

Natter's Notes

Carpenter Ants

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Carpenter ants, sometimes referred to as “termites of the northwest,” can be important structural pests which typically nest in moisture-damaged wood. In our region, swarms of flying reproductives (males and females) often leave the nest during January. After mating, the surviving queens will shed their wings and search for a new nest site.

Once a thriving colony is established, it has 10,000 to 50,000 or more individuals. The main nest is in dead wood, perhaps a tree, stump, or landscape timbers.

But that’s only part of the story.

The pupae and some workers are in a secondary nest, one that’s in a relatively warm, dry structure such as a house, garage, or shed. When a colony is about 6 to 10 years old, it produces its first winged swarmers (reproductive males and females). The females, at 16- to 18-mm (about 5/8-inch), are larger than the males, the latter a scant 1/2-inch long.

It doesn’t matter which *Camponotus* species is in an infestation. In western Oregon, *C. modoc* (black with red legs) is more common than *C. vicinus* (black with red thorax and legs). A mature colony has 3 sizes of workers: minors (the smallest); media; and majors. They may invade households, just as nuisance ants will, but are unaffected by over-the-counter ant bait.

All ants have elbowed antennae, and a petiole (a slender connection between thorax and abdomen) with a noticeable node (a bump). Carpenter ant workers are recognized by their particularly large node and an evenly convex thoracic profile. The additional musculature for the swarmers’ wings creates a beefier profile changing the thoracic outline to somewhat flattened and table-like. After females drop their wings, close examination of the lateral thorax with a hand lens will reveal small indentations – the places where the wings were attached.

Key points

- Secondary nests in structures begin in moisture-damaged wood.
- Buildings near a wooded area are more liable to attack than others.

- Carpenter ants don’t eat wood; instead, they excavate wood for housing.
- Carpenter ants feed on honeydew and captured insects.
- If winged ants emerge indoors from underneath the baseboard, the nest is probably in the wall; if via a ceiling light fixture, in the space above, in either the attic or ceiling void.

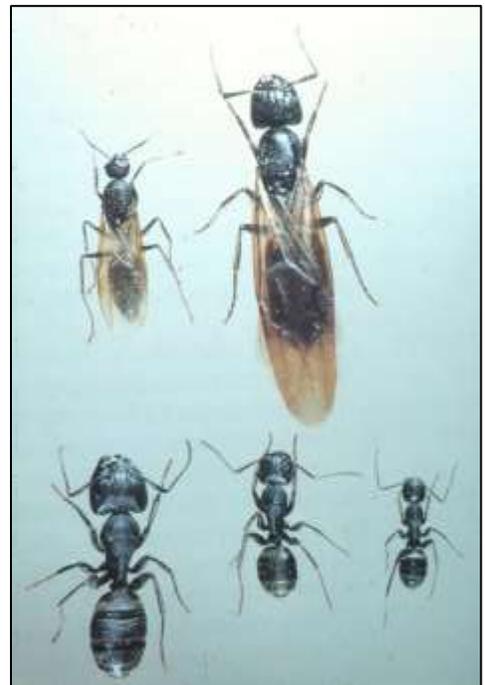


Figure 1: Relative size of carpenter ant castes: Top: Winged queen (L) and winged male (R); Bottom: Workers - Major (L); media (center); minor (R). [Image: Laurel Hansen, Spokane Falls Community College] (<https://www.extension.umn.edu/garden/insects/find/carpenter-ants/>)

(see next page)

More often than not, clients don't know if they are infested or where the main nest is. These activities can provide answers:

- Look for piles of fresh sawdust in the attic and crawl space.
- To determine where the ants are entering the structure, look for 2-way trails outdoors. The best time is from 10 PM to 2 AM from April through October. Inspect along the foundation and other architectural lines, in the crawl space, and where utilities (pipes and wiring) enter the structure.
- If a trail is found, follow it to the main nest which, to limit structural re-infestations, must be treated by a pest control company.

Thwart the likelihood of a carpenter ant infestation with several ongoing practices:

- Create an airy clear zone around structures by trimming, or removing, any plant material within 12 to 18 inches.
- Maintain mulch at least 8 inches below the siding.
- Ensure roofing is intact.
- Inspect the perimeter of the structure periodically, to check for a 2-way trail which warns of an infestation.

Management practices for an infestation

- Hire a pest control company to treat the structure and, whenever possible, the main nest.
- Correct the moisture problem and replace damaged wood
- Over-the-counter ant baits available in the northwest are ineffective against carpenter ants.

Resources

- PNW Insect Management Handbook, the section titled Structural and Health Pests.

- "Identification and Habits of Key Ant Pests of Washington" (EB0671) has identification details for common ants.

"Carpenter Ants: Their Biology and Control" (EB0818; WSU)

- The PCT professional handbooks offer insights as to the services pest control companies may offer clients. For one thing, pest control companies have effective ant baits not otherwise available to the public. "The Technician's Handbook" (Richard

Kramer) is a handy source of brief summaries about key pests. Each entry includes the pest's description, a clear line drawing, life cycles, foods, habitats, and cultural management. Still more details about ants are in "Structure-infesting Ants" (Stoy Hedges). ☺



Figure 2: Carpenter ant workers have elbowed antennae; evenly rounded thoracic profile; and a large node on the narrow connection between thorax and abdomen. (<https://bugguide.net/node/view/779340>)



Figure 3: Queen carpenter ants shed their wings after mating. Additional muscles for the wings change the thoracic profile to flattened and somewhat table-like. (<https://bugguide.net/node/view/837730/bgiimage>)



Figure 4: Carpenter ant damage to wood is recognized by the clean galleries. (<https://commons.wikimedia.org/wiki/File:Holzschaden.jpg>)