



Longtailed Skipper

Stars of the Garden



Eastern Tiger Swallowtail



Monarch, Brushfoot

Resident Butterflies Of Pinellas County



Gray Hairstreak, Gossamer Wing



Cloudless Sulphur, White and Sulphur

Stars of the Garden

Resident Butterflies in Pinellas County

Compiled by Ellen Mahany, MG Volunteer

This publication presents information about some sixty resident butterflies of Pinellas County with the purpose of aiding both butterfly gardeners and butterfly observers. The five sections are organized according to five butterfly families.

Formatting by Rebecca Hendricks, MG Volunteer

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Introduction

Butterflies are garden stars, bringing attention to themselves through their beauty and gracefully erratic flight, sparkling with color while they search for and find host and nectar plants -- and mates.

These enchanting insects have many characteristics in common, as listed on the next page in the comparison between the two members of the Lepidoptera Order, the moth and the butterfly.

Just as significant are the unique features of each of five families (and of several subfamilies). Pictured on the cover is a common member from each family: the Monarch, Brushfoots; the Gray Hairstreak, Gossamer Wings; the Long-Tailed Skipper, Skippers; the Cloudless Sulphur, Sulphurs and Whites, and the Eastern Tiger Swallowtail, Swallowtails.

Many more than one hundred species of butterflies make their home in Florida, while about sixty are common to occasional residents somewhere within the varying ecosystems of Pinellas County. (Some butterflies with unusual needs are rarely seen.) The information presented here pertains to each of these residents, organized by family.

The two purposes of this presentation are to help observers in identifying these species and to aid gardeners with selecting appropriate species for their residential gardens based on each butterfly's habitats as well as its required host plants and favorite nectar sources. Knowing each butterfly's behavior will help gardeners in making wise choices and in excluding species impossible to accommodate.

Each new butterfly garden, one after another, can help against loss of habitat, the largest threat to the decreasing butterfly population. When butterflies come, other pollinators as well as beneficial predators will follow. They will be nourished by a wealth of horticulture and, perhaps, by some of the majority of the ninety-nine out of one hundred caterpillars who do not survive to adulthood. **The one percenters will star in the garden!**

Lepidoptera Order

Along with moths, butterflies belong to the **Lepidoptera Order**, composed of insects whose bodies and wings are covered with tiny overlapping scales that create the colors and design of each species. Other purposes of these scales include thermoregulation, camouflage, pheromone dispersal to attract mates, and recognition of species and gender. Even though these insects lose scales throughout their short lifetime, they are still able to fly, despite wear and tear. In common also, moths and butterflies have a coiled proboscis for sipping nutrition and experience a complete metamorphosis.

Contrasting Characteristics of Moths and Butterflies

1. **Moths** generally are nocturnal; **butterflies** are diurnal.
2. **Moths** generally have a duller appearance; **butterflies** are more vividly colored.
3. **Moths** tend to rest with their wings at their side; resting **butterflies** often hold their wings vertically over their backs.
4. **Moths** have thicker, hairier bodies; **butterflies** have slender, smoother bodies.
5. **Moths'** antennae have feathery endings; **butterflies'** antennae have knob ends.
6. **Moths** spend the pupa stage in cocoons; **butterflies** transform in chrysalides or pupae.



Monarch Butterfly Credit: Andrei Sourakov



Tropical Sod Webworm Moth Credit: IFAS

Characteristics of Butterflies

- **Bask in the sun** to absorb solar radiation to reach temperature needed to fly
- **Evade predators** through erratic flights due to slender bodies with disproportionately large wings
- **Generally live** about two weeks in the adult stage
- **Smell with sensors** on their feet and antennae
- **Dine on fluids**, commonly flower nectar, but a few species prefer dung, rotting fruit, sap, bird droppings and carrion
- **Replenish sodium ions** lost during mating at nourishing male puddle clubs
- **Have many enemies**: insects such as ants, wasps, wheelbugs, praying mantises, and ambush bugs, as well as lizards and birds

Butterfly Residents of Pinellas County

Family Name: Brushfoots/Nymphalidae

- Named for significantly reduced two front feet covered in brush-like scales, this family's species can walk on only four feet.
- This is the largest and most diverse butterfly family.
- The female uses her brush feet to identify chemicals of appropriate larva plants.
- Large knobbed antennae are another family characteristic.
- A chrysalis hangs with the tip attached to a silk pad.
- In lieu of flower nectar, nine species listed sip from alternatives such as rotting fruit, dung, carrion and tree sap.

Interesting Fact about Larvae: The True Brushfoots (subfamily Nymphalinae) have uniform rows of branched spines on the body and a pair of spines or horns on the top of the head as protection against predators. Some species in other subfamilies also have varying forms of spine protection.



Mature Common Buckeye larva, shown here on false foxglove, has many blue-black branched spines.

Residents of Subfamilies by Subfamilies

Admiral: Red Spotted, Purple, Viceroy

Emperors: Hackberry, Tawny

Longwing and Heliconian: Gulf Fritillary, Zebra Longwing

Milkweed: Monarch, Queen

True Brushfoots: American Painted Lady, Common Buckeye, Pearl Crescent, Phaon Crescent, Question Mark, Red Admiral, White Peacock

Satyr or Woodnymph: Carolina Satyr, Gemmed Satyr

Snout: American Snout

Red Spotted Purple (Admiral)
(Limenitis arthemis Astyanax)



Larva Food: Wild cherry, Carolina willow, oak

Size: 3-3.5 inches **Flight Season:** all year

Habitats: Immature woodlands, adjacent open areas

Comments: Although the adult sips flower nectar, it prefers rotting fruit, dung, carrion, and sap flows. For protection it mimics the distasteful Pipevine Swallowtail (see Bateson Mimicry at Pipevine Swallowtail entry). It flies in strong glides. The young caterpillar eats the host leaf tips to the midrib, then attaches its droppings to the thin spar with frass and rests there to avoid being reached by ants.

