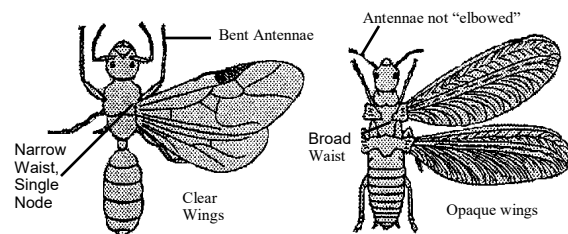


# CARPENTER ANT... OR TERMITE, OR ...?

The black carpenter ant (*Camponotus pennsylvanicus*) is often the species that damages houses in the Northeast. It has a single node (waist segment) and is 1/4 to more than 1/2 inch long. It does not have a stinger, but it can bite. A frequently asked question about these ants is, "Is it an ant or termite?" If you are still unsure after reading the information below, consult Cornell Cooperative Extension.



	Carpenter Ant	Termite
<b>Waist</b>	Pinched	Thick
<b>Antennae</b>	Bent elbow	Straight
<b>Wings</b>	Top pair larger than bottom; both are clear; no piles of wings can be found after swarming.	Both pairs similar size and opaque (milky); piles of wings found after swarming.

## ANT APPETITES AND BAITS

*Carpenter ants eat insects and the honeydew excreted by aphids, but they do not eat wood.*

*Scientists are using their knowledge of ants' preferences to develop ant baits (containing low-toxic insecticides) that are more specific than traditional chemical controls. A recent formulation is the "dual ant bait," which provides ants with a choice of both sweet and greasy, and may increase the chance of the ants accepting it. More research is needed to verify the efficacy of these baits, but results to date are encouraging.*

Ants are social insects, living in groups called nests or colonies. They undergo complete metamorphosis, developing into egg, larva, pupa, then adult. Colony members can be separated into groups called "castes" by the roles that they play in the colony's survival, such as reproductive or worker.

The reproductives consist of the queen and the male ants. The male ants fertilize the queen during the ant's nuptial flight, then die. The queen finds a secluded site, chews off her wings, and starts to build a colony. The queen cares for her first group of offspring through the egg, larval, and pupal stages by herself. After the members of this group have changed into adults, they take on the care of the young. The queen's job then becomes laying eggs and regulating the activities of the colony. The queen and colony may survive for 10-15 years, producing hundreds of thousands of offspring.

The carpenter ant colony may be located outside of the house in a tree stump or in a hollow of a living tree. It could also be located in your house.

The worker caste ants are devoted to a variety of activities such as nest construction, repair and defense, finding food, and feeding and caring for larvae and the queen. Workers vary in size and appearance within a species, so size is usually not a good characteristic for identification. They live for approximately one year.

When the colony has matured, carpenter ants establish new colonies by producing swarms of winged male and female reproductives. Many people first become aware that they have ants when the ants initiate the reproductive flight.



## References and Further Reading

- Klass, C. and D. Karasevicz. 1995. Pest Management Around the Home: Cultural Methods. Miscellaneous Bulletin S74. Cornell Cooperative Extension, Ithaca, NY
- Lifton, B. 1991. *Bug Busters: Poison-Free Pest Controls for Your House & Garden*. Avery Publishing Group, Inc., Garden City Park, NY 254 pp.
- Olkowski, H. and W. Olkowski. 1988. Ants in the House. Common sense pest control IV (4) Summer/ fall.
- Olkowski, W., S. Daar, and H. Olkowski. 1991. *Common-Sense Pest Control*. Taunton Press, Newtown, CT. 716 pp.
- Simeone, J., L. Abrahamson, and C. Klass. 1988. *Carpenter Ants*. New York State Tree Leaflet No. F-3, SUNY College of Environmental Science and Forestry, Syracuse, NY.

Produced by the Urban IPM Program, Cornell University, NYSAES, Geneva, NY 14456; 315-787-2353; <<http://www.nysaes.cornell.edu/ipmnet/ny>>. Authors: Kathleen Sharpe and Carolyn Klass. Editing and design: Carrie Koplinka-Loehr. Cover drawing of carpenter ant is copyrighted by the Bayer Corporation and used by permission.



