

A-1 PEST CONTROL PRESENTS...



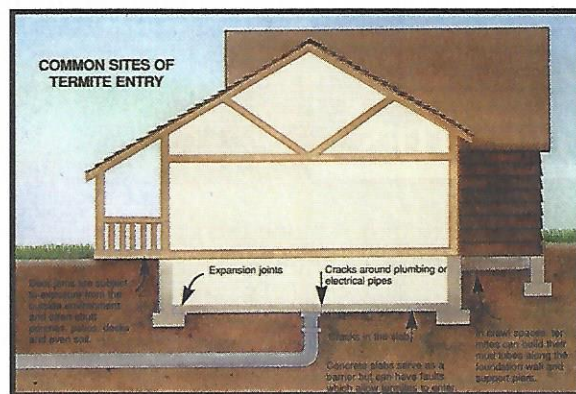
Read About...

Termites	2-3
Termite Treatments	3
Maize Weevils	3
Fruit Flies	4
Clothes Moths	4

In this issue of the Pest Gazette we will look at several pests that you might see or hear about this spring. Termites can be a serious threat to your home. Subterranean termites, our focus, account for over \$2 billion annually in treatments and damage. No pest is more threatening to a structure than a termite. Even if your building doesn't have termites, you'll want to know about termites. We will also provide information about Small Fruit (or Vinegar) Flies, the Maize Weevil (a common stored products pest), and Clothes Moths. Now is the time to call your pest management professional if you see any signs of the pests mentioned above, or other pests that will be showing up this time of year. Happy Spring!

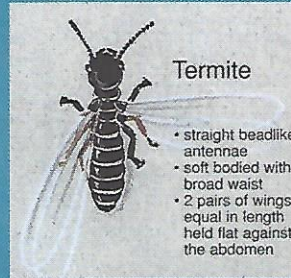
Usually, one of the first signs of infestation is the appearance of swarmers, which is in the spring for many species. Ask us about which species are found in this area and when swarms occur. Swarms usually generate panic calls from homeowners that suddenly see what can be thousands of winged termites appearing in a living room or basement or even outside. Termites don't bite so don't worry. Swarms are an indication that termites are present and that a healthy colony may be present nearby. Sometimes termites will swarm after an area is treated by a pest management professional. It is generally felt that this is a panic swarm where the termites are trying to escape the stress put on the colony by a treatment.

If you find mud tubes, or see a swarm call our office today to have an inspection. Keep some swarmers for us to look at and we'll discuss a treatment program that is just right for you.



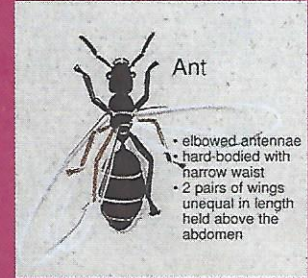
HOW CAN YOU TELL IF THOSE FLUTTERING FLYING THINGS ARE TERMITES?

Subterranean termites mainly live underground or in protected areas such as galleries in wood. There is always at least one queen and many more "secondary reproductives" are usually present. Most people never see a queen, but may have seen swarmers or workers. The total number of individuals in a colony of subterranean termites may total more than a million. Imagine a million insects attacking your house! Workers are small white insects. They are blind and very sensitive to heat, cold, and dry air. This sensitivity is why they build shelter tubes or "mud tubes." In fact, they need to maintain an atmosphere of nearly 100% humidity. Sometimes finding shelter tubes, a little smaller diameter than a pencil, is the first sign of a termite infestation. Workers are just that...the workers of the colony. They find new food sources (vegetation or wood containing cellulose). Upon finding a food source, the termites put down a chemical signal or pheromone to lead the other workers to the feeding site. Termites do not "attack" your house or building. They forage and find food sources, commonly in moist areas. Termites do a very good job of breaking down cellulose in the soil. When they discover your house or other buildings, they become a real pest and that is where the professional pest management company comes in. In most areas of the country, depending on the species, healthy subterranean termite colonies will "swarm" or send out winged reproductive termites to start new colonies in the spring. The swarmers are darker in color, some species almost black, and have four wings. One favorite question is how to tell termites from ants. First, ants generally do not swarm the same time as termites, but it can happen. The following is a description of how to tell termites from ants.



Termite

- straight beadlike antennae
- soft bodied with broad waist
- 2 pairs of wings equal in length held flat against the abdomen



Ant

- elbowed antennae
- hard-bodied with narrow waist
- 2 pairs of wings unequal in length held above the abdomen

Termites swarm at very limited times of the year.

