

Do Venomous Caterpillars Live in Your Yard?

Compiled by Wendi Hartup
Area Natural Resources Extension Agent
Forsyth County Cooperative Extension

If you are walking in the forest be wary of a small caterpillar that can be found on foliage of forest, shade and ornamental trees. A small handful of caterpillars have stinging hairs, spines and barbed hooks and are the worms or larvae of butterflies, skippers and moths (Order Lepidoptera). Reactions can range from mild itching or swelling to burning pain and/or intestinal disturbances. In some cases, local lesions may persist for several days. The type of reaction depends on the species of caterpillar, degree of contact, and susceptibility of the individual.

Stinging caterpillars do not sting like bees, yellow jackets, hornets and wasps. Stinging caterpillars possess hollow quill-like hairs, called setae, connected to poison sacs. These structures are primarily used for protection from predators. The sting inflicted on humans is not from a deliberate attack by the caterpillar, but usually the result of inadvertent contact. When brushed against, these structures break away, releasing toxins. In some cases, broken setae may penetrate the skin; in others, toxins spill out to spread on the surface of the skin.

Not all caterpillars with spines or barbs are venomous. Many species are armed with setae and spines but distinguishing harmless from stinger species based on appearance is difficult. The most common stinging species in the Southeast are caterpillars in the family of Slug Caterpillars, Flannel Moths, Giant Silkworms, Dagger Moths, Smoky Moths, and Nymphalid Butterflies.



Saddleback Caterpillar

Photo: <http://edis.ifas.ufl.edu/>

The Saddleback Caterpillar is the most common Slug Caterpillar and is quite striking. It grows to about one-inch long and is dark brown with prominent brown "horns" that bear numerous spines. The middle of the body is green. The green area has a white or cream margin and a large oval to oblong dark brown spot in the center, also with white margin. The Saddleback occurs on a wide variety of trees, shrubs, and other plants, including corn. Common tree hosts are apple, basswood, cherry, dogwood, elm, maple, oak, and plum. It is most often encountered in late summer and fall.

The Puss Caterpillar (the adult is called Southern Flannel Moth) is our most "dangerous" stinging caterpillar. Contact may produce severe reactions including: intense burning and nettling of the skin; severe pain; reddening and inflammation; development of pustules and other lesions; numbness; swelling; and nausea. Pain may persist from one to twelve or more hours. In some instances, victims have required medical attention. The severity of the reaction is generally proportional to size. Also, newly molted skins retain stinging capabilities.

The Puss Caterpillar grows to about one inch long and looks like a mini-version of the furry tribbles from Star Trek. They are thickly



Puss Caterpillar

Photo: <http://edis.ifas.ufl.edu/>

covered with fine, long, tan, grayish to brown hairs, among which are hidden venomous setae. Hairs peak roof-like over the back and taper rearward to form a "tail." Puss Caterpillars feed on foliage of a variety of broadleaf trees and shrubs such as apple, elm, hackberry, maple, oak, pecan, and sycamore.



Io Moth Caterpillar

Photo: <http://www.ag.auburn.edu/>

The Io Moth caterpillar grows to two-and-half inches long and is pea-green with greenish spines tipped with black. A reddish stripe edged with white extends down the entire length of the larva's abdomen. Food plants range from grasses and herbs to foliage of some hardwood trees. Some trees reported as hosts include apple, black locust, cherry, dogwood, elm, hackberry, hickory, maple, oak, sycamore, and willow.

The Dagger Moth family contains some of the most common and destructive plant-feeding caterpillars. Many species are major pests of field crops, gardens, and pastures (e.g., armyworms and cutworms), but some species commonly feed on foliage of trees. The Smeared Dagger Moth eats plants including smartweed (the larva is sometimes called the smartweed caterpillar), strawberry, corn, cotton, grasses, clover, and occasionally apple, boxelder, cottonwood, elm, oak, and willow. The body is basically black with a broad, bright yellow, broken line along each side, and a double row of yellow spots down the back. There are rows of black tubercles (some may be red) from which arise numerous yellowish to brown bristly spines.



Smeared Dagger Moth

Photo: <http://www.ag.auburn.edu/>



Laurel Cherry Smoky Moth

Photo: <http://www.ag.auburn.edu/>

Smoky moths, by classification, are closely related to the flannel moths. Three species are reported to occur in the southeastern United States. One species the Laurel Cherry Smoky Moth possesses stinging capabilities. Laurel cherry is the caterpillar's primary, perhaps only, host. The full-grown larva is about one-half inch long. The back is black with a row of small elongate white spots along the midline, bordered by a double row of larger white segmental bars that form broken lines. The sides are pale yellow, and bear small tufts of short setae. The caterpillar is most common in late summer and fall. Nettling produced is mild and short-lived; however, small reddish welts may develop at points of contact and remain visible for a few hours.

Reference to butterflies generally brings to mind the large and colorful adults seen active during the day. However, larvae of Nymphalid butterflies are plant feeders and several species bear conspicuous bristled or multi-branched spines similar to those found on some stinging caterpillars. One species, the spiny elm caterpillar (larva of the mourning cloak butterfly), is reported to possess venomous spines.

The full-grown Spiny Elm Caterpillar is about two inches long. Its body is black with numerous white flecks and a row of red spots down the back. Larvae feed on foliage of elm, cottonwood, hackberry, and willow.



Spiny Elm Caterpillar
Photo: <http://www.ag.auburn.edu/>

The chances of running into these insects are relatively low, but occasionally one species may be very abundant. Also the more time spent in wooded areas, the greater the opportunity for contact. Most of these caterpillars are distinctly marked or brightly colored. This can allow you to see and avoid them. If you find one on yourself, don't brush it off or slap it with a bare hand. Use a stick or other object to remove it carefully. Hollow spines may break off in clothing or gloves.

Adhesive tape or transparent tape may be used to pull out some of the broken spines in the sting area. Washing the area thoroughly with soap and water can help remove some of the irritating venom. Prompt application of an ice pack or baking soda may also help to reduce pain and prevent swelling. Antihistaminic drugs, often administered for bee and wasp stings, are reportedly ineffective. See a physician if severe reactions occur. Very young, aged or persons in poor health are more likely to suffer severe reaction symptoms.

These insects are typically uncommon and no control procedures are warranted. However, if particularly large populations develop such as around residences, recreation areas or schools, infested shrubs and trees, they can be treated with insecticides containing *Bacillus thuringiensis* or carbaryl. Always read and follow label instructions.

Sources for information in this article:

http://ipm.ncsu.edu/AG369/notes/stinging_caterpillars.html

<http://www.uky.edu/Ag/Entomology/entfacts/misc/ef003.htm>

<http://edis.ifas.ufl.edu/IN014>

<http://www.ag.auburn.edu/enpl/bulletins/caterpillar/caterpillar.htm>

