



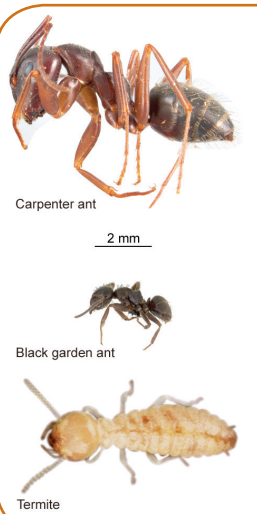
Carpenter Ants

Pest Note



Photos courtesy of: Dr. Henri Goulet, Canadian National Collection of Insects and Edward H. Holsten, USDA Forest Service, Bugwood.org and Susan Ellis, Bugwood.org

Canada



Photos: Pest and Diseases Image Library, Bugwood.org; April Nobile, antweb.org; Scott Bauer, USDA Agricultural Research Service, Bugwood.org

Carpenter Ants – what are they?

Carpenter ants vary in length from 6 to 25 mm. Workers are generally 6 to 13 mm long. The reproductive forms are distinct in size, with males ranging from 9 to 10 mm while females are the largest, varying in length from 12 to 25 mm. The body is divided into three segments, with a very slim waist separating the thorax and abdomen. Their elbowed antennae are segmented. Male and female adults have wings at mating time, and the front wings, if present, are much longer than the hind ones. The red and black carpenter ant has a dark brownish black body, with a reddish brown thorax. The black carpenter ant is uniformly dark brownish black. The red carpenter ant and the black carpenter ant are two of the most common types found in Canada.

All ants undergo complete metamorphosis, so their nest may contain eggs, larvae and pupae as well as adults. Carpenter ants live in large colonies consisting of hundreds of workers, all sterile females, several reproductive males and females, and one or more queen. The male members exist in the colony only briefly, dying soon after mating, and the fertilized females fly on to new sites where they establish new colonies. During warm weather, eggs are laid and develop through all stages in about 66 days (under optimum conditions). The workers are responsible for caring for the young and foraging for food to feed the rest of the colony. When part of an established colony wanders into a nearby structure, it sometimes establishes a smaller satellite colony there. Some experts actually consider this as the main mechanism for house invasions by carpenter ants.

Carpenter ants eat both plant and animal matter. Their natural food sources consist of insects and other small invertebrates, and sweet exudates from aphids and other insects. Protein and sweet foods found in and around homes also provide sustenance for foraging workers. Workers will consume food on the spot, and regurgitate it back at the nest to nourish developing larvae, non-foraging workers and the queen.



Carpenter ant queen
Jim Kalisch, Department of Entomology, University of Nebraska-Lincoln

What can they do?

Carpenter ants construct nests by burrowing into wood. Outdoors, they are found in dead trunks of standing trees, stumps, or logs, or under fallen logs and stones. They can, on occasion, mine sound wood, but usually choose a soft wood, such as pine. Because of their preference for moist, decaying wood, their presence in a home can signal a moisture problem, or wooden structures suffering from decay. These ants excavate galleries much longer than those produced by termites. The wood is not eaten but ejected from the nest as sawdust-like shavings.

In addition to tunnelling in the trim of buildings, wooden steps and sills, colonies can nest in houses without attacking structural timbers, using hollow spaces such as wall voids, attic spaces, hollow doors, and can even be found behind books in libraries, behind drawers in dressers and cabinets, and in styrofoam insulation.

How can I manage them?

A thorough inspection of areas of high moisture, wood in contact with the soil, areas of improper ventilation, and exposed structural lumber is the first step. Carpenter ants get into houses in several ways: through windows, holes in foundations, heating ducts and air-conditioners, along power or telephone cables, points where tree branches or other vegetation come in contact with the house, or via wooden structures attached to houses, such as porches and sheds. Firewood brought into the house can also be a source of carpenter ants.



Carpenter ant damage
Photo: R. Werner, USDA Forest Service, Bugwood.org



Responsible Pesticide Use

Before Purchasing a Pesticide

- Identify the pest correctly.
- Use physical control methods and alternatives to pesticides.
- Read the label directions and safety precautions before buying the product. The label must include the name of the pest to be controlled and the treatment location (e.g., indoor, outdoor, garden uses, pet treatment).
- Purchase only the quantity of product needed for the treatment.
- Consider hiring a licensed pest control operator.

