassavica*, is by far the most widely available species in the Southeast. While this plant readily supports growing monarch larvae, scientists are concerned that it has negative impacts on monarchs. To avoid the potential risks associated with tropical milkweed, native milkweeds should be grown whenever possible.

While native milkweeds are crucial for monarchs, few commercial sources of plants and seeds currently exist in the Southeast. The Florida Museum of Natural History, the Xerces Society for Invertebrate Conservation, Butterfly Conservation Initiative and the Monarch Joint Venture are working to 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.



# Butterfly Larvae & Host Plants

**Spicebush Swallowtail**  
*Papilio troilus*

**Sassafras**  
*Sassafras albidum*



**Eastern Tiger Swallowtail**  
*Papilio glaucus*

**Tuliptree**  
*Liriodendron tulipifera*



**Zebra Swallowtail**  
*Eurytides marcellus*

**Woolly Pawpaw**  
*Asimina incana*



**Palamedes Swallowtail**  
*Papilio palamedes*

**Redbay**  
*Persea borbonia*



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FLORIDA MUSEUM OF NATURAL HISTORY

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THE XERCES SOCIETY FOR INVERTEBRATE CONSERVATION

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



**Giant Swallowtail** *Heraclides crespontes*  
**Hercules-Club** *Zanthoxylum clava-herculis*



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



**Great Purple Hairstreak** *Atlides halesus*  
**Oak Mistletoe** *Phoradendron leucarpum*



**Red-banded Hairstreak** *Calycopis cecrops*  
**Winged Sumac** *Rhus copallinum*



**Viceroy** *Limenitis archippus*  
**Carolina Willow** *Salix caroliniana*



**Cassius Blue** *Leptotes cassius*  
**Doctorbush** *Plumbago zeylanica*



**Atala** *Eumaeus atala*  
**Coontie** *Zamia pumila*



**Gulf Fritillary** *Agraulis vanillae*  
**Purple Passionflower** *Passiflora incarnata*



**Question Mark** *Polygonia interrogationis*  
**Sugarberry** *Celtis laevigata*



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



**Little Metalmark** *Calephelis virginiensis*  
**Purple Thistle** *Cirsium horridulum*



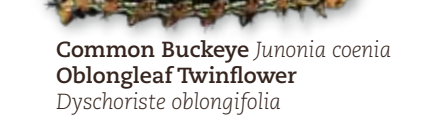
**Zebra Longwing** *Heliconius charitonia*  
**Corkystem Passionflower**  
*Passiflora suberosa*



**Phaon Crescent** *Phyciodes phaon*  
**Turkey Tangle Fogfruit** *Phyla nodiflora*



**Common Buckeye** *Junonia coenia*  
**Oblongleaf Twinflower**  
*Dyschoriste oblongifolia*



**Long-tailed Skipper** *Urbanus proteus*  
**American Wisteria** *Wisteria frutescens*



**Silver-spotted Skipper** *Epargyreus clarus*  
**Bastard False Indigo** *Amorpha fruticosa*



**Cloudless Sulphur** *Phoebis sennae*  
**Partridge Pea** *Chamaecrista fasciculata*



**Southern Dogface** *Zerene cesonia*  
**Summer Farewell** *Dalea pinnata*



**Little Yellow** *Eurema lisa*  
**Sensitive Pea** *Chamaecrista nictitans*



**Barred Yellow** *Eurema daira*  
**Shyleaf** *Aeschynomene americana*



**Dainty Sulphur** *Nathalis iole*  
**Beggarticks** *Bidens alba*



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