West Virginia University
Extension Service

6001

Termites

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In nature, termites are beneficial, helping to break down the wood in dead trees. In cities and towns, however, the wood they want for dinner may just be part of someone's house. Because the likelihood of a termite infestation is greater in land that was previously forest than in land that was previously pasture, much of West Virginia is prime termite territory.

Identification

Termites are social insects that live in a colony with a king, a queen, and several other "castes" known as workers and soldiers. The winged reproductive termites, the kings and queens, are about 1/2-inch long and dark brown with whitish wings. Wingless workers, the stage that actually feeds on the wood, are white or cream-colored and 1/4-inch long. Wingless soldiers are 1/4-inch long and white with a brown head and large jaws.

If you find that you have a termite infestation, the most important thing to remember is not to panic.

Winged termites are sometimes confused with winged ants. There are, however, several major distinguishing characteristics. Termites have four wings of equal size, straight antennae, and a broad waist, but ants have a pinched waist, elbowed antennae, and hind wings that are much smaller than the front wings. Another easy identification character is that termites hold their wings flat down over their backs; many ants hold their wings up at a 45-degree angle. Also, termite wings break off very easily, so it is not unusual to find a pile of loose wings near places where termites have swarmed.

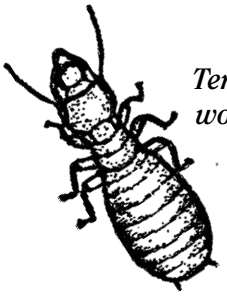
Termite-damaged wood is characterized by galleries running lengthwise in the wood, following the growth rings. The gallery walls are covered with a mudlike substance. Mud tubes will sometimes be visible, extending across the surface of wood members or foundation blocks in houses.

Biology and Habits

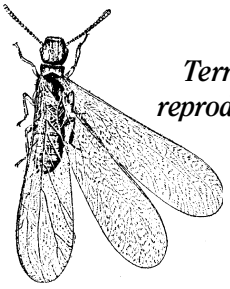
The eastern subterranean termite, *Reticulitermes flavipes,* is the most common termite species in West Virginia. As the name suggests, their nest is located underground in moist soil. Termite workers forage for wood to eat while maintaining contact with the nest. The eastern subterranean termite normally swarms in the spring, beginning in mid-March through April and May. Swarming often takes place after a rain, when the moisture softens the ground. After swarming, the reproductives lose their wings, and a male and female, the new king and queen, burrow into the ground to start a new colony.

Prevention Methods

Proper building design and construction practices can go a long way toward preventing termite infestations. There should be sufficient distance between wood and the ground in crawl spaces, at least 18 inches between floor joists and soil, and at least 12 inches between floor beams and the soil. No wood should come in contact



Termite worker



Termite reproductive

with the ground. Treated wood should be used for high-risk areas such as deck supports.

Dampness in crawl spaces should be reduced by using ventilation openings and plastic soil covers. Gutters and downspouts should be placed so they direct water away from the foundation. Tree stumps, roots, and wood debris should be removed from areas adjacent to the house.

Inspecting for Termites

All houses should be inspected periodically for termites. If you contract with a pest control firm, it will inspect annually. However, with a few proper tools, you can inspect your own house before you call in a professional. You will need a good flashlight, plus a hammer and an ice pick for sounding and probing wood.

Your inspection should include an examination of the foundation of the house, garage, porches, patios, sidewalks, and window and door frames. Check roof eaves and gutters, behind shrubbery, fences, trellises, exterior fuse and meter boxes, areas where utility lines enter house, and any wood adjacent to swimming pools. Check the soil moisture around the house for proper drainage.

In a crawl space, check the insides of beams, chimney bases, and piers; areas near porches, patios, planters, and bathrooms; the top of the foundation where floor and wall intersect; and any plumbing and utility lines.

Indoors, examine door and window frames, baseboards, hardwood floors, joints or cracks in the foundation, any blistered areas or stains on walls or ceilings that may indicate water leaks, areas where pipes enter the floor or foundation, raised or split areas in floor covering, and areas around plumbing fixtures. Inspect the attic for mud tubes, water leaks, or wood decay.

Control Strategies

If you find that you have a termite infestation, the most important thing to remember is not to panic. Termite damage progresses rather slowly. Do-it-yourself termite treatments are not recommended. Professional pest control operators have the knowledge and the equipment necessary to treat for termites in an effective manner. Obtain estimates from at least three professional pest control companies before deciding what to do. Ask which chemicals they use and how they intend to apply them.

The possibility of a termite swarm soon after a house treated is not uncommon and does not indicate that the treatment was performed incorrectly.

Less toxic insecticides for termite control now include several of the pyrethroid insecticides. These termiticides are applied to the house with tools that inject liquid into the soil around and underneath the structure. The idea is to create a chemical barrier to isolate the termite colony from the house. Since the cancellation of chlordane, the average cost of treating a house has more than doubled, from around $400 to about $1,000. At the same time, the effective length of treatments has decreased from 30 to 40 years to 5 to 10 years. The possibility of a termite swarm soon after a house treated is not uncommon and does not indicate that the treatment was performed incorrectly.

Other less toxic control alternatives include boric acid products, insect growth regulators, and nematodes. The boric acid products labeled for termite control are not applied to the soil but are applied as a spot treatment to damaged or susceptible wood.

One of the most innovative termite control tools that will soon hit the market is a termite bait block. The block is impregnated with an insect growth regulator that disrupts development of entire termite colony.

Nematodes are tiny worms often touted as "biological control for termites." However, regulatory officials have judged them unacceptable as a termite control agent in West Virginia.

Preparation of this document was financially aided by a grant administered by the Environmental Stewardship Initiative Team, West Virginia University Extension Service.

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Rachel B. Tompkins, Director, Cooperative Extension Service, West Virginia University.