Viceroy (Admiral)
(Limenitis archippus floridensis)



Larva Food: Willows, poplars and cottonwoods

Habitats: Wetlands, brushy fields, marshes and lake shores

Size: 2.6-3.2 inches **Flight Season:** all year

Comments: In addition to flowers of composites, the adult dines on carrion and dung. It can be distinguished from the Monarch by the curved inside line running across the lower wings. Salicylic acid in larva food renders both the larva and adult distasteful to some predators. Its flight is fast and gliding.

Hackberry Emperor
(*Asterocampa celtis reinthali*)



Larva Food: New foliage on hackberry and sugarberry trees

Habitats: Woodlands and forest margins

Size: 2-2.6 inches **Flight Season:** Mar- Nov.

Comments: Similar in appearance to the closely related Tawny Emperor, it varies in amount but can be locally common. The adult prefers sap flows, rotting fruit, dung and carrion to flower nectar. It rests upside down on tree trunks.

Tawny Emperor
(*Asterocampa clyton flora*)



Larva Food: Old foliage on hackberry and sugarberry trees

Habitats: Woodlands and forest edges

Size: 2 – 2.75 inches **Flight Season:** Mar – Nov.

Comments: In common with the Hackberry Emperor, the adult nourishment is sap flows, rotting fruit, dung and carrion. Through the first three instars, larvae feed communally.

Gulf Fritillary Female (above) and Male (Heliconian)
(Agraulis vanillae nigrrior)



Larva Food: Maypop or purple passion vine, yellow passion vine, and corky stem vine, all distasteful plants shared with the Zebra Longwing, protecting both species from some predators

Habitats: Open fields, disturbed areas, parks and gardens

Size: 2.5-3 inches **Flight Season:** all year

Comments: The Adult chooses nectar from many flowers, including Spanish needles, trailing lantana and other verbenas, hibiscus, golden dewdrop, blue porter weed, asters, false heather, firebush and plumbago. Ants feeding on extra floral nectar glands at each leaf base of larva plants eat eggs and caterpillars. Silver white ventral spots on wings and elongated wings distinguish it from the Viceroy and the Monarch. It flies rapidly and low to the ground.

Zebra Longwing (Heliconian)
(*Heliconius charitonius*)



Larva Food: Same as closely related Gulf Fritillary

Habitats: Hardwood hammocks, pine and oak woods, forest edges, brushy fields and gardens

Size: 2.9 -3 inches **Flight Season:** all year

Comments: A true Heliconian, it consumes pollen along with nectar, prolonging its life span to six months. Favorite pollen plants include Spanish needles (*Bidens alba*) and lantanas. This shade-loving butterfly returns to the same roost each night, sleeping in a colony, with five members offering the most protection from predators. It has been named the Florida state butterfly.

Monarch (Milkweed)
(*Danaus plexippus*)



Larva Food: Various milkweed plants, including pineland, Mexican, sandhill, white, swamp, white vine milkweeds, butterfly weed (*Asclepias tuberosa*) and scarlet milkweed (*Asclepias curassavica*)

Habitats: Open and disturbed areas, scrub land, marshes, pastures, parks and gardens

Size: 3.5-4 inches **Flight Season:** all year

Comments: It is the most common butterfly statewide and nationwide. Alighting on flowers while eating, it prefers a wide range of composites that hold its weight. Milkweeds provide toxic chemicals, making the larva and adult distasteful to some predators. Local year-round monarchs are separate from migrating monarchs. The varying shades of orange and the black veins seen when the wings are open distinguish it from the queen butterfly. The male (pictured here) has two small scent patches on the hind wing. It is known for its strong flight.

Queen (Milkweed)
(*Danaus gilippus berenice*)



Larva Food: Pineland, white twin vine, Florida milk vine, and white swamp milkweeds, scarlet milkweed (but rarely butterfly weed, *Asclepias tuberosa*), from which it receives the same protection from predators as the monarch

Habitats: Swamps, marshes, forest margins, open pinelands, fields, pastures, parks, gardens

Size: 3- 3.5 inches **Flight Season:** all year

Comment: The various white dots seen on open wings, extra set of tubercles at mid- body, and richer orange hue distinguish it from the Monarch. Like the Monarch, the male has scent patches on the hindwing. Its flight is slow and soaring.

American Painted Lady (True Brushfoot)
(Vanessa virginiensis)



Larva Food: Purple, wandering, and narrow-leaved cudweeds, sweet everlasting wild flower and other asters

Habitats: Open fields and gardens

Size: 1.7-2.4 inches **Flight Season:** all year

Comments: Adult male sips mud to replace nutrients lost during mating. This common butterfly is often overlooked due to its nervous, low, erratic flight. Among its favorite nectar plants are mallow, privet, vetch and asters, including dogbane and goldenrod. The larva makes an individual leaf shelter to rest in safely when not eating.

