



## Be On the Lookout for Termites and Other Spring Pests

### What's Inside...

#### PAGE 2

- How to Recognize Termites
- Treatment Types for Subterranean Termites

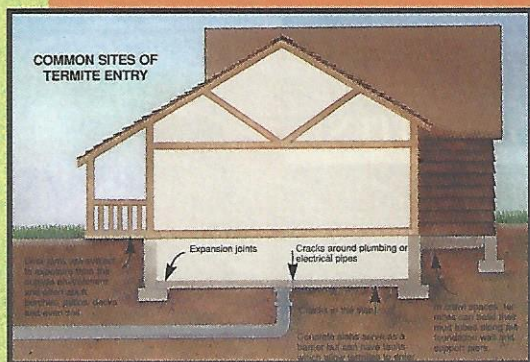
#### PAGE 3

- Larder Beetles
- Termites in Mulch & Formosan Termites

#### PAGE 4

- Brown Recluse Spiders

In this issue of the Pest Gazette we will look at several pests which you might see or hear about this spring. First, subterranean termites are a huge threat to your property. Subterranean termites account for over \$2 billion in treatments and damage annually. No pest is more threatening to a structure than termites. Even if your building doesn't have termites, you'll want to know about termites. We will also examine the brown recluse spider which is a major health threat and look at the larder beetle...a stored product pest. Now is the time to call your pest professional if you see any signs of pests emerging this time of year. Happy Spring!



## Swarmers Signal PROBLEMS

Usually one of the first signs of infestation is the appearance of swarmers. This is in the spring for many species such as eastern subterranean termites. Some species swarm in the

summer or fall. Ask us about which species are found in this area and when swarms occur. Swarmers are termites which are sent out to start new colonies. Swarms usually generate panic calls from homeowners who 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, but a swarm, where it appears that termites are being "pumped" out into the air, can be alarming. Swarms

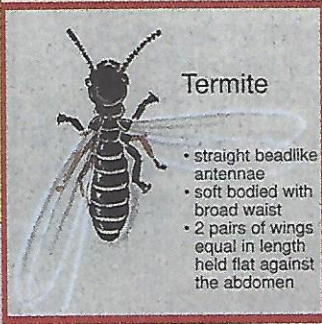
are an indication that termites are present and that a healthy colony may be nearby. Sometimes termites will swarm soon after an area is treated by a pest control operator. It is generally felt that this is a panic swarm where the termites are trying to escape the stress put on the colony by the treatment.

If you find tubes, or experience 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 TO RECOGNIZE TERMITES

Subterranean termites live underground or in protected areas such as wood. There is always at least one queen and many more reproductives may also be 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 be more than a million. Imagine a million insects attacking your house! Workers are small white insects, which are blind and are 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, attracted by moist areas, and find food sources. 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 control company comes in. In the spring in most areas of the country, and depending on the species, healthy subterranean termite colonies will "swarm" or send out winged reproductives to start new colonies. The swarmers are darker in color, some species almost black, and have four wings. One frequent question is how to tell termites from ants. 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.

• <b>Termites</b> swarm at a very limited time of the year.	• <b>Ants</b> swarm throughout the year depending on species.
• The body of the <b>termite</b> swarmer is about 3/8" in most species	• The body of the <b>ant</b> will vary in size depending on the species
• <b>Termites</b> have four wings of equal size.	• <b>Ants</b> have four wings; two smaller and two larger
• <b>Termites</b> have a straight waist.	• <b>Ants</b> have a pinched waist.
• <b>Termites</b> have straight antennae.	• <b>Ants</b> have elbowed antennae.
• <b>Termites</b> are clumsy fliers.	• <b>Ants</b> are good fliers.



## 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 are liquid termiticides diluted with water to ensure adequate coverage in the soil. Injection of this system in the soil creates a treated area that repels or reduces the population of the termites and envelopes your house with a long-term protection. This is the most commonly used system and may be used in combination with baits and/or wood treatments.

Wood treatments involve 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 are relatively new and involve installing bait stations in the ground. Termites then eat the bait and carry the active ingredient throughout the colony or area. This thus reducing foraging reduces the population of the colony in the structure. Baits are very popular since there is no interior drilling and they generally are less bother for the homeowner or building occupants.

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

# Larder Beetles

You go to your pantry to get some dry food for your pet. As you reach for it, you notice a couple of small, dark, hairy-looking "worms" on the bag. When you look closer, you see a couple more on the shelf, away from the bag. There are even several small holes in the wooden molding along the edge of the shelf. In that case, you are probably the victim of Larder Beetles.

