

The invasion of the home snatchers

By **Bruce Wenning**/ Special To The Tab
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Many kinds of pests find their way into your home. Some you can tolerate, others you can't. Carpenter ants and carpenter bees are insects that want to move in with you. When they invade your space, the damage can be extensive and costly.

Ants are the most recognized insects on earth, with many subfamilies, genera and species worldwide. They are in the Order Hymenoptera (bees, ants, wasps, sawflies and parasitic wasps). They have three distinct body regions; head, thorax, and abdomen, and their antennae, which are usually elbowed (bent), function as chemical receptors.

Ants nest in colonies and cooperate in raising their young, finding food and defending the colony. They exhibit a caste system comprised of a queen, males and workers. The division of labor in the colony is an integral condition of group living. Queens fly to mate with males, and once mated, a queen will remove her wings and remain dedicated to egg laying for the colony. Males have wings and die soon after mating with the queen. Workers, as their name implies, do most of the colony's work; they are sterile wingless females. Large colonies can have over 3,000 worker ants.



A carpenter ant.

Photo by Clemson University USDA
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There are many ant species found throughout the United States. The most destructive Eastern species is *Camponotus pennsylvanicus*, the black carpenter ant, which is common in New England. These ants are attracted to damp wood caused by leaking roofs, wood in contact with soil, leaking plumbing fixtures, insulation, blocked gutters, poorly ventilated attics and crawl spaces, and other wooden structures (supports, walls, pillars, siding, joists, sills) that are rotted or water-damaged. When Carpenter ants invade a home or other wooden structure and establish a colony with a queen, it is usually bad news.

Carpenter ants can be found around the periphery of your home in moist foundation mulches, piles of damp leaves and branches and woodpiles. The best approach to the carpenter ant problem is preventive: eliminate damp habitats around the exterior of your home (as well as inside).

Carpenter ants are frequently confused with termites, which are also wood-destroying insects. Termites are soft-bodied and usually white or cream colored; they are

sometimes called, erroneously, "white ants" although they are more closely related to cockroaches than to ants. Carpenter ants, in contrast, are hard-bodied and black or dark brown in color. Termites (which are in the small order Isoptera, meaning equal wings) have fore and hind wings that are nearly equal in size and which fold at rest close to the body. Carpenter ants, whose fore wings are larger than their hind wings, usually extend or hold their wings above their body at rest.

Termites do not have a "waist" (constriction between the thorax and abdomen), whereas carpenter ants do have this constriction. Termites have bead-like antennae while carpenter ants have their antennae in segments resembling a short "arm" and "elbow." Unlike termites, carpenter ants do not eat or digest wood, but instead excavate mostly moist and soft wood (and sometimes dry wood) and deposit the resulting "sawdust" outside their colony, while keeping their galleries clean. Wood digesting termites, on the other hand, line their galleries with moist soil. Carpenter ants are both predators and scavengers, feeding on live and dead insects, plant sap of certain plants, aphid and sap sucking insect honey dew, and various food scraps.

Another type of wood-destroying insect, sometimes mistaken for bumble bees, are carpenter bees, also in the order Hymenoptera (like carpenter ants). They differ from bumble bees in their body markings. Carpenter bees have black abdomens while bumble bees have yellow abdominal markings. Carpenter bees tend to fly and hover high up against buildings and windowsills to excavate their galleries in dry wood. Females have a stinger but rarely sting. Males do not have a stinger and are harmless to humans.

The US has seven species of carpenter bees. The most destructive to homes and other wooden structures is the Eastern species, *Xylocopa virginica*. They can cause significant damage by boring into and excavating wood year after year. You may see this species flying near windowsills, eaves, wooden siding, fence posts, railings, and other very dry wooden structures. An infestation is first detected by finding large amounts of sawdust below half-inch diameter entrance holes in wood. Applying linseed oil to dry wood can reduce the attractiveness of such wood to these bees.

Carpenter ants, carpenter bees, and termites utilize trees and other woody plants and materials as part of their life cycle. Each is important in its respective niche, but when they invade our domain they become pests. Homeowners who find it necessary to control or eradicate them should consult a certified pest control company and request that they deal with the problem in the most environmentally benign way possible.

For more information see Arnold Mallis, Handbook of Pest Control; Hansen & Klotz, Carpenter Ants of the United States and Canada, and www.ceinfo.unh.edu

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