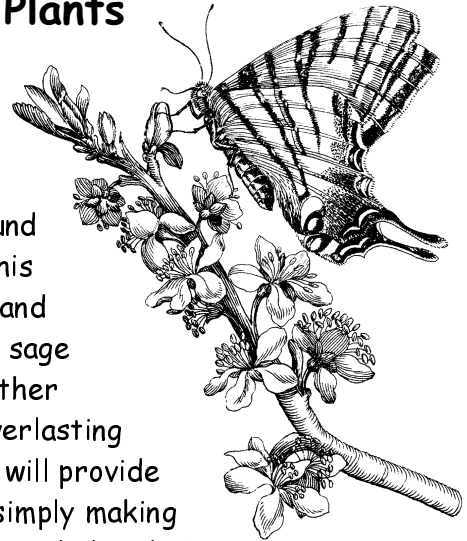


Butterfly Gardening with Central Florida Native Plants

by Sharon R. LaPlante

Attracting butterflies to your backyard is not only rewarding, it is also easier than you may think. This is because the plants that are an integral part of a butterfly's life cycle are all around us in nature as well as in our landscape. Taking advantage of this natural occurrence saves the butterfly gardener time, money, and labor. Native wildflowers such as Spanish needle and lyre leaf sage are invaluable nectar sources for feeding adult butterflies. Other wildflowers - mistakenly considered useless weeds by many; everlasting and toadflax, are regular volunteers in tended flowerbeds and will provide larval food without any work on the part of the gardener. By simply making room for the plants they require, the butterfly gardener is rewarded with an abundance of these beautiful creatures to study, photograph, or just enjoy.



Butterflies require two entirely different types of plants in order to complete their life cycle. An adult butterfly is equipped with a proboscis, or tubular tongue, that it uses for drawing nectar, whereas, immature butterflies, known as larvae or caterpillars, have chewing mouth parts and feed on plant parts. The required food for both life stages should be planted or cultivated in order to develop a successful and abundant butterfly garden. What this means essentially is - provide flowers for the adults and leaves for the caterpillars. Additional requirements include water and shelter, however, these needs are usually met without additional effort once the butterfly garden is established.

Flower nectar is the preferred food choice of most adult butterflies, however some species also take advantage of tree sap, fermenting fruit, and even carrion. When planting nectar plants, keep in mind that adult butterflies need sunlight in order to warm their wings for flight. Therefore, place the majority of nectar plants in a sunny location to assist them as they prepare for takeoff. Black butterflies, such as the zebra longwing, actually seem to prefer feeding, or nectaring, in shady areas much more frequently than their lighter counterparts. This is because their dark color absorbs heat more readily thus enabling them to be active sooner in the day as well as on cooler days. Knowing this, the butterfly gardener should locate some nectar plants in the shade as well as in sunny areas to satisfy all the nectar-seeking visitors. Florida butterflies are active most of the year so it is also important to utilize a variety of plant species. This keeps your garden producing blooms throughout the seasons, ensuring a continuous supply of nectar - even in winter.

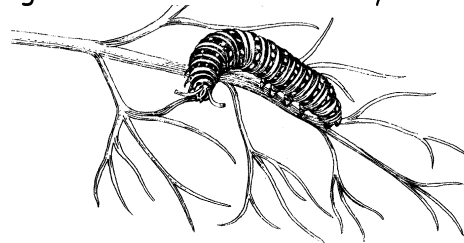
The female butterfly searches out the proper host plant on which to lay her eggs by tasting each plant with sensors on her feet. Once the correct host plant is located, she will typically lay her eggs on its tips where the tender new growth is found. Each species of butterfly uses a particular plant or family of plants to nourish its young and will only lay eggs on those plants. Growing an abundance and variety of larval food plants will attract and support the largest variety of butterflies. Planting larval foods in several locations throughout your landscape will also ensure that a particular plant, or plants, will not be defoliated as quickly and will 'bounce back' faster with

new growth. Caterpillars feed continuously and voraciously for a few weeks until they have completed several molts, or instars, and are mature enough to pupate. Most will move away from the host plant to nearby foliage or structures on which to complete this last stage of their larval life. Some butterflies, however, may stay and pupate on the host plant, while others descend into the leaf litter to accomplish this feat. Once pupated, the organism has developed a very hard outer covering, called a chrysalis, wherein metamorphosis takes place, and in approximately two weeks an adult butterfly will emerge to trigger a repeat of an amazing life cycle.

