A-1 Pest Control Presents

PEST Gazette

BEWARE OF TERMITES

More than 365,000 homes in the U.S. are involved in a fire each year. More than 600,000 U.S. homes suffer termite damage totaling over $1.5 billion annually. This is more than the damage caused by all fires, storms and earthquakes combined. More than 2 million homes require termite treatment each year. Homeowners insurance can help recover losses from fires, floods and earthquakes, but it is almost impossible to get insurance against termites.

Finding out your home has termites scares most homeowners. You typically can't see them, you can't hear them and frequently only a trained inspector can find signs of infestation. Treatment by the homeowner for the control of termites is virtually impossible. Specialized equipment is used and the experts have the knowledge necessary for effective control.

A trained termite control specialist can provide protection from termite infestation. Termites are found in almost every state as well as Mexico and parts of Canada. They eat wood and may also destroy paper products such as books, cardboard boxes, furniture and various other items. Even buildings with steel framing and masonry walls are targets because of the wooden doors and window frames, wooden support beams, cabinets, or shelving.

To learn more about how we can develop a termite management plan best suited to your situation, call a trained professional today.

HOW TERMITES LIVE

There are more than 2,000 species of termites. Only about 70 species invade wooden structures enough to be considered pests. The most damaging are roughly 20 species we call "subterranean" termites because of their living and foraging habits. Two of these, the Eastern Subterranean Termites and the Western Subterranean Termites, are by far the most common, widest distributed and most damaging in the U.S. The following description of biology refers to these two closely-related species.

Termites feed on cellulose, a complex chemical in plant cell walls, and they are very important in the natural decomposition of fallen trees, leaves and other plant products. Subterranean termites build their colonies in the soil or in trees or poles, and they rely mainly on the soil for moisture.

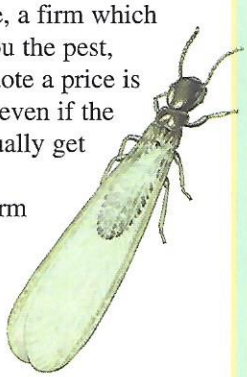
A subterranean termite colony is large (60,000 to 1.5 million termites), and made up of several "castes", each with distinct functions and behaviors. These include reproductives (the queen, king, and winged swarmers), soldiers, and workers. Worker termites are small (0.1-0.25 in. long), creamy-white insects. Soldiers are larger (0.2-0.4 in. long), about 1/20th as numerous as workers, and have a large, dark head, with long, strong, sharp-pointed jaws which they use to attack intruders. Property owners seldom see the worker or soldier termites, but in the spring or fall they may see swarming "winged reproductives." This form of termite can easily be confused with a winged ant unless you look closely.

Selecting a Termite Treatment Firm

Do not panic! In most cases, significant termite damage will not occur in a short period of time. But do not delay your decision indefinitely; damage has already started and termites will continue to cause damage.

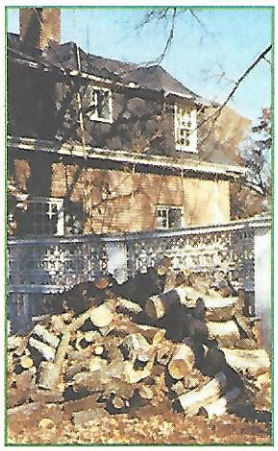
Verify that the firm you select is a member of your state pest management association and the National Pest Management Association.

Compare written proposals. Seek value, avoid making decisions based solely on price. For example, a firm which does a careful survey, and can (will) show you the pest, location and extent of damage before they quote a price is more apt to do an effective job than another, even if the second firm's price is 1/3-1/2 lower. You usually get what you pay for.



Ask friends and neighbors to recommend a firm that they have been satisfied with in the past. Check with the Better Business Bureau for company performance records (complaints).

PREVENTIVE MEASURES YOU CAN TAKE



You can do several things as a home owner to help prevent termite infestations including:

Stack all firewood, lumber or other wooden items, several feet away from your building.

