

Importance of Wildflowers

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WHY ARE WILDFLOWERS SO IMPORTANT?

- They improve the Air quality around the planet
- They are beautiful, they attract butterflies, moths, bees, birds and other wildlife
- Provides food, wildflowers have helped our insects thrive for 130 million years



Leavenworth's Tickseed
Coreopsis leavenworthii

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Lance leaf Tickseed *Coreopsis lanceolata* - Gardenia.org

TOXICITY OF WILDFLOWERS

Some are eatable by humans, e.g. Beautyberry, Gallberry, Purslane, Yucca, Lemongrass, Dandelion.

Some are poisonous to us, though not to insects. Example: the Atala butterfly caterpillar eats leaves of *Zamia integrifolia* - Coontie which has Cycasin toxin, is poisonous, and everything the plant produces is poisonous

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SCIENTIFIC CATEGORIES OF WILDFLOWERS

- Once, every single flower in the world was a wildflower
- We have 2,500 native species in Florida
- How are they classified? By family, **genus & species**. Genus is the **first part of a plant's botanical name** used to properly describe it and is the classification for living organisms or binomial nomenclature in biology. **Genus comes above species and below family** eg:
<https://plants.usda.gov/home/classification/81275>
- Species is the second name, by definition is a group of living organisms consisting of similar individuals capable of exchanging genes or interbreeding
- EG: *Mimosa strigillosa*, genus specie. Family Fabaceae, legume or pea family

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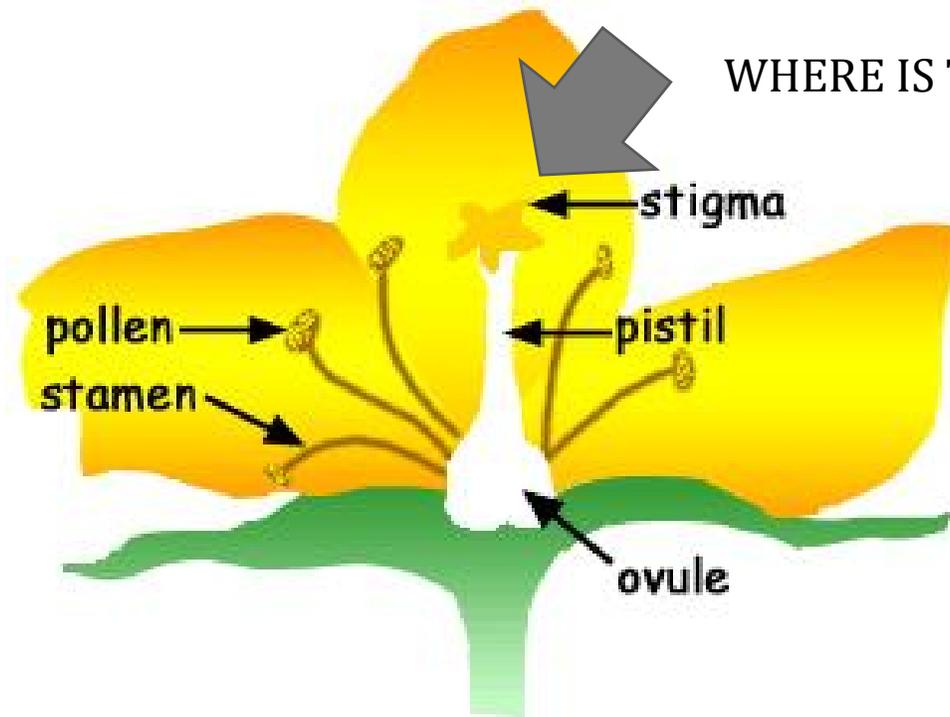
Florida tickseed *Coreopsis floridana*, Florida State wildflower

FLORIDA'S WILDFLOWERS

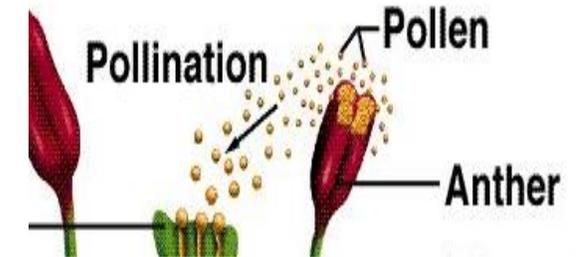
- Florida's state wildflower is the genus *Coreopsis*-tickseed, found in many colors, there are 15 drought tolerant species. Only the *floridana* (species) is native to Florida. Others are E.G. *Lancelota*, *Leavenworthii*, *Grandifolia*
- How do we benefit from wildflowers? Plants take in carbon dioxide and produce oxygen by a process called photosynthesis. Having plenty of vegetation around ensures that **we** have enough air to breathe and that it will be fairly filtered and clean. The same is true with our water

What is Pollination?