Common Buckeye (True Brushfoot)
(Junonia coenia)



Larva Food: Plants in many families, including plantain, false foxglove, matchweed, twin flower

Habitats: Open sunny fields and gardens

Size: 1.5- 2.7 **Flight Season:** all year

Comments: Adult diet includes rotting fruit and nectar from milkweed, tall verbena, and snapdragons. This species is easily recognizable because of large eyespots on wings, a protection against predators. It flies rapidly, close to the ground. Northern butterflies migrate to Florida in the fall.

Pearl Crescent (True Brushfoot)
(Phyciodes tharos)



Larva Food: Asters including frost aster and bushy aster

Habitats: Open sunny roadsides, fields, forest edges, gardens

Size: .9-1.2 inches **Flight Season:** all year

Comments: Nectar plants include asters, swamp milkweed, tall verbena and zinnias. The most common crescent, it produces multiple generations. It has a rapid, erratic flight. Males enjoy puddling together.

Phaon Crescent (True Brushfoot)
(Phyciodes phaon)



Larva Food: Matchweed (*Phyla nodiflora*), leaves of asters

Habitats: Swampy areas, pond edges and open fields

Size: .9-1.25 inches **Flight Season:** all year

Comments: Adult prefers matchweed and other composite flowers. Its low, rapid flight keeps it close to host plants. Young caterpillars live together in silken nests they construct on the underside of leaves.

Question Mark (True Brushfoot)
(Polygonia interrogationis)



Larva Food: Sugarberry, hackberry, winged elm, American elm

Habitats: Open fields, deciduous woods, forest edges

Size: 2.25-3 inches **Flight season:** all year

Comments: Adult receives its nourishment from fermenting fruit, dung, carrion and tree sap flows. It has a strong, rapid flight and often rests in trees or on leaf litter. The white spot on the underwing resembles a question mark.

Red Admiral (True Brushfoot)
(Vanessa atalanta)



Larva Food: Pellitory, false nettle, stinging nettle

Habitats: Wetlands, moist woodlands, ponds, gardens

Size

: 1.75-2.5 inches **Flight Season:** spring–fall

Comments: It is a common garden visitor, especially in the spring. The adult prefers tree sap, bird droppings and rotting fruit but will sip nectar from a variety of flowers. The larva forms an individual leaf shelter for protection. The male adult rests on low vegetation or sunny ground locations. Its flight is quick and erratic.

White Peacock (True Brushfoot)
(*Anartia jatrophae*)



Larva Food: Water hyssop or lemon bacoda and matchweed

Habitats: Streams, ponds, wet fields

Size: 2-2.5 inches **Flight Season:** all year

Comments: A locally common butterfly, it prefers wet sites. Matchweed and Spanish needles (*Bidens alba*) are favorite sources of nectar. It flies swiftly and erratically near to the ground.

Carolina Satyr
(Hermeuptychia sosybius)



Credit: North American Butterfly Assn.

Larva Food: Various grasses including St. Augustine

Habitats: Wetlands, woodlands and adjacent grassy areas, residential yards

Size: 1 to 1.5 inches **Flight Season:** Feb.-Nov.

Comments: Although the dorsal wings are drab, the ventral wings display attractive gold-ringed eyespots. Adults prefer tree sap and rotting fruit to flower nectar.

Gemmed Satyr
(*Cyllopsis gemma*)



Credit: NABA

Larva Food: Various grasses including Bermuda

Habitats: Wet woodlands and adjacent grassy areas

Size: 1.25 – 1.7 inches **Flight Season:** Mar.- Nov.

Comments: The only Florida satyr without eyespots, it has ornamental black hindwing spots trimmed in silver. It is locally common. The only reported adult food is tree sap.

American Snout
(Libytheana carinenta)



Larva Food: Sugarberry and hackberry trees

Habitats: Wetlands, deciduous woodlands, forest margins, parks

Size: 1.6-1.9 inches **Flight Season:** Feb.-Oct.

Comments: Its name refers to its long labial palpi which resemble an elongated snout. It is attracted to a variety of flowers, including dogbane, dogwood, golden rod, and favors yellow and white flowers. It flies rapidly and erratically. Males puddle for nutrients.

Butterfly Residents of Pinellas County

Family Name: Gossamer Wings/Lycaenidae

- This second largest butterfly family internationally is named for its members' often brightly colored, streaked, delicate-appearing wings.
- Although sometimes brilliantly colored, some species are often overlooked because of their smaller size.
- Both Hairstreaks and Blues, predominant in this diverse family, have conspicuous hindwings with bright eyespots, small hair-like tails resembling antennae, and converging colored hairlines to distract predators from attacking their heads.
- Both Hairstreaks and Blues hold their wings together over their backs while at rest.

Interesting Fact about Larvae: Although ants are predators of caterpillars, some ant species have developed a symbiotic relationship with several larvae species in this family. In return for a honeydew drink, secreted by the larva's dorsal nectary organ in the eighth abdominal section, ants protect both larvae and pupae from predators.



Ant Attending Ceraunus Blue Caterpillar

Gossamer Wings Residents of Pinellas County by Subfamilies

- **Blues:** Cassius, Ceraunus
- **Hairstreaks:** Banded, Gray, Great Purple, Red Banded, Southern, White M
Comment: The male has only two well developed sets of legs.
- **Metalmark:** Little Metalmark (only member of subfamily residing in Florida)

Cassius Blue
(Leptotes cassius theonus)



Larva Food: Plumbago, and vines, shrubs and trees in the Fabaceae family

Habitats: Coastal areas, tropical pinelands, hammock margins, disturbed sites, gardens

Size: .7-1 inch **Flight Season:** all year

Comments: A common garden butterfly, the male is violet blue but the female is brown with blue scaling. Favorites among many nectar sources are *Bidens alba* and matchweed or lippia.

