

CARPENTER ANTS

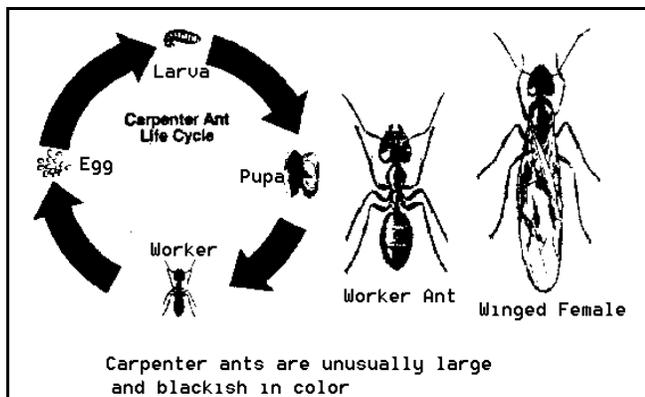
Michael F. Potter, Extension Entomologist

"I keep seeing big, black ants in my house, especially in the kitchen and bathroom. I spray the ones I see, but they keep coming back. What kind of ants are these, where do they come from, and how do I get rid of them?"



These are the questions typically asked by homeowners who have carpenter ants. Carpenter ants are one of the most common ants found in Kentucky. They are also one of the most difficult to control.

This publication will help you determine if you have carpenter ants, and provide tips on how to control them.

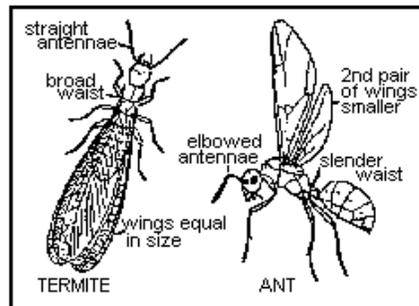


Carpenter ants, vary in size and color but are usually large (1/4-1/2 inch) and blackish. Occasionally, swarms of winged carpenter ant reproductives will emerge inside a home. Carpenter ant swarms usually occur in the spring and are a sure sign that a colony is nesting somewhere inside the structure.

Winged carpenter ants can be distinguished from termites by their larger size and shape of their antennae, waist and wings.

Besides being objectionable by their presence, carpenter ants damage wood by hollowing it out for nesting. They

excavate galleries in wood which have a smooth, sandpapered appearance. Wood which has been damaged by carpenter ants contains no



How to tell winged termites from ants

mud-like material, as is the case with termites. Shredded fragments of wood, similar in appearance to coarse sawdust, are ejected from the galleries through preexisting cracks or slits made by the ants. When such accumulations are found (typically containing dead ants and bits of insects which the carpenter ants have eaten), it's a good indication that a carpenter ant nest is nearby. Oftentimes, however, the excavated sawdust remains hidden behind a wall or in some other concealed area.

Carpenter ants nest in both moist and dry wood, but prefer wood which is moist. Consequently, the nests are more likely to be found in wood dampened by water leaks, such as around sinks, bathtubs, poorly sealed windows/ door frames, roof leaks and poorly flashed chimneys. Nests are especially common in moist, hollow spaces such as the wall void behind a dishwasher, or in a hollow porch column. Since there often will be no external signs of damage, probing the wood with a screwdriver helps reveal the excavated galleries. Another technique for locating hidden nests is to tap along baseboards and other wood surfaces with the blunt end of a screwdriver, listening for the hollow sound of damaged wood. If a nest is nearby, carpenter ants often will respond by making a "rustling" sound within the nest, similar to the crinkling of cellophane.

Carpenter ants may establish nests in a number of different locations. It is important to realize that these locations can be either *inside or outside the structure*. Carpenter ants actually construct two different kinds of nests: **parent colonies** which, when mature, contain an egg-laying queen, brood and 2000 or more worker ants, and **satellite colonies** which may have large numbers of worker ants but no queen, eggs or young larvae. The

carpenter ants inside a home may have originated from the parent colony or from one or more satellite nests. For example, the ants may be coming from the parent nest located outdoors in a tree stump, landscape timber or woodpile, or from one or more satellite nests hidden behind a wall in the kitchen or bathroom, or perhaps from wood dampened by a roof leak in the attic.

