



# BORITE TERMITE & PEST TREATMENTS Corporation

Toll Free: 866-905-7378

[info@borite.com](mailto:info@borite.com)

VOL.3 ISSUE 2, 2007

THIS ISSUE:

FLEAS, TICKS AND OTHER BITING PESTS

PG.1 FLEAS

PG.2 TICKS & MITES

PG.3 EVICTOR STROBE LIGHT

PG.4 OTHER SERVICES

## FLEAS

### General Morphology of

**Adults.** Fleas are small, black to brownish-black insects, with complete metamorphosis. Adult fleas are 1 to 4 mm long, depending on the species. Fleas have piercing-sucking mouthparts.

**The Flea Life Cycle.** A female flea will lay 4 to 8 eggs after each blood meal, and can usually lay several hundred eggs during her adult life. The smooth, oval or rounded, light-colored eggs are deposited on, but not firmly attached to, the body, the bedding, or the nest of the host. Although they are a little sticky, those laid on the host's body may fall or be brushed off. This accounts for the eggs being found in crevices in the floor, under the edges of carpeting, in sofas, or in cat or dog boxes, kennels, etc., where they usually hatch in 10 days or less.

The small, hairy, wormlike larvae are whitish, with a distinct, brownish head, and do not have eyes or legs.

Within a week to several months, the larvae grow through 3 instars, then spin a pupal cocoon covered with grains of sand, dust, or

organic debris, in which they are quite effectively camouflaged in their natural surroundings.

The pupae are initially white, but they change to brownish before the adults emerge. In the pupa, the appendages are not closely pressed to the body, and it has the general shape and characteristics of the adult. Under favorable conditions, the adult emerges in a week or two, but under adverse conditions, the pupal period may be prolonged to as much as a year. The adult may remain in the cocoon for a long time until vibrations indicating the presence of a possible host stimulate it to emerge and become active.

The potentially long pupal stage, besides the fact that adult fleas can live without food for remarkably long periods, accounts for the fact that people may enter a house after it has been unoccupied by humans or pets for months, yet be rapidly and severely attacked by fleas. Depending on the species and weather conditions, 2 or 3 weeks to as many months, and rarely as long as 2 years, are required for many species of fleas to complete a life cycle.

### Reaction to Flea Bites

Some people react severely to flea bites, while others hardly notice them.

Fleas most often bite people around the legs and ankles, and there are usually 2 or 3 bites in a row. The bites are felt immediately, but tend to become increasingly irritating, and

are frequently sore for as much as a week. Children less than 10 years old were found to be more sensitive to the bites than older persons.

The insects inject a hemorrhagic saliva that can cause severe itching, and repeated bites may produce a generalized rash. A small, red spot usually appears where the flea's mandibles have penetrated the skin. A cool compress will help relieve the itching.

### Disease Transmission

The most serious indictment against fleas is their ability to transmit disease organisms. This ability is enhanced by their promiscuous feeding habits; they move from one host species to another. For example, the cat flea, readily attacks humans, dogs, rats, opossums, raccoons, and foxes. The human flea, can be found on dogs, rats, pigs, mice, skunks, badgers, deer, foxes, coyotes, prairie dogs, ground squirrels, and burrowing owls. The species normally found on rats and ground squirrels also bite man.

### Tapeworms

Fleas, particularly dog and cat fleas, can serve as intermediate hosts for the dog tapeworm, which occasionally attack humans, particularly very young children.

Visit our web site at [www.borite.com](http://www.borite.com)

## TICKS

Both male and female ticks are bloodsuckers. After engorgement, fertilization takes place. The male then dies, and the female drops to the ground and seeks a sheltered place to reproduce. After the period of several days required for the eggs to develop, she lays her eggs and also dies.

Mature nymphs may have to endure months of starvation before finding a suitable host upon which to feed, molt, and become adult. The adult leaves the host to lay eggs on the ground. Upon emerging from the eggs, the larvae commonly climb up on grasses or shrubs in order to be more readily contacted by passing animals.

The brown dog tick is the species the homeowner is most likely to have to deal with, although the American dog tick and other species also enter the home on pets.



American Dog Tick

Photograph by: Jim Occi

## MITES

Mites are very small arthropods, with head and thorax fused into a cephalothorax. They have sucking mouthparts, no antennae, and those of interest as household pests have 4 pairs of legs as adults. Although most of these species have only 3 pairs of legs in the first (larval) stage after hatching from the egg, they gain a fourth pair in the second (nymphal) stage. The life cycle generally consists of the egg, larval stage, one or more nymphal instars or stages, and an adult stage. The life cycle usually requires only 2 or 3 weeks, and results in rapid increase and huge populations of mites under favorable conditions.

