

Gardening Basics

Twig Girdlers

While mowing the yard, you might see twigs under trees that look like they have been chewed off. The answer to what might be the culprit will rely on your close observational skills of the severed branch.

Possible Culprits



Twig girdler (*Oncideres cingulata*) Image credit:
Clemson University - USDA Cooperative
Extension Slide Series, Bugwood.org

A **Twig Girdler** (*Oncideres sp.*) is a longhorned beetle that attacks pecan, mimosa, chinaberry, red oak, hackberry, dogwood, and some fruit trees, etc. The female chews a V-shaped groove entirely around pencil-sized twigs, thus severing the vascular system, resulting in the death of the twig. She then deposits her egg into the bark on the part away from the tree. The eggs hatch in about one week, and the larvae feed under the bark as they go through several stages (instars) inside the twigs. During this time, the girdled limbs break in windy weather at the weakened part or swing in the tree (called flagging) but eventually detach and fall to the ground. The insects complete their lifecycle the following summer and emerge from fallen twigs as grayish-brown beetles that quickly find a host tree to start the cycle over.

Twig Pruners (*Elaphidionoides villosus* or *Anelaphus villosus*) are also longhorned beetles – about $\frac{1}{2}$ " long, grayish yellow with long antennae- that produce damage similar to that of twig girdlers on elm, hackberry, hickory, maple, oak, pecan, persimmon, redbud, black locust, sweetgum, and other trees. In Spring, a pruner beetles' one egg is laid in a leaf axil near the tip of a twig. After hatching the larva chews a hole in the twig and feeds on the wood as it bores its way to the base of the twig. In late summer, it chews concentric circles through the wood, girdling the twig, but leaving the surface of the bark intact, but again, wind causes the weakened twigs to snap. Larva then pupates and remains in the fallen twig over winter, emerging the next year as a beetle.



"*Anelaphus villosus*" by speiden is licensed under CC BY-NC 4.0.



Hickory Spiral Borer (*Agrilus torquatus*) larvae can sever branches up to 1-1/2 inches in diameter. The end of the severed branch has a distinctive spiral pattern. Severe damage is usually confined to individual trees located near wooded areas containing pecans and hickories. Five different species of small parasitic wasps keep this from becoming a common pest.

James Solomon, USDA Forest
Service, Bugwood.org

Control

Although damage can disfigure a very young tree, particularly if the leader (main vertical branch) is attacked, spraying with a chemical insecticide is not recommended for controlling these insects in a yard situation. Instead, collect and destroy (do not compost) girdled branches as they fall in order to reduce the population of the insects.

Bigger Critters

Similarly, pencil-sized branches can be smoothly cut by **squirrels** at a 45-degree angle. It causes no real damage. During early spring, clipped elm twigs mean squirrels are after the tender seeds (samaras). They do nip off twigs to construct their nests, but you usually won't find those trimmings littering the lawn. Squirrels frequently chew bark on a wide variety of trees, perhaps to get at the sweet sap running just below the bark or to eat tender tissue. They also might chew twigs and bark in order to wear down their teeth, which continually grow throughout their life. If squirrels eat tree bark only on one side of an intact branch (less than one-quarter of the circumference), the branch will survive, and the wound eventually heals without intervention. With more than one quarter eaten, the odds of survival decrease and if it's chewed all the way around, there's no hope as the tree is now girdled with the vascular system completely interrupted.

Providing supplemental food before nuts and seeds appear is the easiest prevention of bark attack.



"Grey Squirrel with Twig (*Sciurus Carolinensis*).jpg" by Dnuge2.8 is licensed under CC BY-SA 4.0.

Resources:

Baker, James. "Hickory Spiral Borer", NC State Extension, (accessed 25 Nov 2024),
<https://content.ces.ncsu.edu/hickory-spiral-borer>

Baker, James, "Twig Pruner", NC State Extension, (accessed 24 Nov 2024), <https://content.ces.ncsu.edu/twig-pruner>

Barrett, Bruce A., "Twig Girdler and Twig Pruner", University of Missouri Extension, (accessed 25 Nov 2024),
<https://extension.missouri.edu/publications/g7276>

Boggs, Joe. "Squirrels Debarking Trees", Buckeye Yard & Garden onLine, Ohio State University Extension, (accessed 25 Nov 2024) <https://bygl.osu.edu/node/389>

Glasgow, Thomas and Jami Hooper, "Clipped Elm Twigs", NC Cooperative Extension, Craven County Center, (accessed 25 Nov 2024), <https://craven.ces.ncsu.edu/2019/04/clipped-elm-twigs/>

Russell, Howard and David Smitley, "Fallen Oak Shoots May Be the Work of the Twig Pruner", Michigan State University Extension, (accessed 25 Nov 2024),
https://www.canr.msu.edu/news/fallen_oak_shoots_may_be_work_of_the_twig_pruner

"Twig Girdler", Field Guide to Common Texas Insects, Texas A&M AgriLife Extension, (accessed 25 Nov 2024), Literature: Rice & Drees. 1990. Rice 1995. Rice 1989, <https://texasinsects.tamu.edu/twig-girdler/>

"Twig Girdlers and Twig Pruners on Trees", University of Maryland Extension, (accessed 24 Nov 2024),
<https://extension.umd.edu/resource/twig-girdlers-and-twig-pruners-trees>

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