Importance of Butterflies

Butterflies are important pollinators as well as an important source of food for other animals. Birds, insects and frogs all prey on butterfly larvae and adults. To compensate for their population loss, most butterflies are prolific breeders, laying hundreds of eggs twice a year.

Butterflies serve as environmental indicators due to their rapid response to climatic and habitat changes. The absence of some species in a particular region could be linked to habitat degradation.

Praying mantids are experts at capturing fluttering butterflies

Butterfly Facts

While butterflies lack mouth pieces, all caterpillars are equipped with powerful jaws.

Though most butterflies can see in color, yellows and reds seem to attract them the most.

Butterflies have compound eyes with more than 60,000 lenses.

Butterflies can't hear, but they can detect vibrations.

Adult butterflies communicate using chemical cues.

Most butterflies sleep under leaves with their wings closed together.

The iridescence of many butterflies species is produced by reflective microstructures on the scales.

To learn more about butterflies or to join our butterfly forum visit: www.lakeregionaudubon.org

This publication was brought to you by the Lake Region Audubon Society in conjunction with Reinier Munguia and the assistance of field expert Linda Cooper. Look for more publications from the LRAS in the near future or visit our website for more information.

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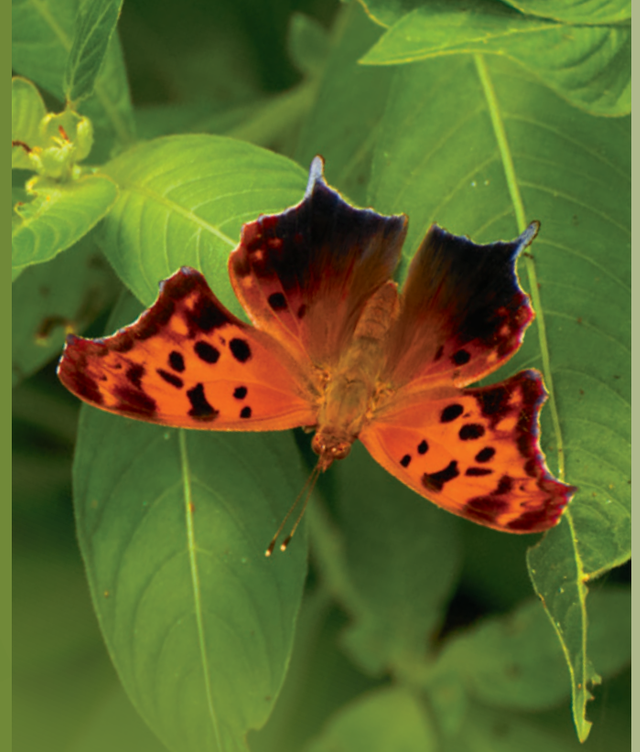

The LRAS guide to

Butterflies

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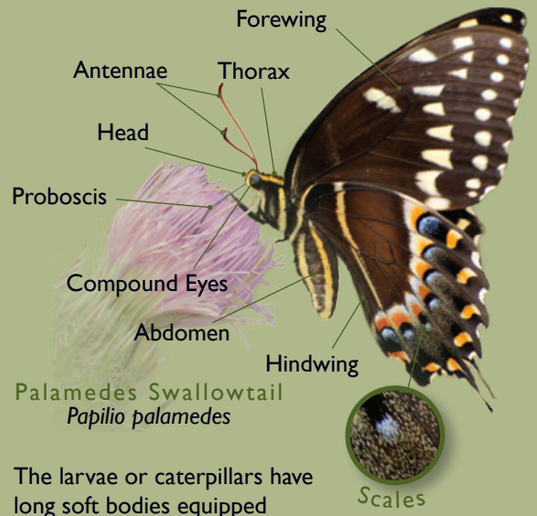
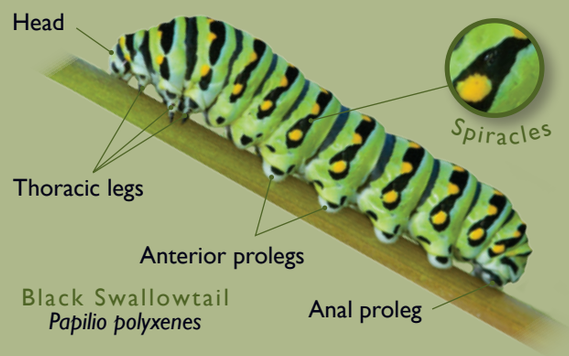
About Butterflies

Butterflies, skippers and moths all belong in the insect order Lepidoptera, which means "scaly wings," as their wings are lined with tiny scales. Their bodies are covered with hair-like structures called setae. Most butterflies feed on nectar and pollen using a long coiled tongue called a proboscis. Butterflies can taste with their feet, a feature that allows them to pick the right host plant before laying eggs.



