

May 24, 2025

Manage Carpenter Bees and Dogwood Borers in the Spring Annette Meyer Heisdorffer, Ph.D. Extension Agent for Horticulture Education Daviess County

Why are the big bees hanging around the building and causing holes in the wood? When does the insecticide spray for dogwood borers need to be applied to protect my dogwood tree? Understanding the habits and lifecycle of these insects provides the knowledge of when and how to manage them.

The large black carpenter bees hover around the outside of homes, buildings, sheds, barns, and decks. They are searching for mates and favorable sites to construct their nests. Carpenter bees resemble bumble bees, but the upper surface of their abdomen is bare and shiny black; bumble bees have a hairy abdomen with at least some yellow markings. Despite their similar appearance, bumble bees usually nest in the ground while carpenter bees tunnel into wood to lay their eggs.

Male carpenter bees are noticeable because of their aggressive behavior, often hovering in front of people near the nests. However, the males lack stingers and are harmless. Females inflict a painful sting but seldom will unless handled or bothered.

Carpenter bees prefer bare, unpainted, or weathered softwoods, especially redwood, cedar, cypress, and pine. Painted or pressure-treated wood is much less susceptible to attack. Therefore, the best way to deter the bees is to paint all exposed wood surfaces, especially those with a history of being attacked. Wood stains and preservatives are less reliable than painting but provide some degree of repellency versus bare wood. To further discourage nesting, garages and outbuildings should be kept closed when carpenter bees are searching for nesting sites.

Carpenter bees overwinter as adults in the wood, usually emerging in April or May. After mating, the fertilized females excavate tunnels in wood and lay their eggs within a series of small cells. The cells are provisioned with a ball of pollen on which the larvae feed, emerging as adults in late summer. The entrance hole and tunnels are perfectly round and about the diameter of your finger. Coarse sawdust, the color of fresh-cut wood, is often present beneath the entry hole, and burrowing sounds may be heard from within the wood. Female carpenter bees may excavate new tunnels for egg laying or enlarge and reuse old ones. Damage to the wood used as a nesting site year after year may be extensive.

Managing the carpenter bee is best completed before tunnels are fully constructed. Liquid, aerosol, or dust insecticides with active ingredients such as bifenthrin, cyfluthrin, or lambda cyhalothrin can be applied directly into tunnel openings according to the label. Leave the hole open for a few days after treatment to allow the bees to contact and distribute the insecticide throughout the nest galleries. Plug the entrance hole with a piece of wooden dowel coated with carpenter's glue, putty, or other suitable sealant to protect against future use of the nesting tunnels and to reduce the chance of wood decay.

The insecticides mentioned above may be used as a more extensive treatment on vulnerable wood surfaces when large numbers are attacking. Bees avoid drilling into the treated surfaces. Apply the insecticide using a pump-up or hose-end sprayer to target areas most favored by carpenter bees, such as eaves, fascia boards, and joist ends of decks. Follow all the insecticide label directions and precautions. Residual effectiveness of these insecticides is often only 3-4 weeks, so the treatment may need to be repeated.

Although carpenter bees are less aggressive than wasps, female bees caring for their nests will sting. Treatment is best performed at night when the bees are less active, or while wearing protective clothing.

Memorial Day weekend is the time to manage dogwood borers. The female borers are looking for dogwood trees to lay their eggs. The adult is a small, day-flying moth. It is blueblack with yellow bands and somewhat resembles a small wasp. The moth emerges and lays eggs, usually in May and June, near trunk wounds or in crevices in the bark.

Young trees are usually attacked near ground level, often around lawn mower injuries. Infestation of older trees likely occurs in the limb crotches or on main limbs through pruning scars, cankers, or cracked bark.

Young borers hatch from eggs in one to two weeks and quickly tunnel into the tree. Once beneath the bark, borers are protected from insecticidal sprays and are seldom detected until serious damage has been done.

Early symptoms of trees attacked by borers are off-color foliage, wilting terminal shoots, and crown dieback. Large branches may die or become weakened and prone to wind breakage. Old trees may exist in an unthrifty condition and are re-infested year after year.

To protect dogwood trees from the dogwood borer, apply borer spray to runoff on the trunk and main scaffold limbs according to the label directions. This will leave an insecticidal residue on the bark that will kill young borers as they hatch and attempt to bore into the tree. Active ingredients to look for in a borer spray are permethrin and bifenthrin. Make sure 'ornamentals' and controls borers is listed on the label. Only one treatment with the insecticide is recommended.

For more information, contact the Daviess County Cooperative Extension Service at 270-685-8480 or annette.heisdorffer@uky.edu or the publication

https://entomology.ca.uky.edu/ef611.

Annette's Tip:

The program "Living with Alpha-gal Syndrome" will be presented by webinar on Thursday, May 29, from 6:00 p.m. to 7:30 p.m. Watch at home by registering at <u>https://ukfcs.net/AgS</u>. Or join a watch group at the OCTC Technical Building, Room 100. Call the Daviess County Cooperative Extension Service Office at 270-685-8480 to reserve a seat.

The Martin-Gatton College of Agriculture, Food and Environment is an Equal Opportunity Organization with respect to education and employment and authorization to provide research, education information and other services only to individuals and institutions that function without regard to economic or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation, gender identity, gender expression, pregnancy, marital status, genetic information, age, veteran status, physical or mental disability or reprisal or retaliation for prior civil rights activity.