Keep all wood supports of porches, patios, decks, or separate buildings more than one foot from contact with your home's foundations; and use only pressure-treated wood for all construction which contacts the ground. Even treated wood has a limited protection period.

Move all wood-containing mulch (even cedar or redwood) and decorative wood chips at least one foot away from your foundation. Sand and stones can be just as attractive an alternative and they discourage pest (including termite) harborage next to your building.

Repair any leaking water lines or fixtures, especially if they wet any wooden part(s) of your house. Repair any eaves, downspouts, gables or shingles, which allow wooden parts of your house to get wet even occasionally.

Monitor moisture levels and take steps to reduce moisture build-up in any crawl spaces.

Relocate frequently-watered gardens or flower beds as far away from your home's perimeter as you can.

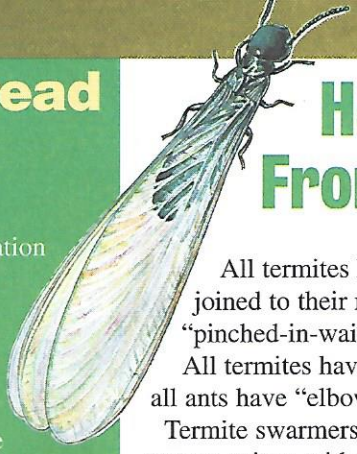
Change your outdoor lights from "white" bulbs to some yellow or pale amber, especially during the Spring, to reduce attraction of any night-swarming termites near your house.

Two Other Types of Pest Termites

Formosan Termites Formosan termites are an exotic species that was accidentally introduced to the U.S. from China and other Asian countries. Their habits are very much like those of our common subterranean species discussed above. They are in the same family of termites, but they belong to a different genus. They are a little bigger and are much more aggressive invaders, forming larger colonies (often 2 million or more). Formosan termites can establish secondary colonies in very moist wood of upper stories of buildings (several stories above ground) and do not need soil contact if there is a nearly constant moisture source. They have been reported from 11 states including: Alabama, California, Florida, Georgia, Hawaii, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, and Texas. Their distribution will probably continue to be restricted to southern areas because their eggs will not hatch below about 20°C (68°F). If you think you might have an infestation of this species, contact a knowledgeable expert from your local pest control firm, or the entomology department of a university, or NPMA to confirm their ID.

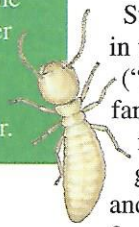
Drywood Termites Drywood termites live in wood which has a fairly low moisture content and is not in contact with the soil or any other moisture source. They must get their needed moisture from the wood they live in, so they are usually found in humid coastal or subtropical areas. They can be transported to other areas in infested furniture, picture frames, decorative wooden objects, or wood for construction. Colonies of these termites are relatively small (fewer than 3,000 individuals), and they increase slowly, requiring several years before any swarmers reproduce. They do not build mud "shelter tubes" which are typical of most species of subterranean termites. Their damage is usually localized, but quite a bit of damage can result from multiple colonies in one building or structure. Drywood termites can be successfully eliminated by a variety of methods which would not be effective against subterranean species. Heating, freezing, focusing microwaves, or high-voltage electric charges on or into all or a portion of the infested structure, or wooden object(s), can kill off whole colonies. Batch fumigation of infested wooden items can also be effective against these termites.

Swarming Can Spread Termites Quickly



After a termite colony reaches a certain population level, usually more than 10,000 for northern temperate subterranean termites, winged (alate) reproductive "swarmers" are produced and leave the colony in a "swarm." A swarm is a mixed group of roughly 50% male and 50% female reproductives which leave the nest at the same time, in a short period of 5-45 minutes. This is usually triggered by a rain, in the Spring (warming temperatures and lengthening days), and occurs usually around dusk or dawn. Large colonies may release swarmers in several pulse-like groups over two or more days when conditions are right.