IT IS THE TRANSFER OF POLLEN GRAIN FROM THE FEMALE PART OF FLOWER CALLED PISTIL TO THE MALE PART CALLED STAMEN



WHERE IS THE POLLEN? IN THE POLLEN TUBE



Reproduction of wildflowers occurs with insects helping pollinating. Also with dispense of seeds, or with wind

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Where are wildflowers found throughout Florida?

- Some wildflowers will only occur in a particular area of Florida, e.g. the colder areas 8B, 9A, B; or the warmer areas 10A, B, Ft. Lauderdale; zone 11 are the Keys
- Wildflowers are on roadsides, in the wild section of a garden. Some are annuals only occurring once, some are perennials, living a few years
- These are wildflowers worth noting, most are cultivated by nurseries. My favorites, Some examples are:

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Milkweeds: There is Scarlet Milkweed *Asclepias curassavica*, Monarchs, Queens use. *Use Swamp Milkweed *A. incarnata*, lower L instead of Scarlet Milkweed, *A. curassavica* L as it carries OE parasites

White Twinevine: *Sarcostemma clausum* slide 14 for Soldier, Monarch, Queen butterflies

Butterfly weed: *A. tuberosa* far R maybe used by the Monarch and Soldier(found in specific areas e.g. Fahahachee swamp)

Giant Milkweed: *Calotropis gigantea*, R used by Monarch, Queen & Soldier butterflies(<https://www.regionalconservation.org/>). See also Monarch_milkweed.pdf (Florida Wildflower Foundation)

*FL has 21 species. Northern states are home to common milkweed *A. Syriaca*, fwildflowers.org



A.incarnata



A.curassavica



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A.gigantea



A. tuberosa

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THE BUTTERFLY CONNECTION

Monarch migration. There are the non-migrating monarchs in all of Florida. Though the migrating monarchs start in fall from Canada and U.S. on the east coast, by Feb they are in Mexico's oyamel fir forests by the thousands. In the 1990s nearly 700 million monarchs made the epic flight. Experts say only a fraction of the population remains, monarchs have declined by more than 80% since the 90s from central Mexico, and by more than 99% since the 1980s in coastal California.

As US Midwest Monarchs migrate to the CA coast have also decreased.
xerces.org/monarch/conservation-efforts

It is hoped that efforts to increase access to host milkweed plants and nectar sources will slow the decline

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THE BUTTERFLY CONNECTION CONT'D

A quick story, the migrating East Coast Monarchs stop in St. Marks National Wildlife Refuge, near Tallahassee religiously the last weekend in Oct. In 2015, we witnessed them swarming Saltbush or Sea Myrtle *Baccharis halimifolia* for nectar, they were caught overnight, about 500, we were allowed to tag them then released. Info was given to Monarch Watch. By the next morning they were gone



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These are wildflowers worth noting, most are cultivated by nurseries. My favorites, Example:

- **Blue Butterfly Pea Vine**, *Clitoria ternatea*, Host for: Long-tailed Skipper
- **Blue Porterweed**, *Stachytarpheta jamaicensis*, Host for: Tropical Buckeye
- **Turtle Tangle Fogfruit, Frogfruit**, *Phyla nodiflora*, Host for: Common Buckeye, Phaon Crescent, White Peacock butterflies.