### MOST COMMON MITES ENCOUNTERED BY HOMEOWNERS

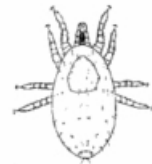
#### HOUSE MOUSE MITE

Although the house mouse is its preferred host, it will also feed on rats and other rodents. The house mouse mite attacks man, and causes a dermatitis.

#### NORTHERN FOWL MITE

This species is an ectoparasite of domestic fowls and many wild birds, but in the absence of bird hosts it will sometimes attack humans, causing an itch. It is similar to the tropical rat mite in appearance and life cycle. It can become a household pest when birds build nests under eaves of a house or in the attic.

Northern fowl mite.  
Illust. credit: OSU



#### CHICKEN MITE

This species is a pest of wild birds. Bird nests can be sources of home infestations, and the human occupants can also be infested. The bite of this mite causes painful skin irritation. After a blood meal the female oviposits in crevices or bird nests. Under favorable conditions, the entire life cycle may require only 7 days. The adults can survive without blood meals for 4 or 5 months.

#### Paper mites

Complaints about bites and rashes which a cause can't be found are often attributed to these fictitious pests. Although mites are extremely small, they are usually detectable with the unaided eye or samples can be collected and checked. Paper mites are often used as reasons to justify pesticide treatments in dwellings. The cause of a problem should be identified before any treatments are made. You should always consult a professional to provide a thorough inspection and provide any treatment recommendations that may be warranted. If no insects or mites can be found, consider other possible causes such as allergies or sensitivities to chemicals, cleaning products, dusts, or changes in your indoor environment or changes in humidity.

For information on bed bugs see our web site under pest control services and a link to the Fox 11 News special, "Bed Bug Outbreaks on the Rise in So Cal."  
[www.borite.com](http://www.borite.com)

### INTRODUCING EVICTOR STROBE LIGHTS



Other signs of rodents: Nests in heater closets, storage sheds, attics and other protected areas. Attics are a favorite place for the roof rat, the most common rat in Southern California.

Evictor strobe lights are a non-harmful way to exclude rodents, squirrels and other animals from attics, sub-areas, grills, storage sheds and any other enclosed uninhabited space.

#### ON SITE ESTIMATES ARE AVAILABLE

#### **RESULTS ARE GUARANTEED**

How do I know if I have rodents?  
There are several signs of rodent infestations, some are obvious and some not so obvious.



Noise, droppings and odors emanating from the attic are also signs of rodent infestations.



These are called rub marks, it is an oily residue left from continual entry and exit of rodents in the same spot.



*It's unwise to pay too much,  
but it's also unwise to pay too little.*

"It's unwise to pay too much, but it's unwise to pay too little. When you pay too much, you lose a little money.....that is all. When you pay too little, you sometimes lose everything because the thing you bought was incapable of doing the thing it was bought to do.

The Common Law of business balance prohibits paying a little and getting a lot...it can't be done. If you deal with the lowest bidder, it is well to add something for the risk you run, and if you do that, you will have enough to pay for something better."

*John Ruskin*

Andrew Dzieman has successfully completed the Purdue University Pest Management Technology management Professionals ever long course. Andrew received an Outstanding Recognition for his efforts. Please, if you see Andrew at your home or business congratulate him on his success.



completed the Purdue University Course. Only a handful of Pest management Professionals ever successfully complete this year long course. Andrew received an Outstanding Recognition for his efforts. Please, if you see Andrew at your home or business congratulate him on his success.

**ALL WORK GUARANTEED**

- Pest Control
- Gopher Control
- Rodent Control
- Rodent Exclusion
- Nuisance Bird Control
- Landscape Pests & Weed Control
- Tree & Shrub Fertilization
- Sanitation & Deodorizing
- Deck & Fence Restoration
- New Construction Borate Treatment

**PEST CONTROL SERVICES**

- CRAWLING AND FLYING PESTS
- RATS\* MICE\* GOPHERS
- RODENT PROOFING\* DECONTAMINATION
- ANTS\* COCKROACHES\* BEETLES
- SPIDERS \* BEES \* WASPS\* MITES
- BEDBUGS\* EARWIGS\* SILVERFISH
- CRICKETS\* FLEAS
- FABRIC PESTS\* PANTRY PESTS

**WOOD DESTROYING PESTS & ORGANISMS**

- BORATE TREATMENT EXPERTS
- FULL & LIMITED INSPECTION
- POWDER POST BEETLES
- DRYWOOD TERMITES
- SUBTERRANEAN TERMITES
- FUMIGATION (TENTING)
- FOAMING APPLICATIONS
- LOCALIZED (SPOT) TREATMENTS
- NON-TENTING TREATMENTS

Licensed Bonded Insured

**Visit our web site at [www.borite.com](http://www.borite.com)**

*We always welcome referrals of friends and family.*

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