SCAVENGER HUNT:
Moths, Butterflies, and Host Plants

Can you find these common moths, butterflies, and larval host plants of the Tampa Bay area?

Use the checklist to check off all of the species you find in this guide.

- **Corky-stem passionflower** (Passiflora suberosa)
- **Gulf fritillary** (Agraulis vanillae)

Many species in the order **Lepidoptera** (moths, butterflies, and skippers) are **specialists**, meaning their larval caterpillars rely on only one type of host plant or larval food plant to survive. One example is the **gulf fritillary** and **passionflower**.
The Hercules club, a favorite of giant swallowtail caterpillars, is known for its spiny branches and the warts on its bark. It is also called the toothache tree because people used to chew on the leaves or stems to treat a toothache!

Gulf fritillaries aren’t the only caterpillars that eat passionflower vines, it’s also a favorite of Florida’s state butterfly, the zebra longwing.

- Zebra longwing (Heliconius charithonia)
- Giant swallowtail (Papilio cresphontes)
- Hercules club (Zanthoxylum clava-herculis)
You may have heard about how **monarch butterflies** acquire toxins from their host plant, milkweed, which makes the adult monarch toxic to predators.

Did you know many other Lepidoptera species have evolved this defense mechanism? Like **oleander moths** and **polka-dot wasp moths** that ingest and store toxins from oleander plants, making them a not-so-appetizing meal!

- **Spotted oleander moth** *(Empyreuma pugione)*
- **Oleander** *(Nerium oleander)*

- **Polka-dot wasp moth** *(Syntomeida epilais)*

Note* Oleander is not a native Florida plant but is a common addition to landscaping and considered to be one of the most toxic plants in the world!
The giant swallowtail caterpillar is a talented bird-poop mimic, which deters hungry predators from eating him!

Fir tussock moth caterpillars are easy to find in early spring. That's when the larvae emerge, munch on oak and cypress trees, and construct cocoons on trees, boardwalks, picnic benches, and any other safe place they can find.

- Fir tussock moth caterpillar
  (Orgyia detrita)
Some moths and butterflies, like the captivating Polyphemus moth, are generalists, meaning the caterpillars are able to feed on the leaves of many different types of plants.

- **Polyphemus moth** *(Antheraea polyphemus)*

Sometimes you don’t see the caterpillar on a plant but you will see signs of them, like chewed leaves, or no leaves at all. You may even find what looks like mini ears of corn under a plant, this is the poop or frass of a large caterpillar.

- **Frass** *(insect poop)*
White peacock
(Anartia jatrophae)

Water hyssop
(Bacopa monnieri)

Bagworm moth case
(Family: Psychidae)

Bagworm moths (Psychidae) are the great architects of the moth world. The caterpillars weave a silk cocoon around themselves and cover it with pieces of twigs, leaves, and other organic material. As the caterpillars grow, they continue to add more plant matter to their case!