A butterfly's water requirements are usually met in the form of raindrops, water droplets, and moist soils and mulches. Routine watering in the butterfly garden is generally more than adequate to fulfill their moisture needs. Watering the flower beds on hot days will usually result in several butterflies landing to drink from the moist soil or mulch. A butterfly drinks by uncoiling its proboscis and laying it in the crevices of the mulch, or along the edge a water droplet, drawing water through the tube shaped tongue. Butterflies can often be seen drinking, or puddling, from mud puddles and areas of concentrated livestock urine in order to obtain required salts and minerals as well as water.

Shelter requirements are generally met once the butterfly garden is established. Adult butterflies seek mature foliage for protection from inclement weather, predators, or merely to rest. Butterfly houses are very attractive in the garden, but unfortunately, at least for the author, do not seem to entice butterflies into the confined space that they provide. Butterflies prefer shrubs or trees with large leaves which give them adequate cover and an easy escape route if threatened with predation. Some species roost communally which can make a seemingly lifeless shrub silently explode with flitting butterflies when disturbed.

Take advantage of the wonderful native plants that Florida has to offer and you automatically provide for many of our beautiful native butterflies. My humble garden becomes absolutely crowded at times with these fascinating animals. With minimal planning and care, your efforts will be handsomely rewarded.



Caterpillar (Larval) Food Sources

If you plant it they will come. So don't be alarmed when it is eaten - it will grow back!

SWALLOWTAILS		
Black Swallowtail	<i>Apiaceae</i> or Celery family	wild chervil (<i>Chaerophyllum tainturieri</i>) wild carrot (<i>Daucus pusillis</i>) bishop's weed (<i>Ptilimnium capillaceum</i>)
Giant Swallowtail	Rutaceae or Citrus family	hoptree (<i>Ptelea trifoliata</i>) prickly ash (<i>Zanthoxylum americanum</i>) Hercules's club (<i>Zanthoxylum clava-herculis</i>)
Palamedes Swallowtail	<i>Lauraceae</i> or Laurel family	spicebush (<i>Lindera benzoin</i>) pond spice (<i>Litsea aestivalis</i>) red bay (<i>Persea borbonia</i>) swamp bay (<i>Persea palustris</i>)

Pipevine Swallowtail	<i>Aristolochiaceae</i> or Birthwort family	Virginia snakeroot (<i>Aristolochia serpentaria</i>) wooly pipevine (<i>Aristolochia tomentosa</i>)
Polydamas Swallowtail	<i>Aristolochiaceae</i> or Birthwort family	Virginia snakeroot (<i>Aristolochia serpentaria</i>) wooly pipevine (<i>Aristolochia tomentosa</i>)
Spicebush Swallowtail	<i>Lauraceae</i> or Laurel family	pond spice (<i>Litsea aestivalis</i>) spicebush (<i>Lindera benzoin</i>) red bay (<i>Persea borbonia</i>) swamp bay (<i>Persea palustris</i>)
Tiger Swallowtail	<i>Magnoliaceae</i> or Magnolia family	tulip tree (<i>Liriodendron tulipifera</i>) sweet bay (<i>Magnolia virginiana</i>)
Zebra Swallowtail	<i>Annonaceae</i> or Custard apple family	slim-leaf pawpaw (<i>Asimina angustifolia</i>) flag pawpaw (<i>Asimina obovata</i>) pawpaw (<i>Asimina reticulata</i>)

WHITES

Checkered White	<i>Brassicaceae</i> or Mustard family	peppergrass (<i>Lepidium virginicum</i>)
European Cabbage White	<i>Brassicaceae</i> or Mustard family	peppergrass (<i>Lepidium virginicum</i>)
Great Southern White	<i>Brassicaceae</i> or Mustard family	American sea rocket (<i>Cakile edentula</i>) coastal sea rocket (<i>Cakile lanceolata</i>) peppergrass (<i>Lepidium virginicum</i>)

SULPHURS

(a partial listing of sulphur species)

