RESTORATION PRIMER

Fire the Carpenter Ants on Your Job

by John Leeke

After years of finding carpenter ants in other people's buildings, it has finally happened to me. I was about 4 feet from my single-story wood-frame garage, when I heard a "skritching" sound coming from the clapboard wall. The sound was not faint. Even with cars passing nearby, I heard it quite plainly. I put my ear to the wall and confirmed the source of the sound: the methodical crunching of wood fibers as the pesky little beggars gnawed out the side of my garage.

On someone else's building it's an interesting problem with effective, but sometimes expensive, solutions. When it's your own home it's malicious destruction of property. I grabbed a pry bar and a spray can of the worst poison I could find and went at them.

The Carpenter Ant

Carpenter ants have 3/8- to 1/2-inch-long, 3-part bodies that are black or brown. They have large mandibles or pincers, and a 90-degree joint in their antennae.

Understanding the nesting cycle of carpenter ant colonies will help you eradicate them.

The cycle begins when a female swarmer mates and finds a nest site. The swarmer is 3/4- to 7/8-inches long with wings. She looks for a hidden location with soft wood and starts the nest by laying eggs.

Ants don't actually eat the wood, but they carve galleries in it, piling up sawdust as they work. They leave the nest daily for food and water.

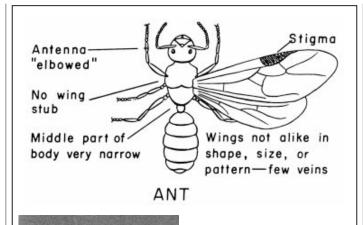
In the first nesting season, you might find 50 to 80 ants. If the wood is dry the colony may never get bigger, which was the case with my garage. If food and water are plentiful and conditions at the nest are good for ants, in three to six years the nest might grow to 3,000 or 4,000 ants. A colony of this size could occupy 5 to 10 cubic feet of galleries carved in the woodwork.

When the colony reaches a certain size or food becomes limited, the nest yields a batch of swarmers that leave the nest to establish new colonies, usually nearby.

Carpenter ants are nocturnal, which means most ants will be in a nest during the day. For that reason, daytime is the best time to find and destroy nests.

How to Find Them

The most obvious tip-off is a pile of sawdust on the ground along the foundation. But even when you don't see sawdust, you may still have ants. In my garage, about a





Carpenter ants do not eat wood, but carve galleries in it, often leaving piles of sawdust outside of their nests. They are black or brown with an hourglass-shaped body with three segments. Nesting females have wings.

cubic foot of sawdust was piled up inside the stud wall with no exterior signs of sawdust to reveal the nest's location.

In a case like that, watch for more than a dozen ants in a day, especially on trails into the house. While working on a house I'm more likely to notice regular ant activity than the owner. If I notice a trail of ants I'll usually mention it. If I'm back the next year and see a trail in the same place, I'll make a big production out of it, because that's almost a certain sign there is a growing colony inside.

Listen for them chewing. Sometimes you can hear them plain as day. Other times the owner may hear them in the middle of the night when it is quiet and they are most active. I intend to add a stethoscope to my kit of inspection tools.

Ants prefer wood softened by decay or dampness. Check these common nest locations:

- doors
- window sills
- structural sills
- joists and girders under leaking sinks or bathtubs

Most of these areas are low in the building. But once I found a nest in the attic of a four-story Victorian mansion. The combination of condensation, a leaking gutter, and foam

insulation had trapped moisture in the cornice, plate, and rafter ends, which attracted the ants.

Crafty Insects

When you discover a nest there will be a flurry of activity as the ants gather up eggs. Act quickly to expose the nest completely.

On one job, we exposed a nest that occupied 2 or 3 cubic feet in a 12x12-inch sill-and-girder joint. We were so disgusted by the sight, we quit for lunch knowing it would make us sick to deal with it. A half hour later, they were all gone. Great, we thought, and got on with our work. But the next year, we discovered what was probably the same colony in an even less accessible nest.

"Nests will relocate deeper within the building," according to Mike Peaslee of Modern Pest Control in South Portland, Maine. He recommends spraying ant colonies as soon as you find them with an over-the-counter contact poison like *Raid*.

I sprayed the ants in my garage with Ortho's Hornet & Wasp Killer (made by Chevron) which I keep in my painter's kit. This aerosol has a powerful jet spray that penetrates deep into nesting galleries and cracks. I wear goggles and a long sleeve shirt when spraying and recommend wearing a respirator for indoor work. Pyrethrin is the active ingredient in most over-the-counter ant killers. It's relatively safe but requires caution — you don't want to get it on or in you.

According to Chevron's Emergency Information Service, sunlight breaks down the active chemicals. Once it has evaporated from the wood, the wood is relatively safe to handle.

There are likely to be other colonies near a discovered nest. Recommend to the owner that the whole house be treated by a professional exterminator. Professionals use powerful insecticides that the ants carry back to the nest. They also can apply the chemicals effectively without hazardous overtreatment.

Common areas of treatment are exterior cracks and crevices, the foundation perimeter, and certain interior trouble spots like joists and girders under leaking sinks and tubs. Most exterminators offer a one-year guarantee. If they are called back, there is probably a nest in an unusual location that is reinfesting the building.

The cost of treatment for a 25x40-foot one-and-a-half-story house is about \$250.

If damage is limited, repairs might not be necessary. But be sure to have the area treated so the ants don't just move back in. If damage to structural members is extensive, wood replacement is the usual treatment, although structural epoxy repair could be effective too.

Keep Them Out

Prevent infestation by following these precautions:

- Find and resolve moisture and decay problems. When the swarmer ant is hunting for a new nest site she will always pick damp soft wood over dry wood in good condition.
- Remove scrap wood from cellars, crawl spaces, and backfills.
- Be sure old beams or new ones that have been air-dried outdoors are not infested.

Even new millwork can be a source of infestation. Out of the 200 to 300 cases he treats each year, Mike Surran of York County Pest Control in Saco, Maine, sees two to three cases of carpenter ant nests in new hollow-core doors brought in for renovation or remodeling.

John Leeke, of Sanford, Maine, restores and maintains historic buildings. He also consults with contractors, architects, and owners working on older buildings. If you have questions on restoration topics, you can contact him c/o JLC,RR#2, Box 146, Richmond, VT 05477.