Ceraunus Blue
(*Hemiargus ceraunus*)



Larva Food: Numerous plants in Fabaceae family, including hairy indigo, creeping indigo, partridge pea, and sensitive pea

Habitats: Coastal areas, scrubs disturbed sites, roadsides

Size: .75-1 inch **Flight Season:** all year

Comments: This common butterfly flutters close to the ground as it seeks nectar from a variety of smaller blossoms. The well-camouflaged larva is protected by ants.

**Banded Hairstreak
(*Satyrium calanus*)**



Larva Food: Oak, walnut, hickory trees, mixed hardwood forest

Habitats: Woodlands, scrubs, forest margins

Size: 1-1.25 inches **Flight Season:** Mar.-May

Comment: The adult seeks nectar from milkweed and yellow and white flowers, including dogbane and clover.

Gray Hairstreak
(*Strymon melinus*)



Larva Food: Buds and blooms from a wide variety of vines and herbs of pea family (Fabaceae), including partridge pea, bush clover, white clover, and milkpea vine, as well as plants in several other families

Habitats: Scrubs, open woodlands, disturbed areas, roadsides, gardens

Size: 1-1.5 inches **Flight Season:** Feb-Nov.

Comment: This common garden visitor is extremely fond of flowers, including herbaceous plants.

Great Purple Hairstreak
(Atlides halesus)



Larva Food: Mistletoe (found in oak trees)

Habitats: Wetlands, woodlands, adjacent areas

Size: 1-1.7 inches **Flight Season:** Feb-Nov.

Comments: A beautiful iridescent blue color, it is one of six butterflies protected by Bateson Mimicry (See Pipevine Swallowtail). The adult is fond of *Bidens alba* (Spanish needles) and Hercules club nectar. It dwells high up near its larva plant.

Red Banded Hairstreak
(*Calycopsis cecrops*)



Larva Food: Eggs are deposited in dead leaf litter below wax myrtle, winged sumac, and Brazilian pepper trees (invasive) and larvae must climb up to host plants.

Habitats: Open shrubby areas, forest margins

Size: .75-1 inch **Flight Season:** all year

Comments: It is named for its red-orange band on upper sides of the hind wings. The adult enjoys dogbane, milkweed, and wild cherry.

Southern Hairstreak
(*Fixsenia Favonius*)



Larva Food: Various oak trees

Habitats: Oak hammocks, woodland edges and adjacent areas

Size: 1-1.3 inches **Flight Season:** Feb.-Apr., but may be prolonged over many weeks

Comments: Small eggs may overwinter, providing larvae with new spring growth. The adult seeks Viburnum, and white flowers, including *Bidens alba* (Spanish needles) and clover.

White M Hairstreak
(Parrhasius m-album)



Larva Food: Oak trees, including Virginia and live oak

Habitats: Scrubs, woodlands, forest margins

Size: .9 – 1.3 inches **Flight Season:** Mar. – Nov.

Comments: This species is named for the narrow white band on the underside of the hind wing forming the letter M (or W). The pupa is hidden among dead litter at base of the host tree; it is capable of moving and of squeaking, with ants responding to the sounds to protect the pupa. Viburnum, lantana, poinsettia, pepperbush, milkweed, dogwood, and goldenrod are among the adult's nectar sources.

Little Metalmark
(*Calephelis virginensis*)



Larva Food: Herbs in the Aster family including vanilla leaf, yellow thistle, and climbing hemp vine

Habitats: Wetlands, open woodlands, roadsides, pine savannas

Size: 0.5-1 inch **Flight Season:** all year

Comments: The only Metalmark species residing in Florida, it is a member of the Riodinidae family, now merged with the Gossamer Wing family. It is named for metallic blue and gold specks on copper-colored wings. Favorite nectar sources are asters, including yarrow and coreopsis.

Butterfly Residents of Pinellas County

Family Name: Skippers/Hesperiidae

- The Skipper butterfly shares some characteristics with the other Lepidoptera insect, the moth, such as a large head, widely spaced, hooked antennae, chunky body and short wings.
- The name of this family comes from the skipping motion of the thick-bodied members of this family, which must fly close to the ground to remain airborne.
- The long, bending proboscis can reach deep into flowers for nectar, providing the skipper with wide and varied nourishment.
- Favorite nectar flowers include Mexican heather, verbenas, climbing aster, blue porterweed, beach mistflower and trailing lavender lantana.
- Identified by small to medium size, hair-like scales, and brown, orange and yellow colors, most skippers in Pinellas County are common within their habitats.
- Especially some of the brown banded skippers are difficult to identify because of similarities.

• **Interesting Fact about Larvae:** Most species in the Skipper family create individual nests of grass (banded skippers) or leaves (spreadwing skippers) tied with silk, where they protect themselves when not eating.