Barred Sulphur	<i>Fabaceae</i> or Pea family	shy leaf (<i>Aeschynomene americana</i>) sticky vetch (<i>Aeschynomene viscidula</i>) pencil flower (<i>Stylosanthus biflora</i>)
Cloudless Sulphur	<i>Fabaceae</i> or Pea family	partridge pea (<i>Chamaecrista fasciculata</i>) sensitive pea (<i>Chamaecrista nictitans</i>) wild sensitive plant (<i>Senna ligustrina</i>) wild sensitive plant (<i>Senna marilandica</i>)
Dainty Sulphur	<i>Asteraceae</i> or Aster family	Spanish needles (<i>Bidens alba</i>)

BLUES

Cassius Blue	<i>Fabaceae</i> or Pea family	Elliott's milk pea (<i>Galactia elliotii</i>) Eastern milk pea (<i>Galactia regularis</i>)
Ceraunus Blue	<i>Fabaceae</i> or Pea family	alicia (<i>Chapmannia floridana</i>) Elliott's milk pea (<i>Galactia elliotii</i>) Eastern milk pea (<i>Galactia regularis</i>) tropical puff (<i>Neptunia pubescens</i>)
Eastern Pygmy blue	<i>Chenopodiaceae</i> or Glasswort family	annual glasswort (<i>Salicornia bigelovii</i>) perennial glasswort (<i>Salicornia perennis</i>)

HAIRSTREAKS

(a partial listing of hairstreak species)

Gray Hairstreak	<i>Fabaceae</i> or Pea family	partridge pea (<i>Chamaecrista fasciculata</i>) sensitive pea (<i>Chamaecrista nictitans</i>) wild sensitive plant (<i>Senna ligustrina</i>) wild sensitive plant (<i>Senna marilandica</i>)
Great Purple Hairstreak	<i>Viscaceae</i> or Mistletoe family	mistletoe (<i>Phoradendron leucarpum</i>)
Red-banded Hairstreak	<i>Fagaceae</i> or Beech family	oaks (<i>Quercus</i> spp.)
White M Hairstreak	<i>Fagaceae</i> or Beech family	oaks (<i>Quercus</i> spp.)

BRUSH FOOTED BUTTERFLIES

American Painted Lady	<i>Asteraceae</i> or Aster family	everlasting (<i>Gamochaeta pensylvanica</i>) narrowleaf everlasting (<i>Gamochaeta falcatum</i>) (synonym <i>Gnaphalium</i>)
Common Buckeye	<i>Scrophulariaceae</i> or Figwort family	false foxglove (<i>Agalinus fasciculata</i>) slender false foxglove (<i>Agalinus tenuifolia</i>) American bluehearts (<i>Buchnera americana</i>) Canada toadflax (<i>Linaria canadensis</i>) Texas toadflax (<i>Linaria texana</i>)
Gulf Fritillary	<i>Passifloriaceae</i> or Passion vine family	passion vine (<i>Passiflora incarnata</i>) maypop (<i>Passiflora lutea</i>) cork-stem passion vine (<i>Passiflora suberosa</i>)
Phaon Crescent	<i>Verbenaceae</i> or Vervain family	carpetweed (<i>Phyla nodiflora</i>) (synonym <i>Lippia</i>)
Question Mark	<i>Ulmaceae</i> or Elm family	hackberry (<i>Celtis laevigata</i>) winged elm (<i>Ulmus alata</i>) Florida elm (<i>Ulmus americana</i>)
Red Admiral	<i>Urticaceae</i> or Nettle family	false nettle (<i>Boehmeria cylindrica</i>) Florida pellitory (<i>Parietaria floridana</i>) heartleaf nettle (<i>Urtica chamaedryoides</i>)
Red Spotted Purple	<i>Salicaceae</i> or Willow family	coastal plain willow (<i>Salix caroliniana</i>) Florida willow (<i>Salix floridana</i>)
Variegated Fritillary	<i>Passifloriaceae</i> or Passion vine family	passion vine (<i>Passiflora incarnata</i>) maypop (<i>Passiflora lutea</i>) cork-stem passion vine (<i>Passiflora suberosa</i>)
Viceroy	<i>Salicaceae</i> or Willow family	coastal plain willow (<i>Salix caroliniana</i>) Florida willow (<i>Salix floridana</i>)
White Peacock	<i>Scrophulariaceae</i> or Figwort family	lemon bacopa (<i>Bacopa caroliniana</i>) herb-of-grace (<i>Bacopa monnieri</i>)
Zebra Longwing	<i>Passifloriaceae</i> or Passion vine family	passion vine (<i>Passiflora incarnata</i>) maypop (<i>Passiflora lutea</i>) cork-stem passion vine (<i>Passiflora suberosa</i>)