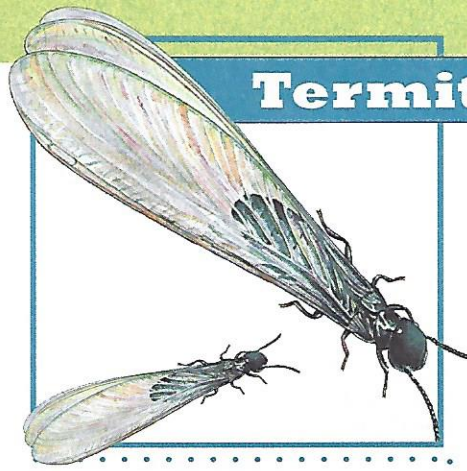
Larder beetles are cosmopolitan stored product pests which infest high-protein, animal materials, such as hides, meats, cheese, feathers, or hair. They often infest dried pet foods, fish, or nearly any product of animal origin (frequently found in pantries). They very rarely eat materials of plant origin. They may invade museum specimens, dead insects, or accumulated lint and hair in wall voids.

Adult Larder Beetles are 1/4 - 3/8-in. long, oval beetles, with a pale yellow band across their back which is about 1/3 of their total length. Both the front one-third and the back one-third of their body is dark brown to black, and there are 6 to 8 dark spots on the yellow cross-band. Their antennae are short, clubbed, and fit into grooves under their pronotum. Their head has no median ocellus (simple eye). Larvae are 3/8 - 5/8-in. long dark brown and covered by dark brown hairs (setae). These often appear to be arranged in bands across their body, alternating with lighter inter-segmental bands. They have a pair of backward-directed, pointed, projections (called urogomphi) which are sharply curved backward and downward in side view.

Adult females lay 100-800 eggs on suitable larval food, or in cracks near where such materials are stored or have accumulated. Usually, male larvae molt five times and female larvae molt six times. Then they crawl away from the larval food, find a suitable site and pupate. A complete life cycle takes 2-3 months. In temperate climates, there is only one generation a year, but as many as six generations a year have been reported under optimal conditions overwintering in crevices in tree bark, or similar sheltered sites. Then they enter buildings in the Spring seeking sources of larval food. Adults live about 3-5 months in warm (Summer) conditions. Adults avoid light during mating and when laying their eggs.

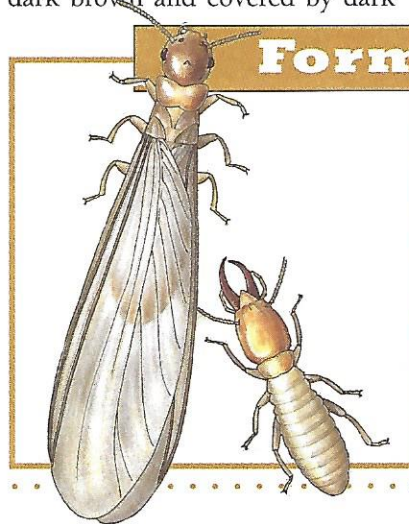
Most damage is done by larval feeding. When larvae are mature, they may crawl several feet away from the material they were feeding in, and drill a hole up to 1/2-inch deep in soft wood. They have even penetrated up to 1/16-inch thick sheets of soft metals such as copper, aluminum or lead. They may even penetrate thin plastic. A plastic bag of at least 3 mils thickness may keep adults from detecting its contents, even if those were items they would normally infest.

The key to controlling Larder Beetles is to find all their breeding sites and eliminate them. Start by examining dry pet foods and pantry areas nearest where



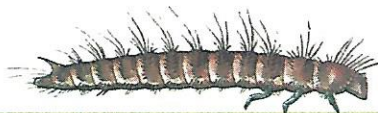
# Termites in Mulch

There is no question that termites in mulch are a common occurrence. Wood and other cellulose in mulch is excellent food for termites. Hardwood bark seems less attractive than softer woods such as pine nuggets. The moisture, food source, and protection of the mulch make ideal conditions for the survival of termites. When homeowners find termites in mulch our pest control company should be called to see if termites are in or on the structure. Termites in mulch alone do not mean that the structure is infested or that any previous termite treatment has failed. Termites in mulch tell us that they are near the structure and you might want to have a preventive treatment. It is generally not an emergency, but termites in mulch should be viewed as an early warning that they may infest the structure if it is not protected.