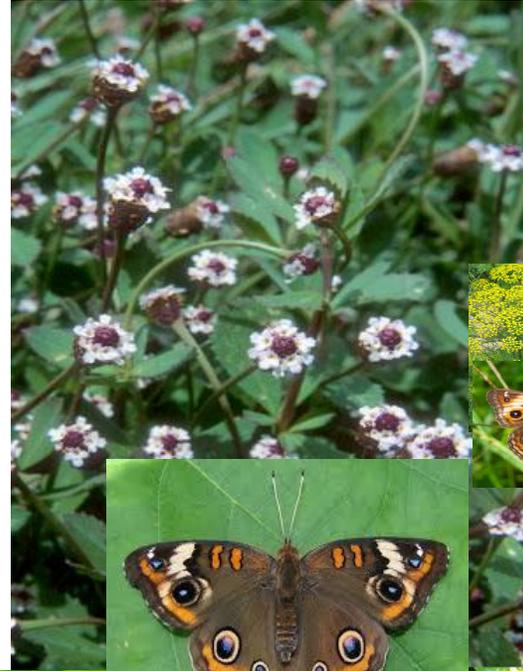
Host plant Queen's Anne lace a wildflower and not usually available, looks like the deadly Mock Bishop's weed & Water Hemlock used by Black Swallowtail butterflies and is poisonous - substitute Dill, Fennel, Rue or Parsley

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Here they are :



Blue Butterfly Pea vine & Long-tailed skipper L Blue Porterweed & Tropical Buckeye-inaturalist



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Turtle Tangle Fogfruit & Phaon Crescent, White Peacock & Common Buckeye. Note the whiter band a difference on the forewing of Common than Tropical Buckeye



Queen Anne's Lace & Dill & Black Swallowtail

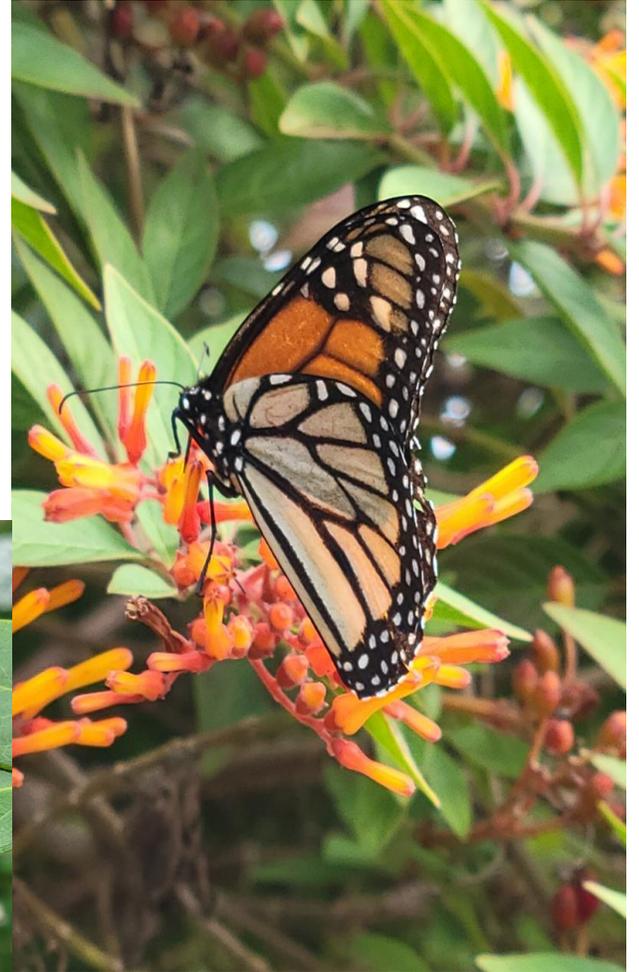
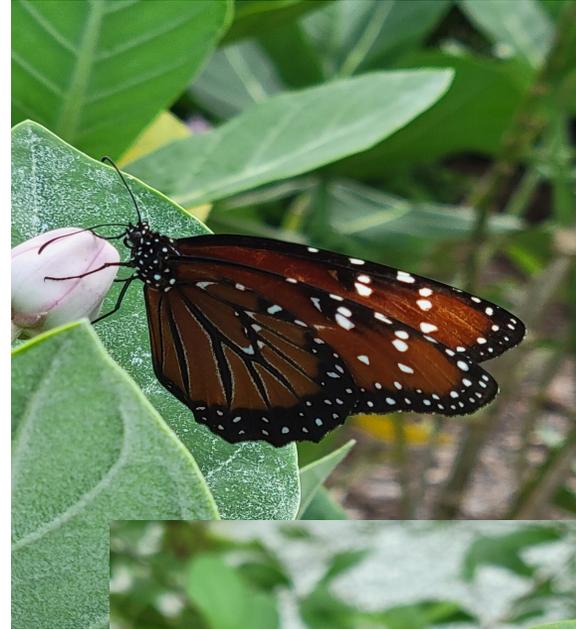
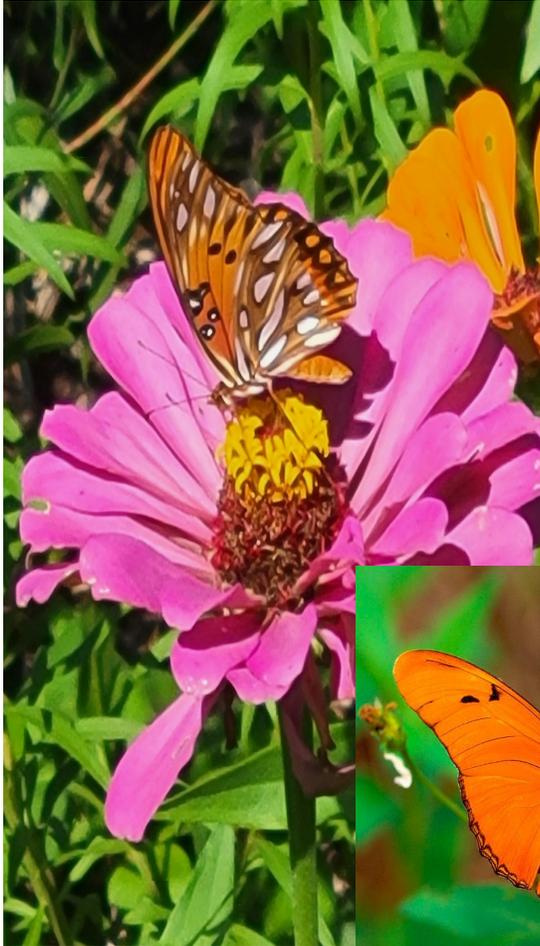
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Corkystem Passion flower, Credit Butterfly World. White Twinevine,
Credit USDA Forest Service

