



BORITE TERMITE & PEST TREATMENTS Corporation

Inspector Borite says.....

This Issue

- Pg.1,2 Black Widow Spiders
- Pg.1,2,3 Subterranean Termites
- Pg.4 Boron Treatments

Our family wants to thank you and your family for allowing us to provide your pest, termite & plant services. We want to thank you for the hundreds of referrals you have given us this past year. We truly appreciate the trust and confidence you have given us and want you to know we will work hard to prove that trust has not been misplaced.

BORITE TERMITE & PEST TREATMENTS IS THE 1ST PEST CONTROL COMPANY IN CALIFORNIA TO BE ACCEPTED INTO THE EPA PESTICIDE ENVIRONMENTAL STEWARDSHIP PROGRAM (PESP).

Black Widow Spiders

The black widow spider, *Latrodectus hesperus*, is the most common harmful spider in California. Venom from its bite can cause reactions ranging from mild to painful and serious, but death is very unlikely and many symptoms can be alleviated if medical treatment is obtained. Anyone bitten by this spider should remain calm and promptly seek medical advice; it is helpful if the offending spider can be caught and saved for identification. The typical adult female black widow has a shiny black body, slender black legs,

and a red or orange mark in the shape of an hourglass on the underside of the large, round abdomen. The body, excluding legs, is 5/16 to 5/8 inch long. The adult male black widow is one-half to two-thirds the length of the female, has a small abdomen, and is seldom noticed. The male black widow does possess venom, but its fangs are too small to break human skin. The top side of its abdomen is olive greenish gray with a pattern of cream-colored areas and one light-colored band going lengthwise down the middle.

Continued on page 2



Subterranean Termites

Drywood termite swarm season is just finishing up and Subterranean termites are just around the corner. In just a few weeks subterranean termites will begin their swarm season. Some of you may see



small, black winged insects flying around.

Unlike drywood termites, they require contact with the soil or a constant source of moisture. They live in undecayed or decayed wood usually with a moisture content around 14% - 18%. Subterranean termites nest in the soil to obtain moisture, but they also nest in wood that is often wet. They easily attack any wood in contact with the ground. If the wood does not contact the soil, they can build mud tunnels or tubes to reach wood several feet above the ground. These tunnels can extend for 50-60 feet to reach wood and often enter a structure through expansion joints in concrete slabs or where utilities (plumbing penetrations) enter the house. **Continued on Page 2**

Continued from page 1

The hourglass mark on the underside of the abdomen typically is yellow or yellow-orange and broad-waisted. The legs are banded with alternating light and dark areas. Contrary to popular belief, the female black widow rarely eats the male after mating, but may do so if hungry. Like males, young female black widows are patterned on the top side. In the early stages they greatly resemble males, but gradually acquire the typical female coloration with each shedding of the skin.

In intermediate stages they have tan or cream-colored, olive gray, and orange markings on the top side of the abdomen, a yellowish orange hourglass mark on the underside, and banded legs. Only the larger immature female and adult female spiders are able to bite through a person's skin and inject enough venom to cause a painful reaction.



Webs and Egg Sacs. The web of the black widow is an irregular, tough-stranded, sticky cobweb mesh in which the spider hangs with its underside up. During the day it often hides under an object at the edge of the web or stays in a silken retreat in the center. The black widow may rush out of its hiding place when the web is disturbed, especially if egg sacs are present.



The egg sacs are mostly spherical, about 1/2 inch long and 5/8 inch in diameter, creamy yellow to light tan in color, opaque, tough and paper like on the surface. A female may produce several egg sacs over a lifetime. Tiny, young black widows, which are nearly white in color, disperse to new locations by ballooning and infest new areas.

Where the Spiders Live. Black widow spiders occur in most parts of California. They and their associated webs usually are found in dark, dry, sheltered, relatively undisturbed places such as; among piles of wood, rubbish, or stones; in culverts, hollow stumps, and old animal burrows; in garages, sheds, barns, crawl spaces, utility meter boxes, children's play sets; and sometimes among plants. People are most likely to be bitten when they disturb the spider while they are cleaning out or picking up items in such places. A sensible precaution is to always wear gloves and a long sleeved shirt when working in areas that have been undisturbed for a time and where there are good hiding places for spiders.

If you or a friend have seen these spiders in or around your home, give us a call. We have an excellent control program for black widow spiders and other species of spiders.

Subterranean Termites Continued from page 1

Winged termites emerging from the ground outdoors near the house does not necessarily mean the house is infested, but it is a good reason to check further. Termites in the wood of homes or other buildings usually come from colonies already established in the soil.

BIOLOGY

Termites are small, ant-like insects. However, they differ from ants in that they feed off the cellulose in wood. Working largely unseen under the surface, they can tunnel through the wooden structural members in buildings and completely destroy them. Wood that comes in contact with the soil, such as the exterior trim or cladding on your home, provides a perfect point of entry for a termite colony.

