Swallowtail Butterflies

Swallowtails are part of the *Papilionidae* family of butterflies. Swallowtail adults are medium to large and some have tail like projections off their hind wings. Many of these either are distasteful or mimic a bad tasting butterfly.

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



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- Photos: Deanna Frautschi

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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.

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