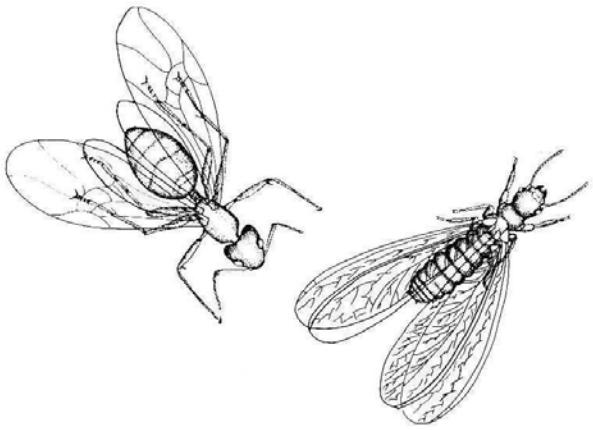

Bug-Wise

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Termite Swarming Time: Spring is a time of awakening and reproduction. Long dormant plants resume growth and burst into bloom; birds begin courtship and nesting, and eastern subterranean termites swarm forth in their reproductive flights. Although homeowners view the first two events as happy harbingers of spring, swarming termites elicit very different emotions and often prompt frantic phone calls to the 'County Agent'.

Swarming is the primary means by which termites reproduce, spread, and begin new colonies, and it normally takes several years for a colony of termites to become large enough and vigorous enough to produce swarmers. These winged 'swarmers' are unmated male and female reproductive forms. A healthy, well-established colony of subterranean termites will produce hundreds to thousands of swarmers.

Through most of the year a colony of termites goes about its daily business in out of the way, unseen places, tunneling through the soil and feeding on wood or other cellulose products. Normally, termites shun light and quickly plug any holes or openings to the outside world. However, on 'swarming day' the worker termites intentionally open holes to the outside and the young swarmers emerge in mass to fly and be carried by wind to another location. The plan is to pair up with a member of the opposite sex, fall to the ground together, shed the wings, mate, find a protected site in the ground, and begin a new colony. Unlike fire ants, which mate in the air leaving the newly mated queen to start a new colony alone, newly paired termites found a colony together – queen and king. However, the vast majority of termite swarmers die without fulfilling this goal.

Although several different species of termites occur in the state, the eastern subterranean termite, *Reticulitermes flavipes*, is the most common species. Depending on location in the state, and other factors, eastern subterranean termites will swarm from mid-February to mid-May, normally during the morning hours. Most swarming events occur quietly and are unobserved. It is when the swarming event is actually witnessed by the homeowner, or when dead swarmers are found on the windowsill or in other locations, that the phone calls and questions begin.

Are these termites or ants?: Although swarming termites may resemble ants superficially, a close examination reveals several major differences. Ants have elbowed antennae, a narrow, wasp-like waist, and hind wings that are shorter than the forewings. Termite swarmers have straight, bead-like antennae, a broad waist, and the hind wings and forewings are the same length.

Are these those Formosan termites that I've been hearing about?: Formosan termites do occur in Mississippi, especially in the southern portion of the state, and their range is spreading. However, Formosan termites normally do not begin swarming until May. So if the swarm occurs before May, they are almost certainly eastern subterranean termites and not Formosans. Although swarms of either species can occur in May, the swarmers of the two species are easy to distinguish. The bodies of eastern subterranean termite swarmers are black, while Formosan swarmers are yellow to gold in color. Also, Formosans swarm late in the evening or at night, while eastern subterranean termites swarm in the morning hours. Fortunately, although there are some key differences in the biology, behavior and damage potential of these two species (Formosans tend to form larger colonies and are generally more damaging), control options are similar.

Does this mean that my house is infested with termites?: If the swarmers actually emerge inside the house, or if dead swarmers are found inside the house, then the home definitely has an active termite infestation. If the swarmers were observed emerging just outside the house, within 10 feet or so of the foundation, then the home is likely to be infested, but not necessarily. Termites are a natural and beneficial part of the forest ecosystem. They are present in every wooded environment in the state, including wooded home landscapes, and the observation of a swarm emerging from a stump or other site that is located some distance from the house is not cause for alarm.

