Swallowtail Butterflies

Swallowtails are part of the brush-footed family of butterflies (*Nymphalidae*), large and brightly colored. Their first set of legs are reduced in size and not used for walking. Brush footed butterflies can be attracted to flower nectar, rotting fruit, plant sap or animal dung. Swallowtails can be further categorized as having two projections off their hind wings.

Butterfly Terminology

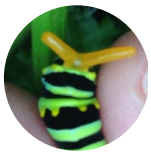
Batesian mimicry: Harmless or palatable species mimics a colorful and usually toxic species.

Mullerian Mimicry: Mimicry in which several species share a common model. Swallowtails (spicebush, black swallowtail, and black phase of eastern tiger swallowtail) and Red spotted purple mimic the model pipevine swallowtail.

Sexually Dimorphic: Substantial difference in appearance between adult males and adult females. For example, adult Black swallowtail females have fewer yellow dots and more blue scaling than the male adult.

Proboscis: Long, tube-like appendage through which butterflies sip nectar, water, fruit, and tree sap.

Osmeterium: Y-shaped scent gland that extends from the head of a swallowtail caterpillar when disturbed, releasing a noxious odor.



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MORE INFORMATION / REFERENCES

WHAT'S THAT BUTTERFLY?
go.illinois.edu/WhatButterfly

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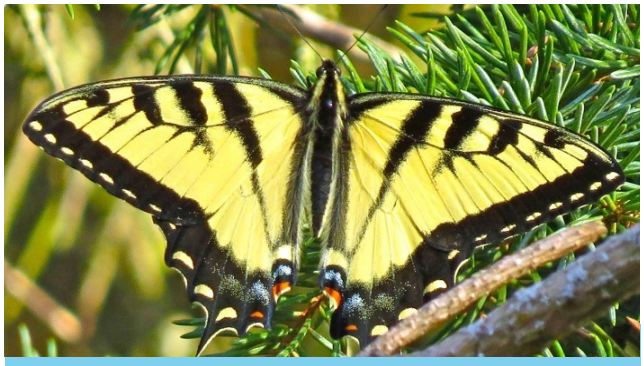
- Photos: Deanna Frautschi



Tiger Swallowtail showing black tiger stripes, black edging, plus yellow dots on wing edges. Small amount of blue scaling indicates a likely male.

Tiger Swallowtail
Papilio glaucus

Characteristics: 5"; sexually dimorphic; bright yellow adults have black tiger marks with black bars and edging; a row of yellow dots follow the wing's edge; females can change to all black to mimic pipevine swallowtails, but retain 'tiger marks' and blue scaling; underside tiger stripes shadowed with orange, blue and white markings present on the wings' edge

Habitat: Woodlands and gardens

Larvae: Starts off looking like a small gray slug; forms green, black, white, and yellow banding

Larvae Food: Cherry, tulip tree, cottonwood, sweet bay magnolia, and wafer ash

Adult Food: Flowers and mud

Overwinters: Pupae

Affect: Adults obtain essential salts and amino acids from puddles.

Black Swallowtail
Papilio polyxenes asterius

Characteristics: 2.75”-4” shiny black sometimes iridescent blue wings; female has fewer and smaller yellow dots and more blue scaling; characteristic orange eyespot surrounded by blue, orange replaces yellow on the underside along with iridescent blue scaling; abdomen has row of yellow spots

Habitat: Roadways, fields, and gardens

Larvae Dark, with tiny spikes, and white patch; forms green, white, and black bands; yellow osterium

Larvae Food: Carrot family (parsley, dill, and fennel)

Adult Food: Flowers

Overwinters: Pupae

Affect: Lazy back and forth flight movement. Males perch on high points to find females.

Pipevine Swallowtail
Battus philenor

Characteristics: 3.5”-4.5” black wings; blue-green iridescence; row of white dashes on wing edge; males have more blue iridescent hind wings; underside of wings with seven orange dots that follow the curve of the wing on a blue background.

Habitat: Woodlands

Larvae: Brown to black caterpillars with orange spikes; feed in groups

Larvae Food: Aristilochia family

Adult Food: Flowers or mud

Overwinters: Pupae

Affect: Wings flash in the sun; flight is rapid, low fluttering wing beats

Pipevine Swallowtail: Wing with 7 orange dots on of blue.

Black Swallowtail with orange chevrons, iridescent blue crescents and rows of yellow spots on the abdomen.

Spicebush Swalllowtail
Papilio trolius

Characteristics: 3”-5”wings, overall greenish appearance; sexually dimorphic; upper wing is black with yellow spots in both sexes; male hindwing is mostly green and the female is iridescent blue, both have pale green chevrons and an orange spot on the upper side; the underside of the wings of both sexes is two rows of orange spots with iridescence between; iridescence interrupts after fourth orange spot

Habitat: Woodlands, fields, and flower gardens; more common in the southern two-thirds of the state

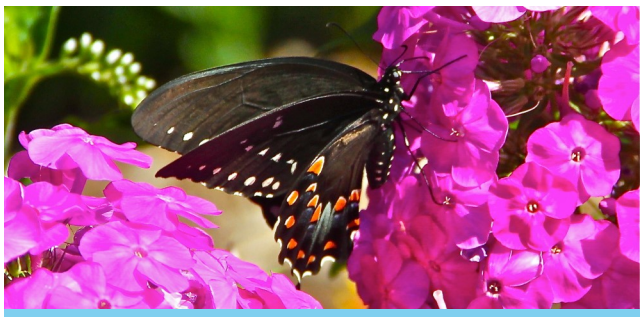
Larvae: Starts off as white and brown resembling bird droppings, turning to a large green caterpillar with two eyespots to intimidate predators

Larvae Food: Spicebush and sassafras

Adult Food: Flowers

Overwinters: Pupae

Affect: Adult flies slow and close to the ground, bounding from flower to flower



Spicebush swallowtail illustrating the two rows of orange spots. The iridescence interrupts after fourth orange spot.