**The recommendation in this publication are not a substitute for pesticide labeling. Read the label**

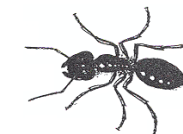
**before applying any pesticide.** Cornell Cooperative Extension provides equal program and employment opportunities. 6M 5/97



Cornell  
Cooperative  
Extension

Cornell Cooperative Extension  
Urban IPM Program  
Information Sheet No. 601

# Integrated Pest Management for Carpenter Ants



## WHAT TO DO NOW

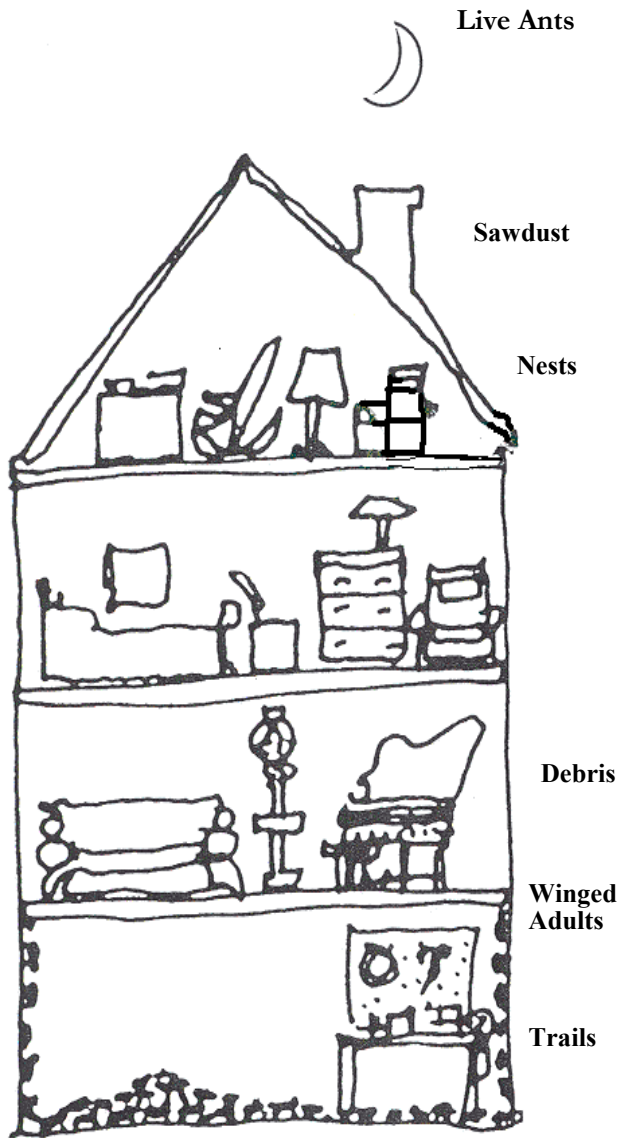
**1 Identify the insect.** If you are certain that you have found a carpenter ant, read on. If you aren't sure, turn to "Carpenter ant... or termite" on the inside of this brochure.

**2 Don't panic.** Carpenter ants differ from termites, which use wood as a food source and will eat sound wood. Carpenter ants do not eat wood; they nest in wet or water-damaged wood. Sometimes they find a void to serve as a nesting area.

Most carpenter ant damage occurs during the summer months. Large numbers of ants can be destructive, yet most times they are more of a nuisance than a serious threat to the structure. In most circumstances, they can coexist with humans until managed with IPM methods.

**3 Inspect Your home** for the ants, as shown inside. Remember that a few ants does not always mean that an infestation is present. Early in the spring, before their regular food is present, workers often wander inside homes looking for sweets. They will scavenge for fats and other foods.

## HOW TO INSPECT FOR CARPENTER ANTS



Outside the house at night, use a flashlight (preferably with a red cellophane filter) to find live ants. Examine the foundation, stairs, deck, porch, landscaping timbers, utility wires, and branches of trees and shrubs touching the house. Carpenter ants are nocturnal and will move in and out of your house at night to feed.