Silver Spotted (Spreadwing) Skipper in Leafy Nest on False Indigo

Residents of Pinellas County by Subfamilies

Banded or Grass Skippers: Clouded, Delaware, Eufala, Fiery, Ocola, Sachem, Southern Broken Dash, Southern Skipperling, Tawny-Edged Skipper, Whirlabout, and Zabulon

Comment: Feed and rest with wings folded together

Spreadwing Skippers: Common/White Checkered, Horace Duskywing, Longtailed, Northern Cloudywing, Silver-spotted, Southern, Tropical-Checkered **Comment:** Feed and rest with outspread wings

Clouded (Banded) Skipper
(Lerema accius)



Larva food: Various grasses (Poacea) Florida paspalum, Eastern gama grass and St. Augustine

Habitats: Wetlands, forest margins, moist woodlands, disturbed areas

Size: 1-1.5 inches **Flight Season:** all year

Comment: Pink, purple and white are favorite colors among nectar plants, including cornflower, mist flower, ironwood, lantana, button bush and shepherd's needle.

Delaware (Banded) Skipper
(Anatrytone logan)



Larva Food:Grasses, including bluestems and switchgrass

Habitats: Moist grassy areas, gardens

Size: 1-1.4 inches **Flight Season:** Mar.- Oct.

Comment: This lovely orange butterfly visits suburban gardens to satisfy its desire for flower nectar, being particularly fond of pink and white flowers such as corn flower, mist flower, ironwood, lantana, button bush and shepherd's needle.

Eufala (Banded) Skipper
(*Lerodea eufala*)



Larva Food: Grasses, including Bermuda, sorghum and sugarcane

Habitats: open grassy areas and gardens along the warm Gulf coast

Size: 9-1.25 **Flight Season:** all year

Comments: Although a typically quick and erratic flyer, this drab brown butterfly is easily viewed during frequent stops to sip nectar, favoring composites from a variety of flowers, including croton, alfalfa, lippia or matchweed, vetch and heliotrope.

Female (above) and Male Fiery (Banded) Skipper
(Hylephila phyleus)



Larva Food: Crabgrass and turf grasses such as Bermuda and St. Augustine (including Floratam variety)

Habitats: Roadsides, disturbed areas, pastures, old fields, lawns, gardens

Size: 1-1.25 inches **Flight Season:** all year

Comments: The adult, which sips nectar from almost any source, lays eggs in the grass located near flowers, The resulting larvae build a leaf nest lying lengthwise under grass blades. The adult flies with the Whirlabout and Sachem as companions.

Ocola(Banded) Skipper
(*Panoquina ocola*)



Larva Food: Several grasses, including Southern cutgrass

Habitats: wide range of wet areas, fields, suburban gardens

Size: 1.5-1.75 inches **Flight Season:** all year

Comments: Most abundant in late summer, this species enjoys lantana, shepherd's needle, swamp milkweed, and pickerel weed. Adults may sip nectar while hanging upside down.

Sachem(Banded) Skipper
(*Atalopedes campestris*)



Larva Food: Several grasses including Bermuda, St. Augustine and crabgrass

Size: 1.0—1.5 **Flight Season:** Mar.-Nov.

Habitats: Various open sunny areas, lawns, gardens

Comments: Found in open disturbed areas with the Whirlabout and Fiery Skipper where the three species actively seek nectar together. Favorite flowers include sunflowers, ironweed, daisy fleabane and other asters, thistles, dogbane and milkweed, mist flower and zinnias.

Southern Broken Dash (Banded) Skipper
(Wallengrenia otho)



Larva Food: Several grasses including St. Augustine and crabgrass

Habitats: Various wooded and open wet areas and gardens

Size: 1.0—1.5 inches **Flight Season:** all year but most commonly seen May through August

Comments: This nondescript brown skipper with orange spots on the forewings is similar in appearance to the Sachem. It has now been recognized as a separate species from the duller brown Northern Broken Dash. Mist flower is among chosen nectar sources.

Southern (Banded) Skipperling
(*Copaeodes minima*)



Larva Food: Grasses, including Bermuda

Habitats: Wet meadows, moist ditches, forest margins, roadsides, disturbed areas, occasionally gardens

Size: .5-.75 inch **Flight season:** all year

Comment: As the smallest skipper in North America, it is easily overlooked and similar in appearance to the Least Skipperling.

Tawny-edged (Banded) Skipper
(*Polites themistocles*)



Photo Credit: FMNH Male of the species

Larva Food: grasses, including panic grass, crabgrass and blue grass

Habitats: wetlands, gardens

Size: .8-1.2 inches **Flight Season:** April-Nov.

Comments: The female and male are similar in appearance but the male has a distinctive orange edging on the forewings. Alfalfa, dogbane, purple coneflower, thistles and chickery are among favorite nectar foods of this common garden visitor.

Whirlabout(banded) Skipper
(*Polites vibex*)



Larva Food: Bermuda, crabgrass, St. Augustine

Habitats: Various open areas, forest edges, lawns and gardens

Size: 1-1.25 **Flight Season:** Season: May –Nov.

Comments: This drab-brown female differs in appearance from the orange-yellow male. This species can be confused with the Fiery Skipper and Sachem, its frequent companion fliers. It enjoys lantana and *Bidens alba*.

Zabulon(Banded) Skipper
(*Poanes zabulon*)



Larva Food: Love grass and purple top grass among various grasses

Habitats: Shady, wet areas, open woodlands and old fields, occasionally gardens

Size: 1-1.4 inches Flight Season: Mar.-Oct.

Comments: Males are bright orange and females drab brown. Females prefer shade while males keep watch on sunlit branches. Among a wide selection of favorite blooms, are milkweed, coneflower, black-eyed Susan, button bush, and ironweed.