The extent and potential damage to a home depends on how many nests are actually present within the structure, and how long the infestation has been active. Although large carpenter ant colonies are capable of causing structural damage, the damage is not normally as serious as that from termites. In some cases, the damage may be relatively insignificant, but this can only be determined by locating and exposing the nest area.

Control

The best way to control carpenter ants is to find and destroy the nests. This is often easier said than done. Recent studies have shown that carpenter ants follow distinct scent trails between the satellite colonies and the parent nest. Carpenter ants also rely on scent trails to recruit their nestmates to food. With patience and a little effort, homeowners can use this trailing behavior displayed by carpenter ants to locate and eliminate the nests.

When carpenter ants are observed, **don't spray them**; instead, feed the ants small dabs of diluted honey placed onto the back (nonsticky side) of pieces of masking tape. The best time to do this is late at night since this is when carpenter ants are most active. After the ants have fed on the honey, follow them on their journey back to their nest. **Be patient**-- eventually the ants will disappear behind a baseboard, cabinet, or into some other concealed location such as the hollow space (void) within a wall, door casing, or porch column.

Treat wall voids and other hidden spaces where ants are entering by carefully drilling a series of small (1/8 inch) holes and puffing boric acid (available at most hardware stores) into the suspected nest areas. The boric acid powder will disperse in the hidden void and contact and kill the ants. If you suspect the nest is in a wall, drill and treat at least 3-6 feet on either side of where ants are entering so as to maximize the chances of contacting the nest. Carpenter ants prefer to travel along wires, pipes and edges. If you suspect the nest location is in a wall, also treat behind pipe collars and behind --**not in**-- the junction box for electrical switch plates/receptacles. **NEVER SPRAY LIQUIDS OR INSERT METAL-TIPPED DEVICES AROUND ELECTRICAL OUTLETS!**

As noted earlier, carpenter ants seen in the home may

actually be nesting outdoors, foraging indoors for food and/or moisture. Consequently, the homeowner may end up following the ants they have baited with honey out of the house and into the yard, possibly to a nest located in a stump, or under a log or railroad tie. Once the outdoor nest is discovered, treatment can be performed by spraying or drenching the nest with an insecticide such as carbaryl (Sevin), diazinon, or chlorpyrifos (Dursban). If outdoor nests are suspected, the homeowner should also inspect around the foundation of the building at night with a flashlight, especially around doors, weep holes and openings such as where utility pipes and wires enter the structure. The baiting approach using honey can also be used to trace carpenter ants which are foraging outdoors back to their nest.

Tips When Calling a Professional

Oftentimes, it will be difficult or impossible to locate and destroy the carpenter ant nest(s). In this case, the homeowner may wish to call a professional pest control operator. Pest control companies approach carpenter ant problems differently. Some attempt to locate the nest and selectively treat only in specific areas. Other companies take more of a "shot-gun" approach, drilling and dusting as many potential wall voids and nesting sites as possible. Most companies also apply a perimeter spray treatment around the outside foundation of the home in an effort to temporarily prevent reinvasion. The approach which should not be used is simply to spray each month where carpenter ants are seen. If no effort is made to locate the nest(s) or probable nest areas, the problem will most likely continue.

Typically, there will be wide differences in price depending on the company and amount of effort expended. Since carpenter ant problems are not always solved on the first attempt, the type of guarantee and reputation of the company should be factored into the purchasing decision.

Carpenter Ant Prevention

A number of steps can be taken by homeowners to reduce the potential for future carpenter ant problems.

1. Correct roof leaks, plumbing leaks and other moisture problems which will attract carpenter ants.
2. Eliminate wood-to-ground contact such as where landscaping has moved soil or mulch up against the wood siding of a home.
3. Clip back tree limbs and vegetation touching the roof or siding of the house. Limbs and branches serve as

"bridges" between carpenter ants nesting in a dead tree limb and the structure.

4. Seal cracks and openings in the foundation, especially where utility pipes and wires enter from the outside.
5. Stack firewood away from the foundation and elevate it off the ground. Never store firewood in the garage or other areas of the home, as firewood is a prime nesting area for carpenter ants.