I haven't seen any swarmers. Does this mean that my house is not infested?: Not necessarily. Observation of swarmers is only one means of discovering an infestation. By their very nature termite infestations are cryptic and difficult to detect. Although termite colonies swarm only one day a year, detection of swarmers is one of the most easily observed signs of infestation. Other signs of termite infestation include exposed mud tubes, pin holes in sheet rock, paneling, or other wood surfaces, sunken 'trails' in walls or ceilings indicating the presence of termite tunnels located just below the surface, accumulations of soil on windowsills or along baseboards, and detection of damage to wood, books or other cellulose products.

What should I do if I observe a swarm in or near my house? If you already have an active 'termite contract' with a pest control company, contact the company; tell them what you observed and where you observed it, and request a follow-up inspection. Depending on the contract, the company will usually provide any additional treatments that are needed at no additional cost. If you do not have a current 'termite contract' on your home, contact a local pest control company, inform them of what you have observed, and request an inspection, as well as a bid for any necessary treatment.

How much will it cost to have my home treated for termites?: Depending on the size of the home, the type of foundation, and how the home is constructed, costs of termite treatments can range from around $800 to several thousand dollars. Mississippi has many high quality pest control companies, but the cost of treatments and the type of service can vary considerably among companies. For this reason, it is a good idea to get bids from several different companies. Keep in mind that price and quality of service are not necessarily closely correlated, but also realize that there is a lot involved in treating for termites and quality service and treatment are not cheap. Be sure to ask questions and understand exactly what you are getting when you buy a treatment and 'termite contract'. In addition to the original treatment cost, most companies charge an annual 'renewal' fee to keep the contract in place from year to year. The cost of an annual inspection is usually included in this renewal fee. Depending on the details of the contract and size of the home, renewal fees can range from around $80 to several hundred dollars. Contracts that cover damage repair and re-treatment are usually more costly than those that only provide for re-treatment.

Should I pay the renewal fee each year?: Read your contract carefully to see exactly what protection and services you are getting for the renewal fee. Then make an informed decision based on the potential risks and benefits. After one has paid the initial price to have a termite treatment applied and to get a 'termite contract' on the home, it is usually a good idea to keep the contract in place by paying a reasonable annual renewal fee. This is especially true when using the in-ground baiting method (see below), because termite protection ceases as soon as service visits cease.

How much time do I have to do something?: It takes several years for a colony of termites to grow large enough to produce swarmers. If you have seen a swarm emerge in or near your house, the colony that produced it has been there for several years. If your home is infested with termites, it is critical, but not urgent, that you have the home treated to eliminate the infestation. Taking a month or two to get the home inspected and get bids from several companies won't result in that much additional damage, and it may result in obtaining a better treatment at a lower price.

Can I treat my home myself?: No! Most of the insecticides that professional pest control companies use to treat termites are not available to the general public. This is especially true for the longer lasting, more effective products. Even if the insecticides were available, few homeowners have the training and specialized equipment needed to properly apply termite treatments.

What types of treatment options are available?: Currently there are two basic options for post-construction termite control. One option is the use of in-ground bait stations. These stations are placed in the ground around the perimeter of the building and checked regularly for termite activity (usually every three months or so). Initially, the stations contain only wood or some other bait. They do not contain any insecticide. When/if termite activity is detected in a station the non-insecticide bait is replaced with bait containing a slow-acting insecticide or insect growth disruptor. The other option is the more conventional approach of trenching, rodding, and/or drilling around the building and treating with a liquid termiticide to create an insecticide barrier. Some of the liquid termiticides on the market today are capable of providing long-term effective control of termites that rivals that provided by chlordane (Chlordane is an older, highly effective, termiticide that is no longer on the market).

Which treatment option is best, the bait or the liquid termiticide?: Both the liquid termiticides and the in-ground baits are capable of providing effective, long-term termite control. The baits have the advantage of using far less total insecticide and of being able to provide control in sensitive or hard-to-treat situations. Liquid termiticides offer quicker control with fewer service visits. One of the key advantages of liquid perimeter treatments is that, once properly applied, they will usually continue to provide years of effective termite control even if the termite contract is not renewed. This is not true for the in-ground baiting method.

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