

Quick Facts...

Termites can damage homes and other wooden structures in Colorado.

They are an increasing problem in the state, particularly in urban areas.

Precautions can be taken to avoid termite infestations and effective controls are available.

It is important to remember that termite infestations build up very slowly. There is plenty of time once an infestation is discovered to select the best course of action and to make sure that all corrective measures are done properly



© Colorado State University Cooperative Extension.7/95.



By Wendy L. Meyer¹

Description

Termites are small to medium-sized, soft-bodied insects that live in colonies and feed on wood and wood products. In these colonies, different individual types or castes are responsible for specific tasks involved in colony maintenance. Each caste has a distinctive appearance.

The form of termites most commonly seen is the winged (alate) form. These are produced in great numbers at specific times of the year, usually spring or fall. These are the new kings and queens that leave the colony in large groups, fly briefly, mate and form a new colony. If these appear inside a structure, an infestation is present. Before a new colony is formed they break off their wings, leaving only a small stub where the wings were attached.

Winged termites often are confused with ants, especially carpenter ants. There are several distinguishing characteristics shown in Figures 1 and 2 and Table 1 (see related fact sheet 5.554, *Carpenter Ants*).

Worker and soldier castes are wingless and unpigmented. They usually are not seen unless there is a break in the nest structure or connecting tubes. Soldiers are distinguished by their larger heads, which may be hardened and dark in color. Their jaws are larger than those of workers.

Detection

Termites are classified into several types based on the type of nest they construct. The most important type in Colorado is the eastern subterranean termite, usually responsible for damage to structures. This is the same species that is a pest in the Northeast. These termites usually maintain contact with the soil in which the main nest is found. They search outside their nest for wood to feed on and construct earthen tubes from the nest to the food source.

Nests appear to be designed to maintain high humidity. Termites very quickly die from loss of body fluids if exposed to outside conditions for very long. A break in the nest structure will quickly be detected and repaired by workers.

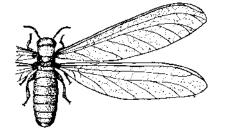


Figure 1. Winged termite.

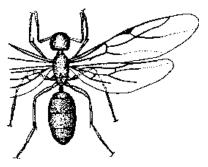


Figure 2. Winged ant.

References

Cranshaw, W., S. Armbrust, M. Brewer, and S. Lajeunesse. 1994. Household Insects of the Rocky Mountain States. Colorado State University Cooperative Extension, Bulletin 557A.

Mampe, C.D. 1982. "Termites." In Mallis, A., Handbook of Pest Control, Franzak and Foster Co., Cleveland, Ohio. 177-257 pp.

Truman, L.C., G.W. Bennett and W.L. Butts. 1976. Scientific Guide to Pest Control Operations. 3rd ed. Harvest Publishing Co., Cleveland, Ohio. 276 pp.

Weesner, F.M. 1965. The Termites of the United States, a Handbook. National Pest Control Assoc., Elizabeth, NJ. 70 pp.

¹Colorado State University research scientist, entomology. Illustrations by Thomas J. Weissling.

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Milan A. Rewerts, Director of Cooperative Extension, Colorado State University, Fort Collins, Colorado. Cooperative Extension programs are available to all without discrimination. No endorsement of products mentioned is intended nor is criticism implied of products not mentioned.

The most common way to detect termites is spotting the winged adults emerging from inside a building, generally in the spring or fall. Termites often fly to windows or other light sources. Other less common signs of infestation are 1/4- to 1/2-inch wide earthen tubes from the soil over foundations, masonry or wooden supports; or wood lines with compacted earth-like material confined to the sapwood that yields a dull thudding sound when tapped.

Prevention

Preventive measures can be taken to protect wooden structures from termites. There should be no contact between wood and the soil. All waste wood should be removed from the building site and buildings should not be placed over waste wood burial sites. Also, cinder blocks, bricks or other hollow masonry in contact with wood and soil should be moved or capped shut with reinforced concrete or a metal shield. Any crack or gap in the foundation or plumbing is a potential point of entry and must be sealed. Wooden shingles or supports should have at least 8 inches of clearance above the soil or the termites may construct connecting tubes above ground for a short distance. These tubes are visible signs of an infestation. Use pressured-treated lumber in termite-prone areas. "Termite sand" (10-16 mesh sand) has been used as an effective termite barrier under buildings in other parts of the country.

High humidity helps promote termite infestations. Make sure that crawl spaces are well ventilated. If soil below the building is very moist, consider a barrier such as roofing paper to reduce moisture in structural wood. Poor grading or improper watering can cause soils around foundations to stay moist and favor termites.

A chemical barrier can be used to prevent termites from reaching wooden structures as they tunnel through the soil. This is most effective when applied during construction stages although injection holes can be drilled to introduce insecticides to the soil around and, if necessary, underneath a completed structure. The soil-applied insecticides can effectively deter termites for many years. As with other types of termite control, these procedures are best left to a professional pesticide applicator for the most effective control.

If an infestation is discovered, don't panic--a new colony grows very slowly. The invasion of a structure from a well established colony can be rapid. It is important to obtain a reasonable assessment of the problem before control methods are undertaken. In addition to conventional chemical treatments, existing infestations can be eliminated using a combination of bait stations and low toxicity termite growth regulators. Locate the point of entry and contact a reliable pest control operator. Use the same care in selecting this service as you would for any other service for your home. Once an existing infestation has been treated and eliminated, identify and correct conditions in the structure that may have contributed to the problem.

Table 1: Characteristics of termites and carpenter ants.

Characteristic	Termite	Carpenter Ant
Antennae	Straight, look like strings of	Elbowed
	beads	
"Waist" (attachment between		
thorax and abdomen	Broad, not constricted	Pinched or narrow
Wings	Both pairs are same size	Second pair smaller than front pair
Coloration of winged form	Mostly black, sometimes have	Varies from orange-brown to black
	lighter markings on legs	
Coloration of workers	Cream-colored	Varies from orange-brown to black
Nest	No sawdust, interior may be	Coarse sawdust at entrance,
	caked with mud, may be	nests follow grain, interior smooth
	connected to soil with mud	or polished
	tubes	