

Carpenter ants are the most abundant wood-destroying member of the ant family in the Pacific Northwest. These ants are usually identified by their large black size (*Camponotus modoc*), though some species can be smaller and reddish brown in color

(*Camponotus vicinus*). Carpenter ants are polymorphic, meaning that members of the same ant colony can vary in size and shape depending on their cast. The best way to identify Carpenter ants is by their smooth rounded thorax when viewed from the side.



Dorsal view of the adult stages of the carpenter ant: Top left—Winged female; top right Male; bottom left—Minor worker; bottom middle—Intermediate worker; bottom right—Major worker.

Biology

Initially, a Carpenter ant colony will establish itself outdoors in a damaged tree base, tree stump or landscape timber. The young colony will contain

a queen and about a dozen workers. If conditions are good, the colony will increase rapidly in the next few years. A colony is considered mature when winged reproductive males and females are formed. This will occur in about three to six years and the colony may contain about 10,000 individuals or more. After wintering in the nest, winged males and females will begin to swarm in spring or early summer.

Carpenter ants construct two different types of nest. The first type of nest is the Parent Colony which is usually established outdoors in a damaged tree base, tree stump or landscape timber. The Parent Colony will contain one egg laying queen, workers and larvae. The second type of nest is the Satellite Colony, which originated from the Parent Colony, and will have workers, eggs and larvae,

but not a queen. The Satellite Colony's nest is commonly found within the structure of the home. However, it is possible to have a Parent Colony within the structure of the home if the conditions are right i.e. damp or decaying wood.

Carpenter ants are very common in the North West so it's not unusual to see them foraging around the property or even inside the home looking for food or a new nesting site. Carpenter ants are omnivorous which means that they do not eat wood, they eat other dead insects, plant juices, and a product called honeydew, which is secreted by aphids. While searching for food they will also feed on sweets and proteins found inside the home.

Carpenter ants in their natural environment are beneficial insects. When building colonies, they aid other organisms in the decomposition process by breaking down dead and dying wood. However, when a Carpenter ant colony becomes established within the home, they are capable of doing serious damage to the structure.



They will continue this same natural process

by hollowing out beams, excavating galleries in floor boards and wood siding, all for their nesting purposes. A good indication that you might have an active Carpenter ant nest within your home is that you are experiencing sightings of large black ants inside every few days or have found an accumulation of sawdust called frass. Frass is the wood byproduct of the Carpenter ants activity of excavation and is sometimes deposited near the ants nesting sight. Frass will also contain some dead insect body parts which is helpful in distinguishing it from ordinary sawdust. Finding frass can aid in the location of a nearby nest. Carpenter ants prefer wood that is water damaged or in the process of decay but once

the nest is established they can extend their colony into sound, dry wood.

Control

Locating the source of Carpenter ants is important and the best way to control them is by direct treatment of the colony. A good place to start looking for Carpenter ants in the home is near damp locations like basements, crawlspaces and attics. Carpenter ants will also establish themselves in wall voids near dishwashers, window frames, bathrooms, and along side fireplaces. Locating the source of Carpenter ants can be difficult so spending some time observing foraging patterns is helpful. You can often observe Carpenter ants foraging between their Parent Colony and their Satellite Colony, or from their food source and back to their nest. Carpenter ants will use foliage that is touching the home or travel along service wires and pipes so it's important to inspect these areas as well. During spring and summer Carpenter ants are most active at night between the hours of 8 and 10 pm so looking for active trails outdoors may be helpful - you may need a flashlight. The key is to remember that Carpenter ants are usually associated with moisture, particularly where wood is involved.

Treatment

Adept Pest Solutions applies an Integrated Pest Management approach to Carpenter ant control. Our highly trained technicians will provide you with a free and thorough inspection of your home and exterior surroundings, in order to identify and determine the cause of the Carpenter ant infestation. Our technicians will make every effort to locate existing Carpenter ant colonies nesting within

the structure of your home and those nesting sites that occur in trees, stumps, woodpiles, landscaping timbers and outbuildings. In addition, our technicians will provide you with a thorough report detailing nesting sites, points of entry and alert you of conditions that are conducive to Carpenter ant infestations along with recommendations for prevention and repair. The need for control will be assessed utilizing environmental, biological, mechanical and chemical methods along with the efficacy, cost and safety of your family and the environment. After careful consideration of these criteria, our technicians' will present to you the most appropriate control methods to be used.

Carpenter ant Prevention Check list:

- ✓ Reduce moisture and repair broken plumbing.
- ✓ Remove dead wood and debris from the property.
- ✓ Grade soil away from the home.
- ✓ Keep soil away from exterior siding.
- ✓ Ventilate damp areas like the crawlspace and basement.
- ✓ Stack firewood several yards from the home.
- ✓ Prune trees and shrubs away from roofline and house siding.
- ✓ Keep gutters and downspouts clean.

References

Hedges, Sa Field Guide for the Management of Structural Infesting Ants. Franzak and Foster Co., 4012 Bridge Ave., Cleveland, Ohio 44113. 155 pages

Akre, R.D., L.D. Hansen, and A.L. Antonelli. EB0818, Carpenter Ants: Their Biology and Control. CES-WSU, 1991, 6 pages

Common Carpenter ant nesting sites within the home