Passionvine, Maypop, *Passiflora incarnata*,
Coontie, *Zamia integrifolia*

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Gulf Fritillary, Zebra-rossi, p. Julia

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Queen, Atala, Monarch-rossi, p

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Garden visitor Coffee-loving Pyrusta moth, tickseed flowers, rossi, p

Others of less importance for nectar for small butterflies, flies, bees: I like pictured above found everywhere are **Tassel Flower**, *Emilia fosbergii*, non-native, **Spanish Needle**, *Bidens alba* wildflower host to the Dainty Sulphur butterfly top R

There is **Pink Powderpuff**, *Mimosa Strigillosa*, host for Little Yellow Sulphur butterfly L. Powderpuff is like a groundcover, will spread delightfully. From Fl Wildflower Foundation, http://20Easy_Dyschoriste.pdf: Oblongleaf Twinflower, *Dyschoriste oblongifolia* host to Common Buckeye butterfly-pictured slide 12 also host to White Peacock and Malachite butterflies. Dies back in winter. returns spring These butterflies will visit wildflower plants in your garden

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Ceranus Blue BF, IRC* Gray Hairstreak BF, Green Nature



Gardenia.net



Partridge Pea, Cloudless Sulphur rossi p

Swamp / String Lily fragrant flower far L, *Crinum americanum*-Larval host for the Spanish moth above. All parts of plant toxic to humans, pets yet is eaten by the eastern lubber grasshopper. Partridge Pea R, host to Ceranus Blue butterfly. Cloudless and Little Yellow Sulphurs, also Gray Hairstreak butterflies. They will visit wildflowers and other plants in your garden. And some of these plants are easy to propagate. *Butterfly pic-IRC/Institute of Regional Conservation

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It's about the role our small insects play in South Florida to preserve our flora and the importance of wildflowers that attract insects:

<https://www.monarchwatch.org/migration/>

https://cms2.revize.com/revize/highlandscountyfl/departments/parks_and_recreation/docs/wildflowers2.pdf

http://www.hcbcc.net/departments/parks_and_recreation/docs/wildflowers.pdf

https://monarchwatch.org/waystations/waystation_application.pdf

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Attracts butterflies bees moths