HACKBERRY BUTTERFLIES

Hackberry	<i>Ulmaceae</i> or Elm family	hackberry (<i>Celtis laevigata</i>) winged elm (<i>Ulmus alata</i>) Florida elm (<i>Ulmus americana</i>)
Tawny Emperor	<i>Ulmaceae</i> or Elm family	hackberry (<i>Celtis laevigata</i>) winged elm (<i>Ulmus alata</i>) Florida elm (<i>Ulmus americana</i>)

MILKWEED BUTTERFLIES

Monarch	<i>Asclepiadaceae</i> or Milkweed family	milkweeds (<i>Asclepias</i> spp.) white vine (<i>Sarcostemma clausum</i>)
Queen	<i>Asclepiadaceae</i> or Milkweed family	milkweeds (<i>Asclepias</i> spp.) white vine (<i>Sarcostemma clausum</i>)
Soldier	<i>Asclepiadaceae</i> or Milkweed family	milkweeds (<i>Asclepias</i> spp.) white vine (<i>Sarcostemma clausum</i>)

SATYRS

(a partial listing of satyr species)

Carolina Satyr	<i>Poaceae</i> or Grass family	wood oats (<i>Chasmanthium</i> spp.) crown grass (<i>Paspalum</i> spp.)
----------------	-----------------------------------	--

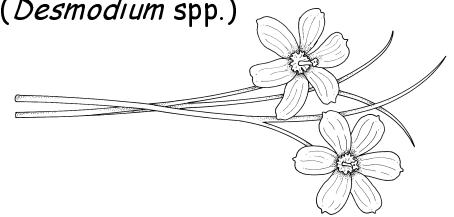
SNOUT BUTTERFLY

Snout butterfly	<i>Ulmaceae</i> or Elm family	hackberry (<i>Celtis laevigata</i>) winged elm (<i>Ulmus alata</i>) Florida elm (<i>Ulmus americana</i>)
-----------------	----------------------------------	--

SKIPPERS

(a partial listing of skipper species)

Giant yucca skipper	<i>Agavaceae</i> or Agave family	Adam's needle (<i>Yucca filamentosa</i>)
Long tailed skipper	<i>Fabaceae</i> or Pea family	beggarweed (<i>Desmodium</i> spp.)



Nectar Sources

If you plant it they will come - so plant enough for everyone!

WILDFLOWERS

<i>Asclepias incarnata</i>	swamp milkweed	sun	avg-moist	pink	sp, su & fall	3 ft
<i>Asclepias tuberosa</i>	butterfly milkweed	sun	avg-dry	orange-red	sp, su & fall	3 ft
<i>Balduina angustifolia</i>	yellow buttons	sun	avg-dry	yellow	sp, su & fall	3 ft
<i>Bidens alba</i>	Spanish needles	sun-pt sh	avg	white	all year	3 ft
<i>Carphephorus corymbosum</i>	Florida paintbrush	sun	avg-dry	pink	su & fall	3 ft
<i>Cnidocolus stimulosus</i>	tread-softly	sun-pt sh	avg-dry	white	all year	3 ft
<i>Elephantopus elata</i>	elephant's foot	sun-pt sh	avg-dry	lavender	su & fall	3 ft
<i>Gaillardia pulchella</i>	blanket flower	sun	avg-dry	red-yellow	all year	2 ft
<i>Garberia heterophylla</i>	garberia	sun-pt sh	avg-dry	lavender	su & fall	6 ft
<i>Glandularia tampensis</i>	Tampa vervain	sun-pt sh	avg-moist	lavender	sp, su & fall	2 ft
<i>Guara angustifolia</i>	southern guara	sun	avg-dry	pink-white	all year	5 ft
<i>Ipomopsis rubra</i>	standing cypress	sun	avg-dry	red	su & fall	3 ft
<i>Lachnanthes caroliniana</i>	redroot	sun-pt sh	moist-wet	off white	sp, su & fall	3 ft