Ants swarm throughout the year depending on species.

The body of the **termite** swarmer is about 3/8" long.

The body of an **ant** will vary in size depending on the species.

Termites have four wings of equal size.

Ants have four wings; two smaller and two larger

Termites have a straight waist.

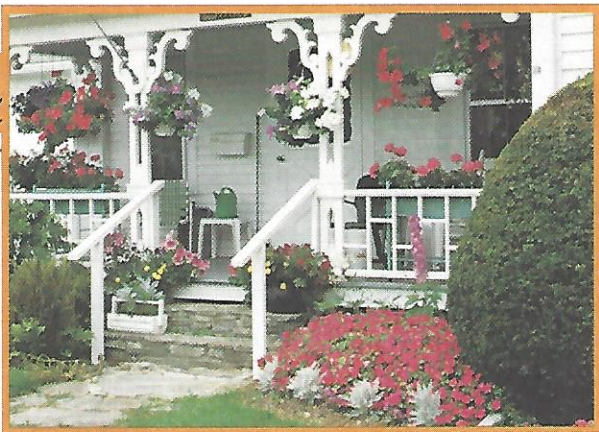
Ants have a pinched waist.

Termites have straight antennae.

Ants have elbowed antennae.

Termites are clumsy fliers.

Ants are good fliers.



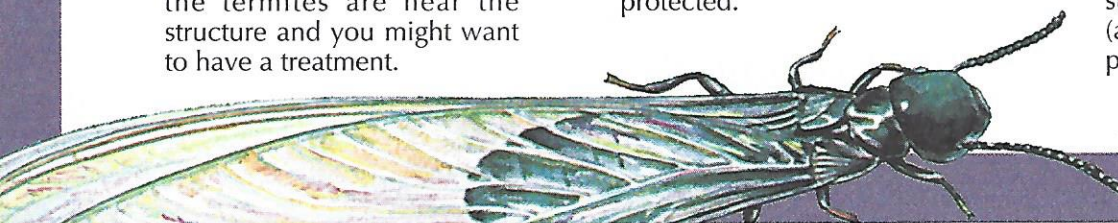
Termites in Mulch

Termites feed on wood or other cellulose. Most kinds of mulch are mainly or totally made of chopped or shredded wood, which is excellent termite food. So it's only natural that termites are often found in mulch. The moisture, food source, and protection within the mulch make ideal conditions for the survival of termites. Hardwood bark seems to be less attractive than softer woods such as pine nuggets.

☉ Termites in mulch alone does not mean that the structure is infested or that any previous termite treatment has failed. Termites in mulch tells us that the termites are near the structure and you might want to have a treatment.

☉ It is usually not an emergency, but finding live termites in mulch should be viewed as an early warning and that termites may infest the structure if it is not protected.

☉ When homeowners find termites in mulch a professional pest management company should be called to see if termites are in or on the structure, and to offer a plan (and their cost) to correct or prevent termite infestation.






Formosan Termites


Formosan termites are an exotic species accidentally introduced to the U.S. from China and other far Eastern countries. Their habits are very much like those of our common subterranean species discussed below. 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 and do not need soil contact if there is a nearly constant moisture source. They have been reported in 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 68°F. If you think you might have an infestation of this species, contact a knowledgeable expert in our pest management firm, or the entomology department of a university, or NPMA to confirm the identification of specimens.

Treatment Types for Subterranean Termites


Currently there are three types of treatments available for use by the professional: soil treatments, wood treatments, and baits.

 **Soil Treatments** (*liquid termiticides diluted with water to ensure adequate coverage in the soil*)

The injection of this system creates a treated area that repels or reduces the population of the termites with a long-term protection. This system is the most commonly used and may be used in combination with baits and/or wood treatments.

 **Wood Treatments** (*involves treating infested wood or potentially infested wood with liquids such as a traditional treatment or borate materials*)

This treatment type protects the wood from infestation and reduces or eliminates the infestation in the wood at the time of treatment.

 **Baits** (*relatively new and involves installing bait stations in the ground*)

Termites attack the wood in the bait station and carry the active ingredient throughout the colony or area and reduce the population of the colony thus relieving pressure on the structure. Baits are very popular since there is no interior drilling, which is less of a bother for the homeowner or building occupants.

Call us today to discuss the treatments we offer and we'll be happy to discuss the advantages and disadvantages of each method.



