



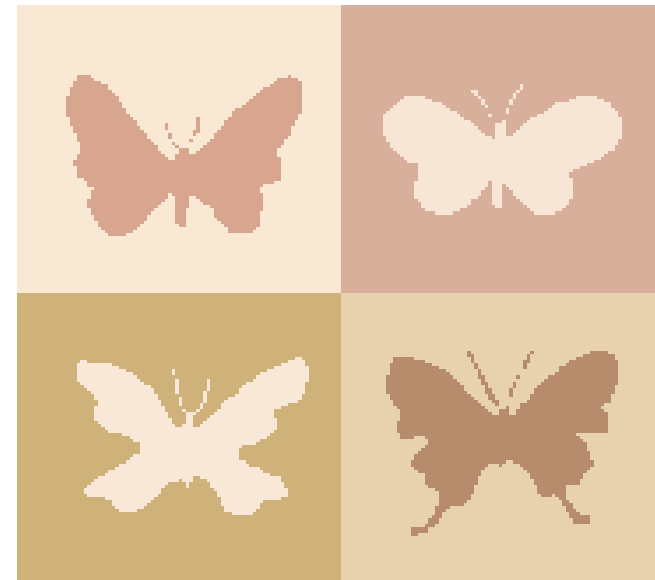
*Volusia County Environmental Management  
presents*

# Discover the Flutter

A Guide to Butterfly Gardening  
in Volusia County



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## Butterflies

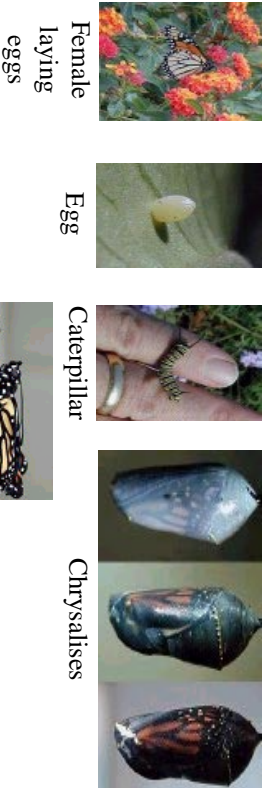
## Larval Food Plants

Atala <i>Eumaeus atala florida</i>	Coontie ( <i>Zamia floridana</i> )
Buckeye <i>Pricis lavina</i>	Plantain ( <i>Plantago</i> spp.), snapdragon ( <i>Antirrhinum</i> spp.), <i>Ludwigia</i> spp., sedums
Pearly Crescent <i>Phyciodes tharos</i>	Asters (esp. native spp.), crownbeard ( <i>Verbesina occidentalis</i> )
Dog Face <i>Calias cesonia</i>	Leadplant ( <i>Amorpha fruticosa</i> ), clover ( <i>Trifolium</i> spp.)
Gulf fritillary <i>Agraulis vanillae</i>	Passion vine ( <i>Passiflora incarnata</i> )
Florida leafwing <i>Anaea floralis</i>	Croton ( <i>Croton linearis</i> )
Goatweed butterfly <i>Anaea andria</i>	Croton ( <i>C. capitatum</i> and <i>C. Monanthogymus</i> )
Julia <i>Dryas iulia</i>	Passion vines ( <i>Passiflora</i> spp.)
Monarch <i>Danaus plexippus</i>	Milkweeds ( <i>Asclepias</i> spp.)
Mourning cloak <i>Nymphalis antiopa</i>	Elms ( <i>Ulmus</i> spp.), willows ( <i>Salix</i> spp.), hackberry ( <i>Celtis</i> spp.)
Painted lady <i>Vanessa cardui</i>	Thistles ( <i>Cirsium</i> spp.), many composites ( <i>Asteraceae</i> ) and mallows ( <i>Malvaceae</i> )
Queen <i>Danus gilippus</i>	Milkweeds ( <i>Asclepias</i> spp.)
Red admiral <i>Vanessa atalanta</i>	Nettles ( <i>Urtica</i> spp.), false nettle ( <i>Boehmeria cylindrica</i> )
Red-spotted purple <i>Limnitis arthemis astyanax</i>	Willows ( <i>Salix</i> spp.), scrub oaks ( <i>Quercus</i> spp.)
Long-tailed skipper <i>Urbanus proteus</i>	Legumes ( <i>Fabaceae</i> ), crucifers ( <i>Brassicaceae</i> )
Orange-banded sulphur <i>Phoebis philea</i>	Cassias ( <i>Cassia</i> spp.)
Common sulphur <i>Colias philodice</i>	Legumes ( <i>Fabaceae</i> )
Black swallowtail <i>Battus philenor</i>	Carrots, parsley, Queen Anne's lace, dill ( <i>Umbelliferae</i> )
Pipevine swallowtail <i>Battus philenor</i>	Pipevines ( <i>Aristolochia</i> spp.), knotweeds ( <i>Polygonum</i> spp.)
Palamedes swallowtail <i>Pterourus palamedes</i>	Red bay ( <i>Persea borbonia</i> ), sweet bay ( <i>Magnolia virginiana</i> ), sassafras ( <i>Sassafras albidum</i> )
Schaus swallowtail <i>Heracides aristodemus ponceanus</i>	Torchwood ( <i>Amyris elemifera</i> ), wild lime ( <i>Zanthoxylum fagara</i> )
Spicebush swallowtail <i>Pterourus troilus</i>	Spicebush ( <i>Lindera benzoin</i> ), red bay ( <i>Persea borbonia</i> ), sweet bay ( <i>Magnolia virginiana</i> )
Tiger swallowtail <i>Pterourus glaucus</i>	Many broadleaf trees and shrubs, esp. willows ( <i>Salix</i> spp.), and tulip poplars ( <i>Liriodendron tulipifera</i> )
Zebra swallowtail <i>Euryides marcellus</i>	Pawpaws ( <i>Asimina</i> spp.)
Zebra <i>Heliconius charitonius</i>	Passion vine ( <i>Passiflora</i> spp.)

