## **GIANT SWALLOWTAIL**

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This large distinctive yellow and black butterfly is a common sight flitting between trees and in backyard gardens throughout much of the desert southwest and eastern United States. Start looking for them in the warming months of spring and continue to enjoy them through the rest of the warm months, before the cool of fall creeps in. Here in Arizona that means we can usually see them from early March to late September. They are most often seen around citrus trees.

Most swallowtail butterflies (Family: Papilionidae) have the distinctive "tail" at the end of their hind wings which are thought to help protect the butterfly from would be predators. These tails look just enough like a false head to dupe attackers into biting a non-vital area- providing an opportunity for the butterfly to escape. Swallowtails also prefer mates with nice long as a signal of vitality.

The caterpillars of the Giant Swallowtail feed on various citrus plants and their relatives (family: Rutaceae). Females prefer to lay single yellow eggs on the underside of young, tender citrus leaves often out of sight of you and other potential predators. Tiny caterpillars emerge in about two weeks depending on temperature: the cooler the temperature, the longer it takes the caterpillar to develop. If there are too many larvae on a small plant, they can overrun and damage it, but a large plant is not harmed. If you see what looks like bird droppings on the leaves of your citrus, there is a chance you have found swallowtail larvae. Mimicking bird droppings is a special form of camouflage to fool potential predators. If this unpleasant appearance isn't enough, swallowtail caterpillars also have a smelly fork shaped defense organ, called an osmeterium, which is everted from just behind their head like a balloon when the caterpillar is threatened. The osmeterium is thought to ward off predators by its foul smell and bright orange color.

Pupae of Giant Swallowtails can match the background; sometimes they are green and sometimes they are brown. This variation allows them to hide more effectively from predators while they are transitioning from caterpillar to butterfly. This species overwinters as a pupa protected from the elements within its cocoon. In Arizona, this is a short period of time, while in cooler locales, this period of quiescence can last months.

Giant Swallowtail adults are black with a bit of yellow streaks on the wings. To complement their colors, they have a characteristic loping powerful flight especially when searching for food or mates. Watch for butterflies feeding on nectar from plants such as lantana, bougainvillea, goldenrod and citrus blossoms in addition to looking for good citrus trees to lay their eggs on. Giant swallowtails are common garden visitors, unperturbed by human activity.

Whether you are on your favorite hiking trail, on your way to work, or in the comfort of your own yard, swallowtail butterflies are an easy and rewarding insect to spot and observe.