<i>Liatris gracilis</i>	graceful blazing star	sun-pt sh	avg-dry	pink	su, fall	3 ft
<i>Lobelia cardinalis</i>	cardinal flower	sun -pt sh	moist-wet	red	su & fall	6 ft
<i>Piloblephis rigida</i>	false pennyroyal	sun	avg-dry	lavender	wtr & sp	2 ft
<i>Ruellia caroliniensis</i>	wild petunia	sun-pt sh	avg	blue	sp, su & fall	2 ft
<i>Salvia coccinea</i>	red salvia	sun-pt sh	avg	red	all year	3 ft
<i>Salvia lyrata</i>	lyre leaf sage	sun-pt sh	avg	blue	spring	2 ft
<i>Stokesia laevis</i>	Stoke's aster	sun	avg-moist	purple-blue	sp, su & fall	2 ft
<i>Verbesina virginica</i>	frostweed	sun-pt sh	avg	white	su, fall	6 ft
<i>Vernonia angustifolia</i>	ironweed	sun-pt sh	avg	purple	su, fall	4 ft

SHRUBS

<i>Cephalanthus occidentalis</i>	buttonbush	sun-pt sh	moist	off white	sp, su & fall	10 ft
<i>Cordia globosa</i>	bloodberry	sun-pt sh	avg	white	sp, su & fall	5 ft
<i>Erythrina herbacea</i>	coral bean	sun-pt sh	avg-dry	red	spring	4 ft
<i>Hamelia patens</i>	firebush	sun	avg-moist	red	all year	15 ft
<i>Rhododendron canescens</i>	wild azalea	pt shade	moist	pink	spring	15 ft
<i>Rhododendron viscosum</i>	swamp azalea	pt shade	moist	white	summer	15 ft
<i>Rubus cuneifolius</i>	sand blackberry	sun	avg-dry	white	wtr & sp	6 ft
<i>Rubus trivialis</i>	southern dewberry	sun	avg-dry	white	wtr & sp	3 ft
<i>Vaccinium corymbosum</i>	highbush blueberry	sun-pt sh	avg-moist	white	spring	10 ft

TREES

<i>Aesculus pavia</i>	buckeye	pt-shade	avg-moist	red	spring	36 ft
<i>Aralia spinosa</i>	devil's walking stick	pt-shade	avg	off white	summer	30 ft
<i>Prunus americana</i>	American plum	pt-shade	avg	white	spring	30 ft
<i>Prunus angustifolia</i>	chickasaw plum	pt-shade	avg	white	spring	24 ft
<i>Prunus umbellata</i>	flatwoods plum	pt-shade	avg	white	spring	24 ft
<i>Vaccinium arboreum</i>	sparkleberry	pt-shade	avg	white	spring	30 ft

VINES

<i>Bignonia capreolata</i>	cross vine	sun-pt sh	avg	red	spring	
<i>Campsis radicans</i>	trumpet vine	sun-pt sh	avg	red-orange	sp, su, fall	
<i>Ipomoea cordatotriloba</i>	morning glory	sun	avg	lavender	sp, su, fall	
<i>Ipomoea hederifolia</i>	scarlet morning glory	sun-pt sh	avg	red	sp, su, fall	
<i>Ipomoea pes-caprae</i>	railroad vine	sun	avg-dry	lavender	sp, su, fall	
<i>Lonicera sempervirens</i>	coral honeysuckle	pt shade	avg	red	sp - su	

Recommended reading:

- Ajilvsgi, Geyata. Butterfly Gardening for the South. Taylor Publishing: Dallas, TX. 1990
- Emmel, Thomas. Florida's Fabulous Butterflies. World Publications: Tampa, FL. 1997
- Glassberg, J., Marc Minno, & John Calhoun Butterflies Through Binoculars: Florida. Oxford University Press 2000
- Huegel, C. Butterfly Gardening with Florida's Native Plants. Florida Native Plant Society: Orlando, FL. 1992
- Minno, Marc & Maria. Florida Butterfly Gardening. University Press of Florida: Gainesville, FL. 1999
- Taylor, Walter Kingsley. The Guide to Florida Wildflowers. Taylor Publishing: Dallas, TX 1992
- Wunderlin, Richard P. Guide to the Vascular Plants of Florida. University Press of Florida: Gainesville, FL. 1998