# 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 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 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 20C (68F). If you think you might have an infestation of this species, contact a knowledgeable expert in our pest control firm, or the entomology department of a university, or NPCA to confirm the identification of specimens.



Continued on back...

# BROWN RECLUSE SPIDERS.

You turn on the light and a medium-sized, brown-colored spider runs back under your sink cabinet. It moved just fast enough that you did not get a good look at it. Was it a dangerous spider, like a Brown Recluse, or was it just an ordinary spider? What should you do?

The truth is, brown spiders of the genus *Loxosceles* (also called "fiddle-backed" spiders) are fairly wide spread in the U.S. Seven species of these sometimes bite humans, but the bites of only two of them have been reported to cause human deaths. Because of that, the Brown Recluse Spider, *Loxosceles reclusa* Gertsch & Mulaik, the more common, gets blamed for nearly any spider bite which causes any symptom beyond immediate local pain or fang marks.

Just because you saw a brown-colored spider, near the time and place when a human suffered a surface wound, that certainly does not automatically mean it was a Brown Recluse bite. Even a Doctor cannot, from only seeing a wound, tell that it was caused by any particular kind of spider (or even that it was caused by a spider). Precise additional tests would

have to be done to help find that out.

Real Brown Recluse bites occur most often when a human rolls over on, or puts their hand down near (or on the leg of), a spider and the spider bites defensively. All spiders— male and female— are venomous. That's how they subdue their prey. They have voluntary control of whether any, and how much, venom is injected in any bite. Symptoms then depend on the nature and amount of venom injected, and on the host's individual reaction to that specific venom.

Brown Recluse Spiders are wandering hunters, which sometimes 'trail' a strand of webbing. They do not use webbing to capture prey, as do Black Widows, House Spiders, and half of the other 3,000 species of spiders in the U.S. Females of this species do spin a small amount of irregular, loose webbing in a remote corner as a "retreat", and also spin a loose egg sac, in which they lay 30 to 300 eggs. These take nearly a year to develop from egg to adult. These spiders typically live outside around rocks, old tires, utility boxes, wood piles, or under loose bark of logs or trees. Inside, they prefer undisturbed areas in or under boxes, shelving, furniture (especially large upholstered items which provide ample covered areas), closets, crevices under or beside doors or window frames, under loose cedar "shake" shingles (or siding), or in wall voids, undisturbed crawl spaces, or attics. They usually run into any available hiding place when disturbed.

As always, it is very important to get an accurate identification of exactly what spider is



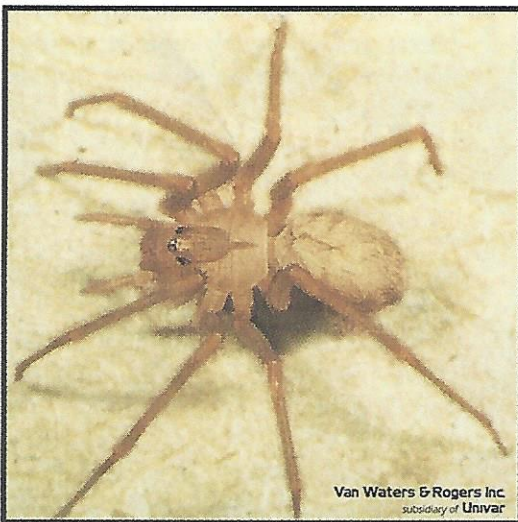
## ...Larder Beetles

you first discovered the beetles, but be sure to consider furs, animal hides, hunting trophies (often mounted and hung on a wall), and decorations or wall hangings made from or containing skins, hair, or leather. Also consider past problems with flies, ladybugs, rodents or birds. This inspection should be followed by good sanitation (removal of all infested materials found), and application of a properly-labeled pesticide when needed.

involved before starting any control effort. Sticky traps can be a great surveillance and control tool for Brown Recluse Spiders.

Spider control often requires the advice and assistance of a trained and state-certified pest management professional. This is especially true for Brown Recluse Spiders. Their populations can build up very large numbers throughout a structure before they are first noticed. Large, wide-spread populations of Brown Recluse Spiders may require several months to be brought under control by even an experienced pest manager.

If you know, or suspect, you may have a spider problem, contact us. Our trained professionals can help identify the pests, determine the extent of infestation, and recommend a prompt, effective control program. We use an Integrated Pest Management (IPM) strategy, emphasizing non-chemical methods, and only when necessary progressing to use specifically targeted placement of the minimum effective amount of the least toxic materials which will do the job.



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