

asleep and that a welt later resulted from the bite. She also stated that she had found one of the ants attached to the lip of her dog. Although this ant has no sting, the large workers can inflict a painful bite with their strong mandibles, and the wound can be aggravated by the injection into it of formic acid.

During the warmer months of the year workers may invade houses from their nests outdoors in trees, logs, stumps, or other places. Quite often the ants make conspicuous trails on the lawn or soil in passing to and from their nest. Infrequently the ants are accidentally brought into houses on firewood stored in the basement. It appears quite definite that houses in the vicinity of trees, logs, or stumps suffer more from carpenter ant attack than houses some distance from them, and that older houses are more frequently attacked than new ones because the woodwork in them may be in poorer condition. The ants seem to enter houses through faulty, decayed, or moist wood, and although their nest may begin there, it may extend into adjacent solid woodwork. Black carpenter ants may attack the woodwork of houses in various places but quite often they attack the beams, underpinnings, porch pillars, window casings, and external trim. The presence of a nest in a house can often be detected by the fine sawdust and fragments of insects thrown out by the ants from small holes in the woodwork. Someone states that laboratory studies and numerous observations of carpenter ant damage to buildings suggests that the ants prefer to nest in moist wood. Attempts to induce the ants to colonize in wood containing less than 15 percent moisture were generally unsuccessful. He further remarks that the moisture content in well-constructed, heated structures should ordinarily vary from 6 to 10 percent, and properly air-seasoned lumber, from 12 to 15 percent; wood kept at this moisture equilibrium should be free from carpenter ant attack. Excessive moisture content of wood is therefore to be prevented by keeping it from direct contact with the ground, from seepage, from condensation, or poor ventilation. Workers frequently (but not always) forage at night, and for that reason the housekeeper may fail to see them. In their search for moisture, the ants may appear in the bathroom, the kitchen sink, and lavatories. Workers will even crawl on to dishrags or towels in their quest for moisture. Black carpenter ants occasionally nest in houses in such unusual places as trunks, or chests of drawers stored in the attic or basement. They have also been reported occurring in a roll of waxed paper.

Friend and Carlson, in studying damage by these ants to chestnut poles in Connecticut, found that 10 percent of the poles had to be replaced each year because of the ants' nesting habits. At the time of their investigations, each replaced pole cost \$30 to \$35. Most of the damage occurred from ground level to about 6 feet above ground, and consisted of both longitudinal and radial injury, the latter being the most serious. They were of the opinion that nests originated in decayed spots, deep checks, knot holes, or other types of injury, and that the solid wood was not attacked until the colony became large. Snyder, however, found that sound chestnut poles set in dry ground in woodlands were damaged by the ants to some extent, but he did not elaborate on the nature of the wood at the ants' point of entry.