Using a Pesticide

- Carefully read all label instructions and precautions before using pesticides.
- Do not drink, eat or smoke while applying pesticides.
- Persons and pets should vacate the area during treatment. Cover or remove aquaria.
- If kitchen area is to be treated, cover or remove food, dishes and utensils.

After Using a Pesticide

- Always wash your hands thoroughly after handling any pesticide product.





Carpenter ant damage on porch roof
Photo: Gerry Duprey



Sawdust shavings ejected from a carpenter ant nest
Photo: Edward H. Holsten,
USDA Forest Service,
Bugwood.org

Signs of infestation

- Determine if there is actually an infestation of carpenter ants or if it is a case of individual ants wandering in the house. Look for a high concentration of ants in a particular area like under the kitchen sink.
- Pay attention to foraging ants and the patterns of their movement. For example, there may be a trail communicating with a parent colony outside. Note: they are most active after sunset.
- Notice if there are swarms of winged reproductive ants trying to escape to the outdoors, usually in the spring.
- Look for piles of sawdust-like borings expelled from their galleries and slit-like openings in woodwork.
- Listen for the sound of an active colony which will produce a dry rustling noise that can be heard best at night during high ant activity and quiet time in the house. The use of a wine glass or stethoscope can be helpful to listen to the walls.

Physical Control

Clear away any decaying or infested wood from around buildings and remove firewood from inside the premises and away from the sides of buildings. Do not bury stumps or other wood debris in proximity of the house. Pay attention to the state of landscaping elements such as decorative bark, retaining walls and driftwood. Humidity problems in the home should be investigated and corrected. Decaying or infested structural wood should be replaced with sound material. Removal of food sources will discourage ants from invading buildings. Keep food in sealed containers and regularly sweep up all crumbs and other food fragments. Good sanitation should also prevent re-infestation.

Products

Chemical control methods have two major goals: elimination of existing nests and prevention. Chemical control is most effective when used in conjunction with physical control. It should be noted, however, that once a colony is well established, it is usually necessary to locate and treat the actual nest site for permanent or long-term control. In the case of a satellite colony, the parent colony should be located and destroyed for most effective control. In difficult situations consider using a professional exterminator.

Domestic class products for ant control available to homeowners will generally contain a pyrethrin (e.g., permethrin) as the active ingredient. The application of such products as boric acid or diatomaceous earth can be effective in reducing the number of ants infesting a house. If you intend to do an indoor application, check the product label to make sure it is registered for use inside the home. There are also several other commercial products available to professional pest control operators.

For commercial food processing or preparation areas, use products specifically labelled for such sites. Carefully follow all label directions and precautions. Remove or cover all food, packaging material, and utensils before treatment. Afterwards, wash all surfaces that may be in contact with food and rinse thoroughly with water before re-use.

Note: When applying pesticides, it is advisable to leave any dead ant bodies where they are. Other scavenging ants will either ingest or bring the dead ant back to the nest to feed the rest of the colony. In this way, the pesticide's effect is passed on.



Photo: Omar Fahmy

© Her Majesty the Queen in Right of Canada, represented by the Minister of Health Canada, 2010
HC Pub: 91044
ISBN: 978-1-100-15307-0
Catalogue Number: H113-1/4-2010E

Health Canada Pest Management Regulatory Agency

2720 Riverside Drive, Ottawa ON K1A 0K9
Phone from inside Canada: 1-800-267-6315

Phone from outside Canada: 613-736-3799 (long distance charges apply)

Fax: 613-736-3798

www.healthcanada.gc.ca/pmra



- Do not permit persons or pets to contact treated surfaces until residue has dried completely.
- Provide adequate ventilation of treated areas after use.
- Wipe clean all surfaces that come in direct contact with food, such as counters, tables and stovetops, including indoor and outdoor surfaces.
- Always store pesticides out of reach of children and pets and away from food and beverages.

Accidental Poisoning

- Call a poison control centre immediately and seek medical attention.
- Take the pesticide container or label with you to the emergency facility or physician.
- Follow first aid statements on the label.
- In case of accidental poisoning of pets seek veterinary attention immediately.
- Report pesticide incidents to manufacturers (phone number on label). They are required to send them to Health Canada.

Disposing of Pesticides

- Do not reuse empty pesticide containers. Wrap and dispose of in household garbage.

Note: These are general recommendations. Consult the label for specific instructions. When in doubt, contact a professional.

Health Canada

Pest Management Regulatory Agency
www.healthcanada.gc.ca/pmra
1-800-267-6315

