

# INSIGHT

The tiger swallowtail is one of the most common and biggest butterflies found in the area.



**STATE INSECT OF VIRGINIA**

# TIGER SWALLOWTAIL

Black tiger swallowtails, which are all female, are less appealing to predators.

**Scientific name:**  
Papilio glaucus  
**Wingspan:** 3 to 5.5 inches  
**Male coloring:** yellow with dark stripes  
**Female coloring:**  
1. Yellow with dark stripes and blue over the interior hind wing or  
2. Black with blue hind wings

In 1976, a bill was introduced to adopt a Chinese mantid as Virginia's official state insect. Entomologist Michael Kosztarab, founding director of the Virginia Museum of Natural History at Virginia Tech, countered by proposing a native species, the tiger swallowtail butterfly. The Senate chose the butterfly, but the House sided with the praying mantis, so the bill was deadlocked.

Fifteen years later, Kosztarab allied with the Virginia Federation of Garden Clubs Inc. and submitted a new swallowtail bill. It passed in 1991, and the eastern tiger swallowtail became Virginia's official state insect.

The tiger swallowtail was chosen over other native species for several reasons, including that it is widespread and active in Virginia from April to late October; the adults pollinate flowers; and it is harmless, colorful and graceful. The tiger swallowtail was also the first North American insect to be described scientifically.

## STATE INSECTS

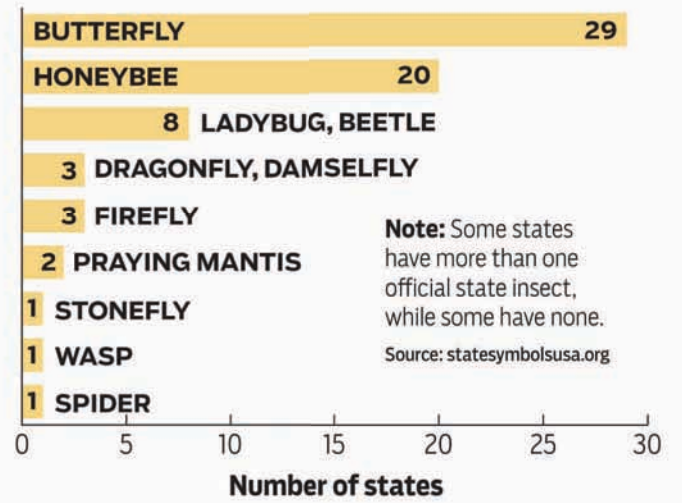
The majority of U.S. states recognize official symbols that represent the cultural heritage and natural treasures of each area.

California was the first state to select a state insect. The Dogface butterfly was officially adopted as the state insect of California in 1929. This was the result of a statewide poll of all the active entomologists in the state.

Virginia, which adopted the tiger swallowtail as its state insect in 1991, was not the only state that chose this butterfly. Alabama, Delaware, Georgia and South Carolina also designated the tiger swallowtail as their state insect.

Some states recognize multiple insects, while Iowa and Michigan do not recognize any state insects.

## TYPES OF STATE INSECTS



## DISTRIBUTION

The tiger swallowtail is widely distributed throughout the eastern half of the United States. It is common along the East Coast from New England to Florida and west through the Midwest states and most of the Great Plains states, reaching as far as Colorado.

Tiger swallowtails are commonly found in deciduous woodlands and along their borders, including parks and neighborhoods.

## LIFE CYCLE

Female eastern tiger swallowtail butterflies lay single green eggs on the leaves of plants. Common host plants include the tulip tree, wild black cherry and sweet bay magnolia. The egg stage is generally 4 to 10 days, depending on the temperature and host plant.

The caterpillar (larval) stage is next and lasts three to four weeks. Full-grown larvae can measure up to 2.5 inches in length. Young caterpillars are brown and white, but they change as they grow older. As they mature, they turn bright green.

The next stage is the chrysalis stage, the pupal stage of butterflies. It lasts for 10 to 20 days. This stage is when the tiger swallowtail undergoes a complete metamorphosis.

The animal then turns into an adult butterfly. Tiger swallowtail butterflies are solitary creatures. The males fly at treetop level and descend to mate with lower-flying females. However, sometimes a group of male swallowtails come together at damp places in the soil and drink water. This is called "puddling." The tiger swallowtail's lifespan as an adult butterfly is 6 to 14 days.



GETTY IMAGES

## DIET

Eastern tiger swallowtail larvae eat the leaves of a variety of woody plants, including wild cherry, tulip, birch, ash, cottonwood and willow. Adult butterflies eat the nectar of flowers from a variety of plants, including milkweed, Japanese honeysuckle, lilac and wild cherry. They also sip water and minerals from mud.

## DEFENSES

### Caterpillar

Eastern tiger swallowtail caterpillars have two false eyespots that resemble the eyes of much larger animals. The eyespots are yellow ringed with black and contain a smaller blue spot lined with black. This deceptive coloration helps protect the caterpillars from predators. The true head of the caterpillar is small, inconspicuous and tucked under the body.

If threatened, the caterpillars can extend two orange horn-like structures. These glands produce a foul-smelling blend of defensive acid secretions that are wiped onto the attacking animal.

### Butterfly

While the male tiger swallowtails are always yellow, the females can be yellow or black. Males prefer yellow females, but the black females are less attractive to predators.

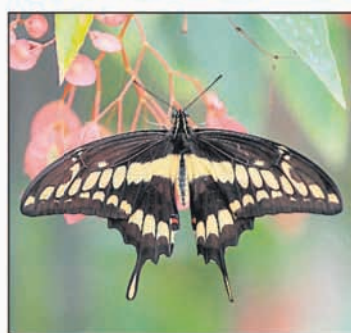
The black form of the tiger swallowtail butterfly is called dimorphic coloration. Their coloring adds a level of protection because it mimics the distasteful pipevine swallowtail.

## OTHER TYPES OF SWALLOWTAILS FOUND IN VIRGINIA



### Black swallowtail

These swallowtails are found in much of the U.S. with the exception of the northwest. Females have a band of blue on their hind wings, while males have a band of yellow.



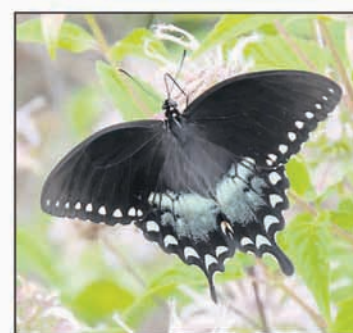
### Giant swallowtail

This is the largest swallowtail butterfly in the U.S., with a wingspan of up to 6 inches. Their countershading gives them better camouflage against predators.



### Pipevine swallowtail

These swallowtails host on pipevines, as their name indicates. Males are an iridescent blue, while females are a duller black color. Their caterpillars are extremely fast-moving.



### Spicebush swallowtail

As the name suggests, this swallowtail butterfly hosts on spicebush, as well as red bay, camphor, sweet bay and tulip tree. Their caterpillars have large eyespots to scare off predators.



### Zebra swallowtail

This is one of the rarest swallowtail butterflies. It is usually only found where its host plant, pawpaw, also thrives. These butterflies have long tails and distinctive zebra striping.