Common White Checkered (Spread-wing) Skipper
(Pyrgus communis/Pyrgus albescens)



Larva Food: Indian hemp and plants in the mallow family including broomweed, poppy mallow and false mallow

Habitats: Open disturbed areas, weedy fields and gardens

Size: .75-1.25 inches **Flight Season:** April- Dec.

Comments: This species has nearly displaced the almost identical Common Checkered-Skipper, becoming the predominant species of the two in Florida. It is a common garden visitor. When this skipper is at rest with open wings, its checkerboard pattern is easily observed. Among many visited flowers are white composites such as *Bidens alba*, fleabane and other asters.

Horace Duskywing (Spreadwing Skipper)
(*Erynnis horatius*)



Larva Food: Oak trees, including live oak, turkeyoak, water oak, and myrtle oak

Habitat: Woodlands, forest margins, adjacent open areas

Size: 1.25-1.75 inches **Flight Season:** Feb.-Oct.

Comment: A common garden visitor, it is attracted by dogbane, button bush, peppermint and goldenrod.

Long-tailed (Spreadwing) Skipper
(Urbanus proteus)



Larva Food: Wide variety of legumes and composites including wisteria, and various weeds including ticktrefoil (so weedy not recommended for gardens) and invasive kudzu (highly invasive)

Habitat: Open and disturbed areas, forest margins, gardens

Size: 1.5-2 inches **Flight Season:** spring-fall

Comments: This attractive species is a common garden resident during fall migration southward. Natural enemies include the Florida predatory stink bug, wasps, and fly parasitoids. The adult sips from bougainvillea, lantana and *Bidens alba*.

Northern (Spreadwing) Cloudywing
(Thorybes pylades)



Larva Food: Beggar ticks, tick trefoil (hard- to-control weed)

Habitats: Dry woodlands and edges, gardens

Size: 1.25-1.78 **Flight Season:** Mar.-Sept.

Comments: It closely resembles other dark brown skippers. Blue, purple, pink and white flowers such as dogbane, thistles and milkweed are among favorite nectar sources.

Silver-spotted (Spreadwing) Skipper
(*Epargyreus clarus*)



Larva Food: Pea family (Fabaceae), including bastard indigo, American hog peanut, ground nut, and American wisteria as well as highly invasive kudweed

Habitat: Swamps, woodlands, swamps, gardens

Size: 1.75-2.4 inches **Flight Season:** spring through fall

Comment: This occasional to common garden visitor has a long list of favorite flowers: black-eyed Susan, dogbane, lavender, garlic chives, mist flower, swamp milkweed, verbenas, coneflower, and zinnias.

Southern (Spreadwing) Cloudywing
(Thorybes bathyllus)



Larva Food: Fabacea family, including beggarweeds

Habitats: woodland edges, open fields and gardens

Size: 1.2-1.6 inches **Flight Season:** Mar.- Sept.

Comment: A common garden visitor, it is similar in appearance to the Northern Cloudywing. It favors blue, purple and white flowers, enjoying among others dogbane, thistles, and milkweed.

**Tropical Checkered (Spreadwing) Skipper
(*Pyrgus oileus*)**



Larva Food: Mallow family including Indian hemp, poppy mallow, and broomweed (*Sida acuta*)

Habitat: Disturbed sites, roadsides, fields, pastures

Size: .9-1.35 inches **Flight Season:** Feb.-Nov

Comment: **Formerly a common butterfly**, it has been replaced in Florida by its lookalike, the Common/White Checkered-Skipper.

Butterfly Residents of Pinellas County

Family Name: Sulphurs and Whites/Pieridae

- One of the most migratory families, its name refers to the butterflies' colors, typically white or yellow, although many species have dark markings.
- Some of the most common butterflies in Florida and worldwide belong in this family.
- Flight style consists of almost constant wing flapping.
- These butterflies enjoy open, weedy areas offering various host plants, especially in the Fabaceae family. Female sulphurs don't lay eggs on new growth without blossoms.
- Small to medium in size, they are sexually and seasonally variable in appearance with paler colors in the summer and darker in the winter.
- Adults are fond of many flowers and hold their wings together while sipping nectar.
- Males often puddle on damp ground to sip salts and minerals lost while mating.

Interesting Fact about Larvae: Cloudless Sulphur caterpillars that eat Senna plant leaves are green; those that eat the yellow flowers are yellow.



Cloudless Sulphur Larvae, heads to left

Residents of Pinellas County (by Subfamily)

Sulphurs: Barred Sulphur, Cloudless Sulphur, Little Sulphur, Dainty Sulphur, Orange-barred Sulphur, Sleepy Orange, Southern Dogface

Whites: Checkered White, Great Southern White

(Note: The Cabbage White, a serious threat to cabbage and broccoli crops, is omitted.)

Barred Sulphur
(Eurema दौरा)



Larva Food: Sandhill joint vetch, pencil flower, perennial peanut, Senna varieties and other members of pea and bean family (Fabaceae)

Habitats: Beaches, scrubs, open disturbed sites, fields, roadsides, fallow agricultural land

Size: 1-1.8 inches **Flight Season:** all year

Comments: Abundant during late summer and early fall, it visits many nectar plants including joint vetch and *Bidens alba*. The black bar on the male's upper forewing contains pheromones to attract the female.

