

# *Ants As Pests - - -*

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Species of ants commonly found in Connecticut. Left to right are: Carpenter ant, winged; carpenter ant, worker; pavement ant, winged; yellow ant, worker; Pharaoh ant, worker; pavement ant, worker; large lawn ant, worker; yellow ant, winged; large lawn ant, winged. Drawing is about 1 1/3 times natural size.



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Ants are probably the most abundant insects in Connecticut. Some species nest in houses, a few in trees, and many in the ground. The only situations in the State unsuitable for ants are the areas flooded frequently by water. Ants can be persistent and annoying pests. They may feed on bread, cake, meat, peanut butter, and sometimes cereals. The carpenter ants may nest in timbers in houses, occasionally causing serious damage. Ants in the garden may excavate nests around the roots of plants and bring in root aphids. Some species of ants feed on honeydew excreted by aphids infesting the leaves and stems of garden plants. In the lawn the mounds of sand brought up when the nest is made disfigure the lawn and dull the lawn mower. Large nests of some species frequently kill the lawn grass, and coarse "weed" grasses survive.

In defense of ants, it must be said that their principal food is other insects. Although they make no selection of their prey, injurious caterpillars form no small part of their diet. Several species of ants have been observed feeding on cankerworms, for instance. The ants usually found in houses also feed on other insects, but their invasions of the pantry more than offset the good they may do.

## Ants in Houses

Two imported ants are very common in Connecticut.

The pavement ant (*Tetramorium caespitum* L.) is probably the most common ant in Connecticut homes. It is a small ant about one-tenth of an inch long, and appears black in color. It nests in the foundation, or under masonry porches, and frequently under sidewalks. In the spring winged females about half an inch long sometimes appear.

The Pharaoh ant (*Monomorium pharaonis* L.) is a very small yellowish-red ant, about one-twelfth of an inch long. It may nest in the walls or foundations. Thirty years ago this was the most common house ant in Connecticut. It almost disappeared, however, when the pavement ant spread through the state. Now it seems to be increasing in importance as a pest.

The most common native ant is the black carpenter ant (*Camponotus herculeanus pennsylvanicus* De G.). Workers of this ant are black, and frequently more than one-half inch long. They usually occur in small numbers, rather than in droves. The carpenter ant nests in wood, either in trees or in buildings. The nest is started in rotting wood, and the excavated "sawdust" is cast aside. The presence of this sawdust helps to locate the nest.

Any one or all of these three species may infest the pantry.

The yellow ant (*Lasius interjectus* Mayr.) is usually found only as a winged female. In the open this ant colonizes aphids on the roots of plants. It frequently nests in unexcavated areas under houses, where there are no plants. It has never been found in the pantry, and its habit of nesting under houses is a complete mystery.

Almost any ant nesting in the lawn or garden may wander into the house, and occasionally find the food supply. However, such invasions are usually rare.

## Ants in Gardens

A number of species of the genus *Lasius* may nest around the roots of plants, and bring in root aphids. Control of the ants usually is sufficient to control aphids, if done early in the growing season.

The ants that visit aphid colonies on leaves and stems of plants usually have little to do with the abundance of the aphids.

## Ants in Lawns

Ants of the genera *Lasius* and *Formica* are common in lawns and on golf courses. Unless the mounds are large, no serious damage is done to the grass.

## Control of Ants

There are three general methods of controlling ants: (1) use of poisoned baits, (2) direct treatment of the nests and (3) treatment of surfaces over which the ants may walk, using a residual contact insecticide.

Baits are usually formulated with a very small amount of poison, so that the workers are not killed immediately. Instead they take the poisoned food back to the colony and feed it to the ant larvae. By the time they make four or five trips, both the young and the workers may be killed.

Commercial poisoned baits have been very effective, especially those containing thallium sulfate. If used according to directions, there is little hazard of harming children or pets.

The other methods are useful in specific cases, as discussed below.

Chlordane has proved to be highly effective in killing ants, both when applied directly to them and to surfaces over which they crawl. It is prepared as a dust for use dry, or as an emulsifiable liquid concentrate or a wettable powder for use in sprays.

Chlordane is not a violent poison, but some care should be observed in its use. It should not be stored in a pantry with food, or in a medicine chest with drugs. Occasionally chlordane causes a rash on the skin, especially if used in oil solutions. It is best therefore to use care to keep the solution off the skin, and to wash thoroughly immediately after using chlordane.

## Control of Ants in the Garden

When soil is known to have been infested with root aphids in previous years, aphids and ants can be controlled by treating the soil before planting flowers. A 5 per cent chlordane dust may be applied at the rate of 5 pounds to 1,000 square feet of area, and raked in 2 or 3 inches deep.

Ants nesting in the garden during the growing season can be killed by mixing 4 ounces of chlordane wettable powder or emulsion with 50 gallons of water, and sprinkling it over the surface of the soil and plants at the rate of 1 gallon to 20 square feet.

## **Control of Ants in Lawns**

Individual nests in lawns may be eliminated by treating each one with 5 per cent chlordane dust, or chlordane diluted in water. For the water treatment, 8 teaspoonfuls of wettable powder or of emulsion may be used in 1 gallon of water.

The entire lawn area can be treated with either chlordane spray or dust to control heavy infestations. The rate of application is the same as in gardens: 5 pounds of 5 per cent dust, or 4 ounces of wettable powder in 50 gallons of water to 1,000 square feet of lawn. Additional sprinkling is desirable to wash the chlordane into the nests.

This same treatment may also control grubs of the Japanese beetle and related species.

## **Control of Mound-Building Ants**

These ants are especially destructive in forest plantations. Two ounces of chlordane wettable powder for each two feet of mound diameter may be spread evenly over the mound and scratched in with a rake to eliminate the ants.

## **Control of Carpenter Ants**

Direct treatment of the carpenter ant nest usually kills the entire colony. A 5 per cent chlordane dust forced into the opening of the nest in the timber or tree usually reaches enough area to kill all the ants. A spray of chlordane in kerosene, which can be purchased ready for use, is also effective. If the nest cannot be found, the chlordane spray can be applied to the floor and baseboard over which the ants walk.

Ants attacking food can be controlled in the same way. Chlordane spray applied to the areas over which the ants walk should kill them. In no case should the food be sprayed unless it is destroyed immediately. It is also best not to spray the shelves on which food is stored or prepared unless the surfaces are washed thoroughly before use.

Ant baits can be used to kill these ants. A small container placed where the ants walk is usually sufficient.