# Butterfly Biology



Butterflies belong to the insect order Lepidoptera which, is derived from a Greek word meaning "scale wing". There are 165,000 species of Lepidoptera worldwide, but of those, only 24,000 are butterflies. Most adult butterflies possess a life expectancy of approximately two weeks. All butterflies undergo complete metamorphosis. Butterflies develop over four stages of life, which include **egg**, **caterpillar**, **chrysalis**, and **adult**. After mating, female butterflies locate specific types of host plants on which to lay their eggs. For example, monarchs lay their eggs on milkweed, and swallowtails lay their eggs on parsley. Within a few days, the caterpillar emerges from the egg and immediately begins to eat the leaves of the plant. When the caterpillars are fully-grown, they shed their skin and transform into a chrysalis. Often chrysalises are attached to plant stems and are protected by surrounding vegetation. Inside the chrysalis, the butterfly begins to develop and one day will emerge.



Female laying eggs

Egg

Caterpillar

Chrysalises

Adult butterfly emerging from chrysalis



# Creating Habitat



Butterfly populations in a residential habitat require both larval and nectar foods. Allow the plants to grow in an unmaintained area where grasses can grow for cover and larval food. Never use pesticides or herbicides in or near the butterfly garden. Keep in mind that some species of butterflies are endemic to urban areas because, they require specific natural habitats.

Creating habitats for butterflies is an important task. To ensure that your butterfly garden is successful it is necessary to include these key components:

**Sunny areas** – Plants that butterflies like require bright sunshine.

**Splashes of Color** – Butterflies are attracted to flowers by color

**Host plants** – Female butterflies lay their eggs only on certain host plants that will nourish the young caterpillars after they hatch.

**Damp areas** – Butterflies cannot drink from open water.

**Basking stones** – Butterflies often perch on stones to bask in the sun. Basking raises their body temperature so that they are able to fly and remain active.



Nectar Food Plants	Scientific Name
Bottlebrush tree	<i>Callistemon spp.</i>
Citrus	<i>Citrus spp.</i>
Wild Lime	<i>Zanthoxylum fagara</i>
Red Buckeye	<i>Aesculus pavia</i>
Azalea	<i>Rhododendron spp.</i>
Butterfly bush	<i>Buddleia spp.</i>
Fetterbush	<i>Lyonia lucida</i>
Staggerbush	<i>Lyonia ferruginea</i>
New Jersey tea	<i>Ceanothus americanus</i>
Alfalfa	<i>Medicago spp.</i>
Asters	<i>Asteraceae</i>
Legumes	<i>(Fabaceae, including cassias)</i>
Bergamont	<i>Monarda spp.</i>
Clover	<i>Trifolium spp.</i>
Coreopsis	<i>Coreopsis spp.</i>
Cow parsnip	<i>Heracleum spp.</i>
Daisy	<i>Chrysanthemum spp.</i>
Groundsel	<i>Senecio spp.</i>
Grasses	<i>Poaceae</i>
Gerardia	<i>Aureolaria spp.</i>
Honeysuckle	<i>Lonicera spp.</i>
Beggar-ticks	<i>Bidens spp.</i>
Sedums	<i>Sedum spp.</i>
Lantana	<i>Lantana spp.</i>
Liatrix	<i>Liatrix spp.</i>
Phlox	<i>Phlox spp.</i>
Queen Anne s lace	<i>Daucus carota</i>
Red root	<i>Lachnanthes tinctoria</i>
Thistle	<i>Cirsium spp.</i>
Spanish needle	<i>Bidens spp.</i>