Cloudless Sulphur
(*Phoebus sennae*)



Larva Food: Partridge pea, sensitive pea, various Senna species, all shared host plants with Orange-Barred Sulphur and Sleepy Orange species

Habitats: Breeds in open areas with access to host plants, also found at beaches and in parks and gardens

Size: 2.2 - 2.8 inches **Flight Season:** all year

Comments: One of most recognized butterflies, the male is pale yellow and female spotted yellow to white-green. Major migration into Florida occurs during late summer and fall. Its long proboscis ensures access to a wide variety of nectar plants, including morning glories, scarlet creeper, cypress vine and scarlet sage. Red is the preferred flower color. It flies fast and powerfully.

Dainty Sulphur
(*Nathalis iole*)



Larva Food: Beggars weed (*Bidens alba*), carpetweed (*Mullogo verticillata*), Indian chickweed

Habitats: Disturbed areas, pastures, roadsides

Size: .75-1.25 inches **Flight Season:** all year

Comments: Florida's smallest yellow butterfly is easily overlooked as it flies over low vegetation. Asters are its preferred nectar plants. The male enjoys puddling. Among its nectar plants are *Bidens alba* and marigolds.

Little Sulphur
(*Eurema lisa*)



Larva Food: Partridge pea, sensitive pea and other herbs in Fabaceae family

Habitats: Dry, open areas, scrubs, fields, sandhills, woodlands

Size: 1-1.6 inches **Flight Season:** all year

Comments: Its favorite nectar plants are from the aster family. It darts as it flies close to the ground.

Orange-Barred Sulphur

(Phoebis philea)



Larva Food: Fabaceae trees and shrubs including various Senna plants (best choices are Chapman's and privet shrubs)

Habitats: open areas, parks and gardens

Size: 2.75-3.4 inches **Flight Season:** all year

Comments: The largest Sulphur butterfly in Florida, it is named for the orange band on the male's forewing. It prefers red or yellow flowers among the many nectar plants it visits and has the same host plants as the Cloudless Sulphur and Sleepy Orange.

Sleepy Orange
(*Eurema nicippe*)



Larva Food: Sicklepod or coffee weed, toxic to livestock; Fabaceae herbs and shrubs, including Sennas

Habitats: Fields, forest margins, scrubs, sandhills, roadsides, fallow agricultural land, parks and gardens

Size: 3.5-5 inches **Flight Season:** all year

Comments: Its quick, nervous flight reflects its active behavior. It enjoys a wide range of nectar plants and requires the same host plants as the Cloudless Sulphur and the Orange Barred Sulphur.

Southern Dogface
(*Zerene cesonia*)



Larva Food: Herbs and shrubs in pea family (Fabaceae), including false or bastard indigo, summer farewell, Feay's prairie clover and exotic white clover

Habitats: Sandhills, flathills, scrubs

Size: 1.9-2.5 inches **Flight Season:** Mar.-Oct.

Comments: This is the only Sulphur butterfly in Florida with pointed forewings, which join with the round black cell spot, black basal scaling and irregular black border to form a dog's head shape. Nectar plants include coreopsis, alfalfa and verbenas.

**Checkered White Female (above) and Male
(*Pontia protodice*)**



Larva food: Mustard family plants, including Virginia pepper grass, and Caper family, including limber caper and Jamaican caper

Habitats: Dry disturbed areas, roadsides, fallow agricultural land

Size: 1:25-2 inches **Flight Season:** Feb. –Dec.

Comments: Adults are fond of mustards, composites and alfalfa. With a fast erratic flight, it is wary of people.

Great Southern White Female (above) and Male
(*Ascia monuste*)



Larva Food: Saltwort, sea rocket, nasturtiums, Mustard plant family, including Virginia pepper grass, Caper family, including limber caper and Jamaican caper

Habitats: Disturbed sites, beaches, salt marshes, fields, roadsides, fallow agricultural land, gardens

Size: 1.5-2.5 inches **Flight Season:** all year

Comments: This stray from South Florida is recognized for its blue-tipped antennae and low and casual flight. Favorites among the many nectar plants it sips from are saltwort, lantana, and verbenas.

Butterfly Residents of Pinellas County

Family Name: Swallowtails/Papilionadae

- The family name recognizes the distinctive trait of long hind tails.
- Other characteristics include darker colors, strong rapid flight, and large sizes.
- For most species, a long proboscis reaching nourishment even in long tubular blooms and the habit of fluttering weightlessly above flowers while drinking offer a wide buffet of nectar plants, including such generalist favorites as trailing lavender lantana, java glory bush, bleeding heart vine, golden dewdrop, dwarf red penta and plumbago (leadwort). Like hummingbirds, swallowtails can reach nectar from plants in hanging baskets.
- Larvae and adults of the two pipevine swallowtails are protected from predators by toxic aristolic acids in larva plants that remain concentrated in their bodies as adults.
- Note Bateson mimicry at Pipevine Swallowtail entry.

Interesting Fact about Larvae: To frighten predators, larvae flash a usually hidden, brightly- colored osmeterium, a smelly defense gland located behind the head, as illustrated by the yellow protrusions pictured in this photograph of a Zebra Swallowtail caterpillar.



Zebra Swallowtail Caterpillar Showing Yellow Osmeterium

Residents of Pinellas County: Black, Eastern Tiger, Giant, Palamedes, Pipevine, Polydamus, Spicebush, and Zebra Swallowtails.

