

# Termites

We are entering the time of year when termite activity comes to the forefront because of blatant termite activity in the form of swarms. Termites swarming from wood or the soil often are the first signs of a termite colony. Subterranean termites are the most common and thus the most destructive wood-destroying insects in the United States. Termites feed on cellulose, primarily dead wood and wood by-products.

## Types of Termites

Subterranean termites live in below ground colonies that can contain up to hundreds of thousands of termites. Termite colonies have tunnels that can extend hundreds of feet in all directions. Soldiers, reproductives, and workers are the three types of termites found in termite colony.

Soldiers are creamy white to grayish-white in color, wingless and soft-bodied. They have a large, rectangular, yellowish-brown head with large jaws. The soldiers' primary responsibility is the defense of the colony.

Reproductives can be male or female, winged or wingless. Both male and female reproductives produce offspring. Reproductives are black and about 0.4 inch long, with pale or grayish, translucent wings. A king and queen of primary reproductives head a colony.

Workers are creamy white to grayish-white with a round head about 1/8 inch long and are blind, soft-bodied, and wingless. Workers are the most prevalent in a termite colony, and they are the termites that eat wood. Workers search for food and water,

build and repair shelter tubes, feed and groom other termites, care for eggs and young, and participate in colony defense.

## Detection of Termites

Subterranean termites may be detected by wood damage or by the presence of mud tubes or the sudden appearance of winged termites.

## Winged Termites

A "swarm" is a group of adult male and female reproductives that leave their colony in an attempt to pair and initiate new colonies. Swarming is triggered when temperature and moisture conditions are favorable, usually on warm days following rainfall usually during March and April. Swarming occurs in mature colonies that typically contain at least several hundred thousand termites.

Termite swarmers have two pair of long, equal-length wings that break off easily and straight antennae with a thick waist. Winged termites can be differentiated from winged

ants, which have elbowed antennae, a small waist, and two pair of unequal-length wings that are not easily detached. Ants are generally harder-bodied than termites.

### **Mud Tubes**

Other signs of termite presence include mud tubes and mud protruding from cracks. Subterranean termites transport soil and water above ground to construct mud tubes that allow them to tunnel across exposed areas to reach wood.

### **Wood Damage**

Termite damage to the wood's surface often is not self evident because termites tunnel within the wood as they feed. Wood damaged by subterranean termites generally have a honeycombed appearance, because termites feed along the softer grains, not the entire wood.

### **Termite Prevention**

Prevention of subterranean termite infestation of wooden structures centers upon disrupting their ability to locate moisture, wood, and shelter.

Moisture accumulation near foundations and crawlspaces should be avoided. Termites must have water to survive. Diverting water away from foundations with properly functioning gutters, downspouts, and splash blocks are vital to preventing termites. Soil needs to be sloped away from the foundation in order for surface water to drain away from the building.

Wood, mulch, paper, etc. that is in contact with soil provides termites with ready and unobservable access to food. It is very important to eliminate any contact between the wooden parts of the house foundation and the soil. Maintain at least 10 inches between the soil and porch steps, lattice work, door or window frames or any other wooden materials. On a structure wood below 18 inches of grade must be treated.

### **Control & Prevention Measures**

#### **Soil Barrier Termiticides**

Conventional soil treatment methods rely on creating chemical barriers in the soil that are toxic to termites. Many of these treatments also have repellent characteristics causing termites to avoid treated soil. To obtain termite control for extended periods of time, such termiticides must be applied as a continuous barrier in the soil next to the structure's foundation. If there are untreated areas in the soil, termites may circumvent the chemical treatment.

#### **Baits**

Bait technology uses wood or a cellulose material favored by termites that is impregnated with a slow-acting toxic chemical. Termite workers feed upon the bait and transfer it to other colony members, eventually reducing or eliminating the entire colony.

In-ground bait stations are inserted in the soil next to structures and near known or suspected sites of termite activity. In-ground bait stations often initially contain untreated wood that serves as a monitoring method. The monitoring wood is replaced with the toxicant once termites have been detected feeding on the untreated wood. Bait systems must be serviced on regular monthly intervals to function properly.

### **Prevention Tips**

Borates and pressure-treatments protect wood against termites. However, even creosote-treated railroad ties and telephone poles, and CCA-treated wood, over time, can be subject to termite damage.

Never store firewood, lumber, newspapers, or other wood products against the foundation or within the crawl space.

Prevent vines from touching any structure.

Avoid or minimize use of wood mulch next to foundations.

Seal cracks in foundation to prevent termite access.

Make sure downspouts and splash blocks are diverting water away from the foundation.

Cut back shrubs from siding and foundation to allow air and light around foundation.