Inside the house, look for small piles of sawdust and moisture-damaged wood. Check corners near walls, inside walls from attic to basement, windows, skylights. Piles of sawdust are from excavations.

Search for nests in wall voids beneath windowsills, inside doors, under fiberglass insulation. Void areas are good nesting sites (because carpenter ants are considered too "lazy" to excavate sound wood). Check hollow staircase railings, even inside wooden curtain rods.

Carpenter ants first create a main colony (nest). As the colony grows, the ants form satellite nests. In managing carpenter ants, it is important to locate all the nests. The main colony and satellite nest, if present, can exist inside the house or outside, near the house. Look along the chimney, where it joins the house, especially if covered with ivy.

Try to find distinct piles of debris that contain insect parts, and pieces of pupal cases discarded by worker ants. Look under sills, insulation; near openings in secluded walls (cupboards, closets).

During the winter, locate winged adults inside, near windows. Ants will be no more than 30 feet from the nest. Their presence indicates an indoor nest, because normal outdoor emergence time would not be winter!

Look for live ants outside during the day: Remember that ants avoid sunlight. Search the shady sides of likely objects (garden hoses, picket fences, under logs). Also check branches touching ground-and look for shallow ant tunnels in the ground.

Inspect for ants following trails inside, along pipes and electrical wires. Carpenter ants sometimes follow straight routes and leave scent trails.

## HOW TO RID YOUR HOME OF CARPENTER ANTS

### ✗ FIND THE SOURCE

Locate the nest (see "How to Inspect"), vacuum it, and destroy the vacuumed debris. Nearly all carpenter ant damage inside of houses is caused by these nests, which consist of a few dozen to thousands of ants. You may need professional help for this step.

### ✗ PREVENT ACCESS

To keep ants from climbing onto your house, prune nearby tree limbs, bushes, and other vegetation. Leave a 2-ft. strip of gravel around the house to allow for inspection.

Store firewood away from the house and, when possible, off the ground. It serves as a nesting place.

Seal cracks and pipe and electrical chases with caulk or use sticky barriers.

### ✗ PLACE A BAIT

Purchase a containerized or liquid insecticide bait after you have tried non-chemical methods.

Be sure to keep your house free from any sweets or grease that might distract the ants. Place containerized bait near a suspected ant trail; put liquid bait in cracks and void areas where ants have been seen. The first sign that the bait is working is an *increase in the number of ants*.

- *Do not kill any ants*, as they must bring the bait back to the colony where it can be effective. The entire population should decrease eventually.
- Do not spray any insecticides once you have placed a bait. Doing so could make the bait ineffective or kill the worker ants that must transport the bait.

Be patient. Baits might require up to 60 days to eliminate a colony. Replace the bait if it becomes depleted and ants are still present.

### ✗ REDUCE MOISTURE

Eliminate excess moisture and wet wood to make the environment less hospitable to ants. Fix leaks in the roof, pipes, and sinks. Insulate sweating pipes. Promote ventilation. Use vapor barriers when insulating outside walls.

Clean gutters regularly; adjust drainspouts so that water flows away from building.

Replace water-damaged wood. Carpenter ants seek water-damaged wood because it is easier to excavate than sound wood: Furthermore, immature ants require high humidity for development.

Don't place wood in contact with the soil; use a water-proofing compound where wood is in contact with concrete or asphalt.

### ✗ USE A LOW-TOXIC INSECTICIDE

If you have followed the suggestions on this page and still need increased management, you might obtain one of the following registered pesticides from a garden supply store. (These should not be used with baits.)

- diatomaceous earth (a desiccant, which dries up the insect; it's made of finely ground microorganisms)
  - pyrethrum product (a chrysanthemum derivative)
  - silica aerogel (also a desiccant, sold in combination with pyrethrum)
  - a commercial product containing boric acid (an effective insect stomach poison and desiccant that has low toxicity to humans)
- Some of these products would be introduced into crevices or wall voids. Always read the label for specific directions.