Swarmers fly upward at first and may be attracted to light. After landing, a female breaks off her own wings, raises her abdomen and emits a pheromone which attracts males of her species. If a suitable male finds her, they touch each other, and he breaks off his own wings. The pair then "run in tandem" for a short time before searching out a suitable piece of wood in which to begin a nest. Their first brood soon takes over the colony maintenance and food gathering, and the queen reverts to only producing eggs. The pair are mated for life. The queen can produce roughly 1,000 eggs per day by her fourth year of life. If either the king or queen dies, other members of the colony can change into reproductives and replace the lost member of the pair.



How to Tell Termites From Winged Ants

All termites have a "thick waist" where their abdomen is joined to their middle body region (thorax); but all ants have a "pinched-in-waist" at that point.

All termites have antennae that look like a "string of beads;" but all ants have "elbowed" antennae.

Termite swarmers have two pairs of long narrow, wings with very few clearly visible veins, and both the front and back pair are nearly equal in size and length. Winged ants have two pairs of wings with several distinct cross veins, shaped like long triangles, and the back pair is much shorter than the front pair.

How Termites Get Into Your House

Subterranean termites live mainly in the ground. They search ("forage") for wood (food) farther and farther from their center of their colony area as their numbers grow. Foragers may make underground tunnels or above-ground "shelter tubes" of mud, feces and debris used to search for new food sources and to connect their feeding sites to the soil. They can enter a building without direct wood contact with the soil through such tubes. Termites can enter buildings through cracks, expansion joints, foam insulation below ground, hollow bricks or concrete blocks, or through spaces around plumbing through openings as narrow as 1/32nd of an inch. Any building, whether constructed with a slab, basement or crawl space foundation, can be infested by termites.

In certain areas of the country you may encounter different types of termites, such as Formosan, damp-wood, or drywood termites. If your home is infested with one of these termites, it may require different or more extensive treatment procedures including wood treatment or fumigation.

Termite Signs

Possible signs of a termite infestation may include:

- Pencil-sized diameter, or larger, mud tubes running across bare concrete or masonry between the soil and any wooden part of your building.
- Thin, small, papery wings, all the same size and shape, 3/8 – 1/2 in. long, on your window sill, counter top or floor (especially if it is late Spring and there has been a recent rain.)
- Thin, "bubbled" or distorted areas of paint on wooden surfaces which feel cool to the touch.

Any wooden building parts (especially if they are support structures) begin to "sag" unexpectedly.

Detecting and Controlling Termites is a Job For a Professional

A thorough inspection by a termite control specialist is the first and most important step in protecting your property. "Experienced" eyes can locate the specific areas in your structure where a termite attack is likely to occur. Special tools such as moisture meters, sound amplifiers or specially trained dogs may be used by some inspectors. If a termite infestation is found, the specialist can design a treatment plan for your property that will control any current infestation and establish a chemical barrier, or baiting system, around the structure to take care of future termite infestations.

Physical barriers, such as a fine stainless steel mesh, a chemically impregnated plastic film, or specific-sized basaltic sand layer have been shown to be effective at preventing subterranean termite infestations.

New baiting techniques offer treatment technicians, and property owners more options. At least three chemical and one biological baits are available. Although several baits are labeled, some aspects of these new systems still await more extensive field experience.

Desert Subterranean Termites

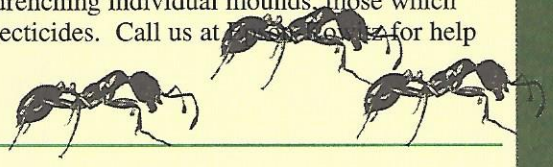
Desert Subterranean Termites, Heterotermes aureus (Snyder), are found mainly in the Colorado and Gila deserts of southern Arizona and California. They live in desert plants, but can also invade and damage poles, fence posts and buildings. They mainly forage in shaded soil or areas made wet by irrigation. They are very similar in size to both the Eastern and Western Subterranean Termites. Swarmers are about 3/8-inch long including their wings. They have pale yellowish to yellowish-brown bodies, and their antennae have fewer than 18 segments. Soldiers have rectangular heads, not narrowed toward the front and about twice as long as wide. Soldiers' mandibles are very slender, longer than the their head is wide, curve slightly inward at their pointed tips, and lack teeth.