Male (above) and Female Black Swallowtail
(*Papilio polyxenes*)



Larva Food: Many cultivated herbs of the carrot family such as fennel, dill and parsley

Habitats: Wet lands, open areas, fields, roadsides, gardens

Size: 2.5-4.2 inches **Season:** Feb-Nov.

Comments: Sometimes considered a minor pest, its resemblance to the toxic Pipevine Swallowtail may provide some protection from predators. See Batesian mimicry at the Pipevine Swallowtail entry. Nectar choices feature zinnias, milkweed, clover, and thistles.

Two forms of Eastern Tiger Swallowtail Females

(Papilio glaucus)



Larva Food: Sweet bay, wild cherry, and white ash trees

Habitats: Woodlands, forest margins, stream corridors, parks, gardens

Size: 3.5 -5.5 inches **Flight Season:** Mar. – Nov.

Comment: As pictured here, the female has two forms. An example of Bateson Mimicry (see Pipevine Swallowtail), the dark form of the female resembles the noxious-tasting Pipevine Swallowtail, a protection while this form of the Eastern Tiger is mating and laying eggs. Unlike other swallowtails, Eastern Tigers do not flutter their wings while eating, somewhat limiting available nectar, as they must place their weight on the nectar plant. Ironweed, milkweed, and wild cherry provide nutrition.

Giant Swallowtail
(Papilio cresphontes)



Larva Food: Wild lime, Hercules club, hot wafer ash, citrus species

Habitats: Open areas, forest margins, citrus groves

Size: 2.5 - 4.2 inches **Flight Season:** Feb.-Nov.

Comments: Citrus greening is killing some larva food sources of this common butterfly. Among many nectar sources it visits are lantana, azaleas, golden rod, and swamp milkweed.

Palamedes Swallowtail
(*Papilio palamedes*)



Larva Food: Sassafras, spicebush, red bay, swamp bay, and invasive camphor trees, all members of the laurel family (also the larva food of the Spicebush Swallowtail)

Habitats: Swamps, wetlands, woodlands, forest margins

Size: 3-5-5.5 **Flight Season:** Feb-Nov.

Comment: Because laurel wilt, caused by a toxic fungus deposited within tree sap by ambrosia beetles, is killing trees of the laurel family, this formerly common butterfly has an uncertain future. Males commonly puddle to sip salts and minerals. Thistles, blue flag and azalea are favorites among many nectar sources.

Pipevine Swallowtail

(Battus philenor)



Larva Food: Virginia snakeroot and wooly pipevine, but Dutchman's pipe, the larva food for the Polydamus Swallowtail, is toxic for this swallowtail's larvae.

Habitats: Wetlands, woodlands, fields, gardens

Size: 2.9--4 inches **Flight Season:** Feb. to Nov.

Comments: Protected through adulthood from some predators by toxic chemicals in the larva plants, the Pipevine Swallowtail is mimicked by six species which receive limited protection from some predators, a theory called Bateson Mimicry. Charles Darwin believed in this debatable phenomenon but considered the resemblances accidental. The five similar Florida species are Pinellas County residents: Eastern Black, Spicebush, and Eastern tiger Swallowtails, the Red Spotted Purple of the Brushfoot family and the Great Purple Hairstreak of the Gossamer Wing family. All of these species resemble the blue and black Pipevine in various ways. (The Pipevine Swallowtail is more known to reside in northern Florida, and its larva plants may be difficult to locate.)

Polydamus Swallowtail
(*Battus polydamus lucayus*)



Larva Food: Calico flower or elegant Dutchman's pipevine (*Aristolochia elegans*), an aggressive pipevine difficult to confine

Habitats: Disturbed areas, urban parks, fields, gardens

Size: 4-5 inches **Flight Season:** Feb. –Nov.

Comments: A good colonizer, this species travels long distances to locate its host plant. It lacks the characteristic family long hind tail. Lantana, plumbago, bleeding heart and Java glory bush are especially attractive nectar sources.

Spicebush Swallowtail
(Papilio troilus)



Larva Food: Spicebush, red bay, prickly ash, sassafras and other laurel trees

Habitats: Wetlands, woodlands, forest margins, fields, gardens

Size: 3-5-5 inches **Flight Season:** Feb.-Nov.

Comment: Because the larva food is subject to laurel wilt, this butterfly shares the fate of the Palamedes Swallowtail. It is one of the species resembling the toxic Pipevine Swallowtail, receiving some protection from predators. It has many nectar choices such as thistles, milkweed, azaleas, dogbane, lantana and mimosa.

Zebra Swallowtail
(*Eurytides marcellus*)



Larva Food: Pawpaws are difficult to grow because of super long tap roots. The best chance to view this beauty may be in a nature preserve such as the Florida Botanical Garden or Brooker Creek.

Habitats: Scrubs, woodlands, pinelands, forest edges, fields, pastures

Size: 2.5-4 inches **Flight Season:** Mar.- Nov.

Comments: Unlike other swallowtails, it has a short proboscis and sips from composites, favoring white flowers.

Butterfly Gardening Resources

Resources for information about butterflies and butterfly gardening are provided by the University of Florida through the Institute of Agriculture and Science (IFAS) and through the Florida Friendly Landscaping Program.

To search for resources provided by UF IFAS, enter your subject followed by IFAS for specific information.

The Florida Friendly Landscaping program can be found at: <https://ffl.ifas.ufl.edu>.

You can also go to the Butterfly Gardening App and Wildflower and Butterfly Databases under resources at the Florida Friendly Landscaping program website: <https://ffl.ifas.ufl.edu>.