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HORTICULTURE EDUCATION

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Management of Dogwood Bores and Carpenter Bees with Science-Based Information
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The native dogwood trees beautifully bloomed this spring. A major pest that affects the dogwood tree is the dogwood borer. This weekend is the target date to protect dogwood trees against the dogwood borer. In addition, large black bees hovering around buildings are noticed. These are carpenter bees. Both insect pests have specific methods of management based on their lifecycle and habits.

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 blue-black 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 at 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.

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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 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' is listed on the label and that it controls borers. Only one treatment is recommended.

Another insect we think about in the spring is the carpenter bee. The males are noticeable because of their aggressive behavior, often hovering in front of people who are around the nests. However, the males are harmless since they lack stingers. Females can inflict a painful sting but seldom will unless handled or bothered.

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 compared to carpenter bees which tunnel into wood to lay their eggs.

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 will provide some degree of repellency versus bare wood. To further discourage nesting, garages, and outbuildings should be kept closed when carpenter bees are actively searching for nesting sites.

Carpenter bees overwinter as adults in the wood. They usually emerge 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. The extent of damage to wood that has been used for nesting year after year may be considerable.

Managing the carpenter bee is best completed before tunnels are fully constructed. Liquid, aerosol, or dust insecticides with active ingredients such as bifenthrin, cyfluthrin, deltamethrin, 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 above-mentioned insecticides 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 by using a pump-up or hose end sprayer targeting areas most

favored by carpenter bees such as eaves, fascia boards, and joist ends of decks. Follow all the insecticide label directions and precautions listed. The 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 taking care of their nests will sting. Treatment is best performed at night when the bees are less active, or while wearing protective clothing.

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

Annette's Tip:

Dr. Mike Potter, University of Kentucky Extension Entomologist provides detailed information about the carpenter bee and its behavior at https://entomology.ca.uky.edu/ef611.