Termites are social insects that live in colonies where labor is divided among a caste system. They have reproductive and soldier castes. In many termite societies there is also a distinct worker caste, but the typical duties of workers (nest building and food gathering and feeding the reproductives and soldiers) are handled by nymphs as well. Workers and nymphs do all the work, soldiers sole job is to defend the colony. Winged adults are often called swarmers, they are primary reproductives. They emerge from the colonies on colonizing flights during certain seasons in the year. After the flights, the male (king) and female (queen) will pair up, lose their wings and construct a small cell in the soil.

Continued on page 3

Continued from pg. 2

They will mate, lay eggs, and rear the first group of workers. In colonies where the primary reproductives are not present, secondary reproductives (without color or functional wings) often occur in large numbers.

HABITS: Subterranean termites live in colonies underground, from which they build tunnels in search of food; able to reach food above the level of the ground by building mud tubes; dependent on moisture for survival.





Subterranean termite feeding follows the grain of the wood. Unlike drywood termites or other wood-boring insects, subterranean termites do not push wood particles or pellets (fecal material) to the outside, but rather use it in the construction of their tunnels. This debris, along with sand and soil particles, is used as a form of plaster.

They can form "secondary nests" above the ground called "aerial colonies". These independent nests may survive independent of the ground if there is a moisture source available. Such sources of moisture would be from a leaky roof, or plumbing leaks.

DIET: Wood and other cellulose material.

Subterranean termites feed on wood or other items that contain cellulose, such as paper, cardboard, fiberboard, and some fabrics derived from cotton or plant fibers. Termites have protozoa in their digestive tracts that can convert cellulose into usable food.



			
<p>Nymphs These immature termites develop into workers, soldiers or reproductives. As the nymphs become larger, they also begin to damage wood.</p>	<p>Soldiers These termites protect the colony. They have enlarged jaws called mandibles, which they use to defend the colony. They look like workers, but their heads are enlarged and darker colored than the workers. They comprise only 1 to 3 percent of the foraging termite population.</p>	<p>Workers These are the termites that cause most of the damage by eating wood, but they also maintain the colony, build and repair the nest, forage for food, and help care for the young. Workers are the most numerous of the three castes.</p>	<p>Reproductives Reproductives can be primary or secondary. The secondary are found in mature colonies and serve as replacements if something happens to the primary reproductives. Winged reproductives (alates) are coal black to pale yellow-brown, flattened and about 1/4 to 3/8 inch long, with pale or smoke-gray to brown wings. Alates are also known as "swarmers"</p>

Control: Subterranean termites are usually easier to control than drywood termites. Areas of infestation can be identified visually by the presence of shelter tubes (mud tubes) or located with the use of a moisture meter to detect areas of excessive moisture.



Once the areas of infestation are located, treatment options are determined. Most often treatment of the soil or in houses with slab foundations or garage floors, treatment through the slab is required. Both a liquid application and a foam application are typically used. If subterranean termites are found inside walls, a foam application is made in the wall cavities of the infested areas. Most often it is only necessary to treat the areas limited to the points of infestation. In sever cases the entire perimeter of the structure may require treatment. Usually there is no need for you to leave your home during the treatment.

Ask about our free non-chemical early warning detection system for any client currently on pest or termite control service.



BORON

Active Ingredient = Disodium Octaborate Tetrahydrate (DOT)

NEW CONSTRUCTION, REMODELING, ROOM ADDITIONS & EXISTING STRUCTURES

Boron can be applied to new construction, remodeled areas, room additions and existing structures. Boron is a permanent treatment for the prevention of drywood termites, fungus and any other wood destroying pest. Boron is applied as a spray on liquid or foam application to exposed, accessible bare unpainted wood. Boron penetrates into the cells of the wood leaving behind the mineral deposits. Borates have low toxicity to humans and are even approved for interior use in food processing plants. **Boron doesn't affect wood's strength, color, or ability to be finished. It doesn't corrode fasteners, and doesn't outgas vapors.**



In existing structures accessible portions of the attic are treated along with, in most cases, the mud sill and rim joist in the sub area.

These two areas account for the majority of the surface areas of bare wood where termite infestations start in existing structures.

In new construction all the exposed accessible wood is treated from the roof decking to the sub area framing. The exterior wall sheathing and roof decking is treated on both sides. All exterior and interior walls and framing are treated, around window and door openings, skylight openings and plumbing penetrations. Treatment on new lumber kills mold, mildew and fungus on contact.



It is a commonly held belief that borate treatment for wood is a new development. Wrong! Borates have been widely used in Europe and elsewhere for decades. In New Zealand, wood-destroying organisms had been a major problem until soaking construction timbers in a borate solution was mandatory. This was introduced in 1953 and since that time there has not been a single reported incidence of failure in these treated houses. (Dr. Jeff Lloyd March 18, 1998)

Borite Termite & Pest Treatments Corp. are recognized experts in the field of (DOT) Disodium Octaborate Tetrahydrate applications in all types of construction for the control and prevention of decay fungi, termites, powder post beetles, and preventative treatments.

BORITE TERMITE & PEST TREATMENTS IS THE 1ST PEST CONTROL COMPANY IN CALIFORNIA TO BE ACCEPTED INTO THE EPA PESTICIDE ENVIRONMENTAL STEWARDSHIP PROGRAM (PESP).