BUG BIZ
Pest Management and Insect Identification Series
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Camponotus nearcticus, Small Carpenter Ant

(Hymenoptera: Formicidae)

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Description

The small carpenter ant, *Camponotus nearcticus*, is a widely distributed member of the large ant genus *Camponotus.* As the common name suggests, small carpenter ants are smaller than many other species of carpenter ants. Workers range from 1/7 to 1/3 of an inch (3.5 to 7.5 mm) in length. The queen ranges from 1/6 to 2/5 of an inch (4 to 10 mm) in length. They are dark brown to black in coloration with a shiny abdomen (technically the metasoma in ants) that is mostly hairless. The abdomen is connected to the thorax (technically mesosoma in ants) by a narrow one-segmented petiole. Some populations are reported to possess reddish-brown thoraces. Reproductives of both sexes possess long wings, but the male reproductives are quite different in appearance from the females, with narrower bodies and long, spindly legs. The eggs are small, oblong and white in color. Larvae are legless, white or pale yellow and grublike in appearance. Pupae are enclosed within a pale-yellow silken cocoon produced by the larva that is the same size as a typical worker. These cocoons are often mistaken for ant eggs but are much larger than the eggs.

Other species of carpenter ants share many morphological similarities with *Camponotus nearcticus,* and correct identification requires detailed study by an ant specialist or qualified insect diagnostician. More than 20 species of carpenter ants may occur in Louisiana, many of which are similar in appearance. Two subspecies names, *Camponotus marginatus decipiens* and *Camponotus fallax rasilis*, appear in older literature and are now considered synonyms of *Camponotus nearcticus.*

Life Cycle

The life histories of many carpenter ant species are similar, and that of the small carpenter ant can be considered typical. Small carpenter ants are common in various kinds of forests, where they forage in the canopy. They may be active day and night but are more active at night. Winged reproductives are produced during fall and overwinter in the nest. Mating occurs during the following spring, when males and females leave the nest and engage in nuptial flights. Males die soon after mating, and mated females (now queens) remove their wings and search for nesting sites in wood. The young queen excavates a small chamber where she lays her first eggs. After hatching, the larvae are cared for by the queen and undergo a series of growth stages before transforming into the pupal stage within its silk cocoon. Development from egg to adult can require about three months, depending on temperature. As subsequent generations of workers are produced, the colony expands, with workers taking over responsibilities for food gathering, maintenance and care of the queen and brood. Foraging workers harvest honeydew, nectar of various plants,



Top view of a winged adult male Camponotus nearcticus (Joseph Berger, Bugwood.org).

animal excrement, and dead and dying insects. Colonies are generally small, comprising several hundred to more than 500 individuals. As the colony grows, workers expand galleries inside the woody substrate, leaving behind a sawdust-like material that they push from the nest. This accumulates as a pile below the entrance holes.

Ecological Significance and Pest Status

Small carpenter ant is widely distributed across North America. It is more common in the east, where it occurs from Canada to Florida. In areas where suitable forest habitats occur, small carpenter ants may find their way into homes and outbuildings, especially in situations where firewood or wet, partially rotten wood provides ample nest and foraging habitats.

In Louisiana, small carpenter ant is not considered an economically important pest. Structures with wet, rotting wood are subject to infestations by this species and other species of carpenter ants, and occasional serious structural damage can occur that is often associated with termite infestations.

Control

Monitoring. Inspecting homes, decks and outbuildings for holes or piles of sawdust gallery material is necessary to identify active infestations. Foraging worker ants do not necessarily indicate structural infestations but indicate the need for further inspection. Moist wooden structures such as leaking roofs, gutters, water pipes, inadequately sealed fascia and soffit boards, can provide entry points for mated females seeking to establish colonies.

Cultural control. Simple measures can reduce the chances of infestations with these and other species of carpenter ants. Keeping tree branches away from houses or buildings reduces the chances of expansion of a nest into structures. Storing firewood in a dry place away from structures is recommended to prevent occasional infestations of a wide variety of wood-inhabiting insects. Insecticide treatment of firewood to protect it is not recommended.

Chemical control. Direct treatment of the nest with a liquid insecticide labeled for control of carpenter ants is the most effective method of rapid colony elimination. Baits labeled for carpenter ants are also effective but slower acting. Always follow legally mandated label directions. Colonies occurring outdoors do not pose a threat and should not be treated. For current treatment recommendations, consult the LSU AgCenter's most current Insect Pest Management Guide.



Camponotus nearcticus worker carrying pupa (Gary Alpert, antwiki.org).



Side view of Camponotus nearcticus worker (April Nobile, AntWeb.org).

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Contact Us: For advice about arthropod identification or diagnosis, contact the LSU AgCenter Department of Entomology. Reach the department through the Contact Us webpage: https://bit.ly/36c4awm.

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