Maize Weevil

If you find that your bowl of cereal includes some small, crunchy, dark brown "grains" with four light spots, you may have maize weevils, or one of their relatives. The maize weevil is a wide-spread pest of stored grain and grain products. Its biology is very similar to the rice weevil. Its larvae mainly live inside the kernels of whole grains, but may also attack moist, caked flour or corn meal. They have four light-colored spots in two pairs on their back, and are a little bit smaller than the rice weevil. They can fly, but are mainly found in stored grain or grain products.

- Damage to stored foods is mainly due to feeding by the weevil larvae.
- A female maize weevil can lay more than 300 eggs in her lifetime.
- One life cycle may take 32 to more than 100 days, depending on temperature, moisture, and food.

Control. The best strategy for controlling maize weevils is to do a thorough survey to find all of their primary breeding sites (infested larval food materials) and eliminate them. You may start by:

- Examine whole grain items such as popcorn, sunflower seeds, bird seed, and even dry pet foods.
- Check pantry areas near where you first discovered the weevils.
- These pests fly to light, and may build up at a window near whatever material the larvae were living in.
- A thorough inspection should always be followed by good sanitation (including removal of all infested materials found), and application of a properly-labeled pesticide when needed.

Fruit Flies

When you bring fresh fruits and vegetables into your home, do you ever wonder why those small, pesky brown flies with red eyes sometimes show up a short time later? Those flies, called fruit flies or vinegar flies, are attracted to fermenting fruits and vegetables. They prefer bananas, grapes, peaches, pineapples, tomatoes, pickles and potatoes and fermenting liquids such as beer, cider, vinegar, and wine. Fruit flies can carry bacteria that may cause food to spoil more quickly. The presence of bacteria and fruit fly larvae in fruits and vegetables you have eaten can cause mild stomach and intestinal discomfort and diarrhea. These flies have short life cycles and can reproduce quickly under good conditions.

To reduce and eliminate populations of fruit flies in your home:

- Search for and destroy any rotting fruits or vegetables. Place any new fruits and vegetables in the refrigerator until the fly problem has been eliminated.
- Change garbage bags regularly. Fruit flies will also breed and reproduce in moist decaying organic matter found in garbage containers. Garbage should be kept in plastic bags and held in containers that are kept closed.
- Check thoroughly behind cabinets and appliances and on floors for vegetable or fruit matter that fell or was swept into hard to reach areas.
- Discard old sponges and rags. Fruit flies are attracted to items where moisture has accumulated including wet sponges, wet mops, and slimy areas around drains. Keep drains, sinks, dishrags, and sponges clean by washing them often with hot water and soap.
- Make sure screens are in place and secured and sealed in the window frame. Fruit flies can enter your home through very small openings in doors and windows.
- If window and door screens are already in place and flies are still coming in from outdoors, reducing the mesh size [to at least 16 or smaller] may help. Fruit flies are small enough to get through ordinary screens.

Remember, thorough inspection, sanitation, and exclusion are the best methods to control fruit fly populations. If you are having trouble solving or locating the source of your fruit fly problem, enlist the aid of a pest management professional, or such a company.

Clothes Moths

There are two species of clothes moths, the Webbing and the Case-Making Clothes Moths, which are found world-wide, eating our natural-fiber fabrics. Both are plain-looking, gray or buff-colored moths, up to 1/2 inch long. Their larvae eat only natural fibers, especially anything which contains wool or hair. Each female moth can lay about 40 -50 eggs and a life cycle may be completed in about 1 - 4 months depending on the temperature, moisture, and food available. Larvae of Case-Making Clothes Moths spin a silken tube that they use as a portable shelter. They often tend to feed from the under side of the fabric.

- ⌘ Because they are very small, plain-colored, and tend to stay hidden, we often first notice them via "holes" in some fabric (usually an expensive suit, sweater, or tapestry) made of natural wool or other mostly organic fibers.
- ⌘ The most important steps in controlling these moths are thorough surveillance and correct ID, followed by treatment with residual insecticide when necessary and practical.
- ⌘ Non-chemical control measures should be tried first, such as vacuuming infested cloth, washing or dry cleaning of infested items.
- ⌘ Sealing susceptible cloth items in plastic containers, cedar chests, or bags; and possibly sealing moth flakes or balls in with them, can help keep the moths and similar pests out in future.
- ⌘ Newly marketed traps with pheromones specific for clothes moths can help in the survey and elimination of a current population of these moths, and can be a very good tool for future monitoring.

A-1 PEST CONTROL

3636 S. NETTLETON SPRINGFIELD, MISSOURI 65807

417-883-4611