



# PLANT DISEASE AND INSECT ADVISORY

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## Termite Swarming Season Brad Kard, Structural and Urban Entomologist

**Swarming Season.** March, April, and May are the months when swarms of subterranean termites occur in Oklahoma. These flights consist of hundreds to thousands of mature reproductive 'king' and 'queen' termites. These are capable of initiating new colonies if they find a suitable environment after they land. Upon landing, a king and queen pair up and search for cracks and crevices in soil, old tree stumps, and in your home foundation and siding, or in other structures such as wooden sheds, barns, and other outbuildings. If they find a suitable habitat the queen will begin to lay eggs. Fall swarming also occurs in September or October in Oklahoma, but this is not as consistent as spring swarming.

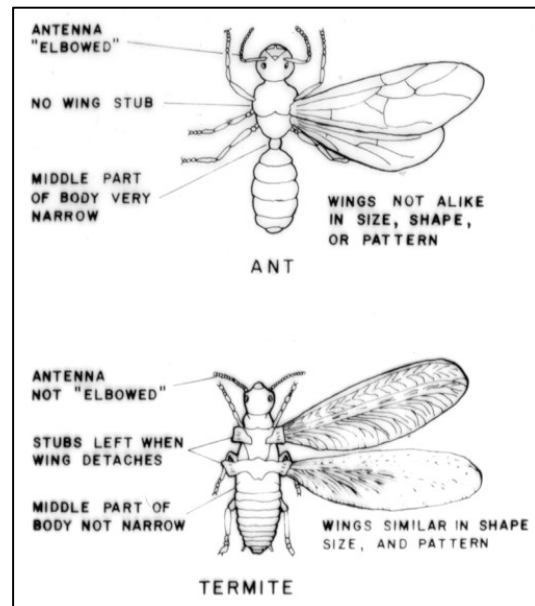


**Are Termites a Problem?** In the natural outside environment termites are beneficial and play an important role in recycling dead wood back to the soil, enhancing soil aeration, and improving soil nutrient levels. They are also an important part of the food web, as many animals including birds, reptiles, amphibians, mammals, spiders, and other insects, such as ants, feed upon swarmers. Termites only become a problem when they infest our wooden structures and damage or destroy the wooden components.

**Does Your Home Have Termites?** If you find termites flying around the outside of your home, this is normal as termites live in the soil throughout Oklahoma. However, swarming does indicate that substantial numbers of termites are in your yard and planter beds. This does not mean that your home is infested, although the presence of swarmers indicates that your home has a risk of becoming infested. If you find swarmers inside your home, then it is almost certain that you have an infestation (unless you left a window or door open and they flew in from the outside). Termites shed their wings after landing and then search for new hiding places. You may find hundreds of wings around window sills, door frames, or on table tops, without seeing the swarmers that have hidden themselves away.

**Inspecting for Termites and Termite Damage.** Termites require high humidity conditions for survival, so they construct mud tubes over concrete foundations and brick walls or wood siding as they forage for wood to eat. The mud tubes maintain humidity for foragers and protect them from predators. As termites forage and build mud tubes, they fill small spaces around window sills, door frames, baseboards, and other structural cracks and crevices with mud. They can also forage through small cracks in a concrete floor or foundation. If wood is severely damaged, a small knife blade or screwdriver tip can easily be inserted directly through the wood surface and into the hollowed-out wood beneath. A small twist can reveal mud and termites immediately beneath the wood surface. The most likely place to find termite damage is in high humidity areas such as under kitchen or bathroom sinks, bath traps, or anywhere that water pipes are in the walls, although they have been found throughout a structure.

**Differences Between Termites and Ants.** Swarming termites and flying ants are both dark brown-to-black in color, so you must look at other body features to separate these two types of insects. The three easiest features to use are the thickness of the waistline where the thorax attaches to the abdomen, the shape of the antenna, and the relative size of the two pair of wings. Ants have a noticeably constricted waist that connects the much wider abdomen and thorax. The waistline of a termite is not constricted and is the same width as the thorax and abdomen it connects. Ant antenna consist of smooth, long straight segments that angle sharply like a bent elbow about halfway up their length. Termites have straight, bead-like antenna like a small string of pearls and they do not elbow. The front pair of ant wings are obviously larger and longer than their short and relatively narrow back wings. Both the front and back pair of slender termite wings are the same size and shape, and extend well beyond the rear tip of their abdomen.



**Managing Termites and the Benefits of working with a Pest Control Company.** The first rule of termite management is sanitation. A homeowner should conduct a thorough external and internal inspection of their home, and if mud tubes are found they should be scraped off walls and siding. All pieces of wood and wood debris in the planter bed, dead shrubs, and any paper or cardboard that may be on the ground near the home should be removed. Wood-chip mulch placed against exterior walls can also harbor termites, and should be raked back six inches away from exterior walls. Firewood should not be placed against a house, and should be kept off the

ground. A homeowner should ensure that water drains away from the house, that rain gutters are free of debris, and that downspouts direct water outward and away. Wet soil, and water around or under a house, creates conducive conditions for termite survival and proliferation. If sanitation and water problems are not first eliminated, then it is nearly impossible to manage and remove termites from a structure.

The primary methods of managing and killing termites in houses today consist of one or more strategies. First is the creation of a treated zone in the soil around your home using liquid insecticides (called termiticides) placed directly into the soil immediately adjacent to your home. The insecticides used to create these barriers have been proven effective in scientific field tests and are registered by the U.S. Environmental Protection Agency for this use. Baiting systems are also available and have been shown to be successful in several studies. Both termiticides and baits have proven effective. However, sometimes even the best strategies and treatments do not solve a termite infestation problem, as no strategy or product has been demonstrated to work 100% of the time.

Termiticides provide immediate results but require an insecticide to be placed completely around your home. Baits require more time to work as foraging termites must find the bait station and consume the bait, but they require less insecticidal ingredient. Some homeowners have used both strategies simultaneously for extra assurance, but if one strategy is working well, then adding the second is a personal choice. Infested wood in a structure can be sprayed or injected with insecticide. This requires opening up walls or drilling holes through walls to reach infested areas. Damaged wood should be replaced with chemically-treated wood to prevent future damage.

Proper termite management treatments to a home require specialized tools and equipment, liquid pumps, hoses, and tanks, and extensive training on correct use and application of termiticides and baits, as well as other pest management products. Almost all termiticides and bait systems are sold only to licensed pest control companies for use by state certified applicators, and are not available to the general public. Generally, for a reasonable cost, local pest management professionals will inspect your home to determine the extent of an infestation, and develop a termite management plan. Their experience and expertise is of benefit to the homeowner, and a thorough inspection and management plan is invaluable.

**Summary.** Termites in our homes and wooden structures are a serious problem in Oklahoma. Spring swarms alarm us and remind us of their presence. But with proper sanitation and water management practices, thorough inspections, and the choice of several effective termite management products, the problem can be solved in all but the most insidious infestations and structural problems. So, no need to panic, just assess the problem, decide on a plan, and be persistent in implementing your long-term war on termites.

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