These termites eat mainly the spring growth, causing a layered effect in damaged wood. They sometimes bring soil into the galleries. They depend less on moisture and decay than other termites and will attack dry, sound wood. A typical sign of this species are light-colored, almost circular tubes which come down (or "drop") from rafters or ceilings. Mature colonies have about 150,000 workers, many secondary queens, and new colonies are often formed whenever any part of their population including reproductives gets cut off from the main population (or original colony). This species has been reported to forage farther than 223 ft. (68 m) in 11 days, and often builds shelter (mud) tubes more than 24 inches vertically from the soil up to wooden structures above.

Fire Ants

These ants get their common name from their very painful bites and stings. They are small (workers are 1/16" – 1/4" long) yellowish-red to black ants, all in the Genus: Solenopsis, which are distributed from Virginia to Florida, and from Georgia to California. Workers of most species are several different sizes. They usually nest in the ground, but sometimes part (or a whole colony) may be located within a structure, usually in wall voids near heat or moisture (such as near a chimney or a bath trap). The two most important species are the Red Imported Fire Ant (RIFA), Solenopsis invicta Buren, and the Southern Fire Ant (SFA), Solenopsis xyloni McCook. Colonies of the RIFA may be as numerous as 30 to 100 per acre, with 80,000 to 250,000 ants per colony. They sometimes form multi-queen colonies which may be still larger. Mature queens may lay up to 1,500 eggs per day. Swarming may occur 6 – 8 times per year. A typical RIFA colony mound is rounded, about 18" high, and about 24" across. Mounds have caused farm machinery to break, and farm animals have reportedly been killed by multiple stings (thousands) when they stepped into a RIFA mound. People usually develop a blister-like pustule at the site of a sting and true allergic reactions to fire ant stings can be life threatening.

Researchers are field testing some specialized parasitic flies and pathogens against the RIFA, but the most effective and efficient control strategy is to do wide–area (community wide) baiting followed by drenching individual mounds, those which are still active 10-14 days after the baiting effort, using properly labeled residual insecticides. Call us at [illegible] for help in controlling your RIFA problems.



Armadillos

The 9-Banded Armadillo, Dasypus novemcinctus L., is expanding its range, and is found throughout most of Texas, Oklahoma, Arkansas, Kansas, Louisiana, Albama, Mississippi, Florida, Georgia, and South Carolina; and parts of Nebraska, Missouri, and Tennessee. Their common name is derived from the Spanish term for armor, based on their hard outer covering of plates of hardened skin and bones. Adults may be 2-3 feet long, weigh 15-17 lbs., and are brownish-gray (sometimes with brownish spots). The vast majority of their diet is insects, but they will eat other small animals (e.g., mammals or lizards), and even carrion (rarely). Armadillos are mainly nocturnal, but may be active during the day. They usually run away from danger and hide in temporary shallow dens they have dug within their roughly 6-hectare (12-14 Acre) territory. If they are cornered, they may curl up into a ball with their hard outer "shell" covering the soft parts of their bodies. They are usually considered to be only occasional pests, but they can sometimes cause a lot of damage to turf and landscaped areas as they dig for insects such as grubs.

In the U.S., armadillos usually mate in summer, have a delayed implantation of embrios, and bear young in late February to early April the next year. The common U.S. pest species nearly always gives birth to four genetically identical offspring, which result from separation and subsequent individual development of the first four-cell stage of their original embryo. This armadillo species is a natural reservoir of the bacterium which causes leprosy (Hansen's Disease) in humans. Although it is doubtful that they are important at all in (or even capable of) infecting humans, they have become very valuable laboratory host animals in current research studies of this disease.

Since armadillos' damage is almost exclusively due to their digging for insects, get rid of the insects and they will go elsewhere for their meals.