

**WANTED**  
**ALIVE IN YOUR GARDEN**  
 Spicebush Swallowtail Caterpillar

**Text and Photos by Jan Dixon**



**Known Food Preferences:**

Northern Spicebush (*Lindera benzoin*) and Sassafras (*Sassafras albidum*) are two of the preferred caterpillar food plants. The caterpillars fare better on Northern Spicebush than on Sassafras, which has extensive fine hairs on the leaves that slow their growth.

**Known disguises:** The first three instars of the Spicebush Swallowtail caterpillar resemble bird droppings—they sport a shiny green to chocolate-brown color with black eyespots on the thorax and a white spiracular stripe that may

be absent but, more commonly, is enlarged to form a saddle. Early instars rest hidden in a folded-over leaf shelter. Later instars mimic snakes, with large eyespots prominently displayed on the upper thorax. The caterpillars eat only at night, remaining concealed their leaf shelters during the day. The snake-mimic instars rest with the head up in the shelter so that any predator searching for a meal will see the only anterior “snake head,” and maybe think twice about reaching in there. Just before this caterpillar pupates, it turns yellow/orange and appears to shrink in size.



**Special weaponry:** As if its bird-dropping and snake mimicry were not enough, the Spicebush Swallowtail caterpillar is also equipped with an osmeterium. This fleshy, forked organ can be everted like a tongue from the joint between the head and the prothoracic segment to further enhance the snake-mimicry effect. In addition, the mixture of volatile organic acids that is projected from the osmeterium when the caterpillar is startled has a foul odor that may deter mammalian predators, and chemical components that have been demonstrated to repel spiders, ants, and small mantids.



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**If capture is avoided:**

Spicebush Swallowtail adults will emerge in the area extending from central New England south to Florida and west to eastern Nebraska and central Texas. Two overlapping broods occur in the north, from May through September; three in much of the south, from April through October; and three in Florida and the far south from March thru December.

**Winter hide-out:** The caterpillar will form a chrysalis, usually on the host plant. The short photoperiod results in a brown winter chrysalis.



**Jan Dixon enjoys observing caterpillars, almost as much as adult butterflies, and has raised ten species from her gardens. She volunteers as a butterfly monitor at the Nature Conservancy's Kitty Todd Preserve in Northwest Ohio and is on the board of the Oak Openings Region Wild Ones chapter. She also enjoys teaching about butterfly gardening.**