Palamedes Swallowtail
Papilio palamedes

The larvae or caterpillars have long soft bodies equipped with six claw-like legs in the front and five pairs of prolegs. They shed their skin several times as they grow; these steps of the development are called instars. They feed on living plant tissues using powerful jaws and breathe through spiracles on the side of their body.



Black Swallowtail
Papilio polyxenes

Butterfly Life Cycle

Metamorphosis is the series of developmental stages insects go through to become adults. Butterflies and moths have four stages of life: egg, larva (the caterpillar stage), pupa (the chrysalis stage), and adult. It takes a monarch butterfly just 30 to 40 days to complete its life cycle.

EGG

❶ The female attaches its eggs on the leaves or stems of the host plant. Some eggs laid during winter can undergo a resting stage called diapause, resuming the development in spring.

LARVA

❷ A tiny larva emerges from the eggs, and starts eating immediately, doubling its size almost daily. As it grows, the caterpillar sheds or molts the skin several times. Toxic butterflies get their toxins from the plants they eat in their larval stage.

CHRYSALIS

❸ In the chrysalis stage, the caterpillar starts looking for a place to attach itself. On its last molt, the chrysalis is formed. Finally, the fully formed butterfly breaks through the chrysalis.

❹ The newly hatched butterfly pumps blood throughout its folded wings to achieve its final shape. At this point, many species are sexually matured and ready to start the cycle of a new generation.

Zebra Heliconian
Heliconius charithonia
Florida's State Butterfly

A Guide to Common Florida Butterflies and Caterpillars

Gulf Fritillary
Agraulis vanillae
Host: Passion Flower

Variegated Fritillary
Euptoieta claudia
Host: Passion Flower

Tawny Emperor
Asterocampa clyton
Host: Sugarberry

Hackberry Emperor
Asterocampa celtis
Host: Hackberry, Sugarberry

Viceroy
Limenitis archippus
Host: Carolina Willow

Monarch
Danaus plexippus
Host: Milk Weeds

Queen
Danaus gilippus
Host: Milk Weeds

Question Mark
Polygonia interrogationis
Host: Sugarberry, American Elm

Palamedes Swallowtail
Papilio palamedes
Host: Red Bay, Swamp Bay.

Black Swallowtail
Papilio polyxenes
Host: Dill, Fennel, Parsley

Eastern Tiger Swallowtail
Papilio glaucus
Host: Sweet Bay, Wild Cherry

Zebra Swallowtail
Eurytides marcellus
Host: Various pawpaws

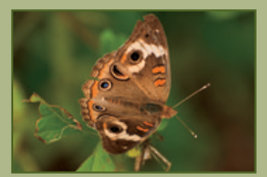
Spicebush Swallowtail
Papilio troilus
Host: Spicebush, Red Bay

Cloudless Sulphur
Phoebis sennae
Host: Partridge Pea, Sennas

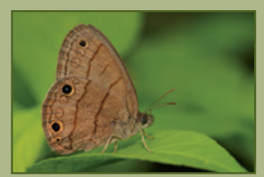
Sleepy Orange
Eurema nicippe
Host: Coffee, Sicklepod Senna

Great Southern White
Ascia monuste
Host: Virginia Pepper Grass, Saltwort

White Peacock
Anartia jatrophae
Host: Frogfruit, Water Hyssop



Common Buckeye
Junonia coenia
Host: False Foxglove, toadflax fam.



Carolina Satyr
Hermeuptychia sosybius
Host: Various grasses

Tropical Checkered-Skipper
Pyrgus oileus
Host: Indian Hemp, Broomweed

Ceraunus Blue
Hemiargus ceraunus
Host: Partridge Pea, milk peas

Cassius Blue
Leptotes cassius
Host: Plumbago, milk peas

White M Hairstreak
Parrhasius m-album
Host: Live Oak

Gray Hairstreak
Strymon melinus
Host: Partridge pea, milk peas

Red Admiral
Vanessa atalanta
Host: False Nettle, Pellitory

Zebra Heliconian
Heliconius charithonia
Host: Maypop, passion-flowers

Silver-spotted Skipper
Epargyreus clarus
Host: Butterfly pea, beggarweeds

Sachem
Atalopedes campestris
Host: Various grasses

Variegated Fritillary
Euptoieta claudia

Gulf Fritillary
Agraulis vanillae

Zebra Heliconian
Heliconius charithonia

Black Swallowtail
Papilio polyxenes

Question Mark
Polygonia interrogationis

Monarch
Danaus plexippus

Cloudless Sulphur
Phoebis sennae

Giant Swallowtail
Papilio cresphontes

Butterfly Behaviors

Puddling

Male butterflies sip minerals from wet sand or soil, a process called puddling. It's believed these minerals are essential for successful reproduction.

Butterflies are ectothermic, which means they cannot produce their own heat. Instead, they perch with their wings outstretched on a sunny spot.

Basking