

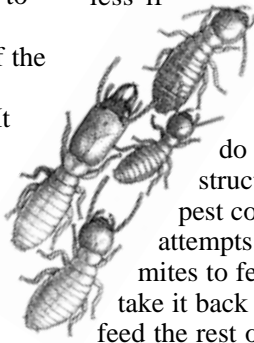
What is the Best Termite Control: Baits or Barriers?

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For more than 50 years, the chemical barrier method was the only way to treat for termites. About five years ago, bait treatments became available. Since then, some pest control companies are providing bait treatments, while others continue to do traditional barrier treatments. People who are trying to make a decision about termite control are confused. If they talk to several pest control companies, they get contradictory information which treatment is best. So they call the extension office, asking, "What is best, baits or barriers?" The answer to this question is, "There is no best treatment. Each treatment methodology has its own advantages and disadvantages." To make a decision about what is best in your situation, you will need to understand the advantages and limitations of each type of control.

An effective barrier treatment completely surrounds the structure with termiticide by injecting it into soil around and under the foundation. This treatment protects the structure, but will not be detrimental to the colony. This treatment requires skill on the part of the pest control technician to insure a complete barrier. It is important for the technician to use the highest concentration and volume allowed on the label. An effective barrier treatment stops termite feeding quickly—there should be no more damage after a month or so. Disadvantages of the barrier treatment are: Holes must be drilled in basement floors, anywhere there are cracks in slab foundations; there can be an odor from the treatment—although some of the newer termiticides do not have a strong odor; and, some people are concerned about the injection of so much chemical, although there should be little environmental and health

problems if the termiticide is used properly. Unlike chlordane which could be effective for 30 years or more, today's termiticides may only be effective for five to ten years, less if lower concentrations and volumes are used. Bait treatments do not protect the structure. Instead, the pest control technician attempts to get the termites to feed on a bait and take it back to the colony to feed the rest of the colony. If everything works as planned, the bait may eliminate or suppress the colony—depending on the bait used. Unfortunately, there is no way to determine whether the colony has been eliminated or suppressed because we cannot see what is happening to the termite colony in the ground. The biggest advantage of baiting is that no invasive procedures are required—no drilling or



See **TERMITE** on page 12

Watch for Fall Invaders

In the fall, many animal, insects, and spiders look for sheltered places to overwinter. The most common invading pests include:

- Box elder bugs. Nymphs and adult bugs suck the sap from leaves of box elder or maple trees so watch for these bugs if you have these trees in your neighborhood. Box elder bugs overwinter in the adult stage and often congregate on south and west exposures. They readily come into houses and may become active during sunny winter days.
- Elm leaf beetles. Larvae and adults feed on the leaves of elm trees. Adult beetles overwin-

ter and readily squeeze through window frames. They are small oval-shaped tan beetles with indistinct striped markings.

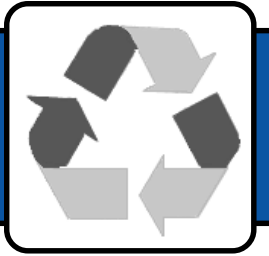
- Cluster and face flies. Adult flies overwinter and squeeze into cracks and crevices. They are especially problematic for rural homeowners, especially those with older homes that have clapboard siding with many cracks and crevices. Active flies can be caught by hanging sticky fly strips in windows (be careful to pull curtains and draperies away from the sticky strips.)
- Multicolored Asian lady beetle. This is a species introduced to control pests that have

a tendency to prefer overwintering in houses. "Multicolored" refers to the tremendous color variations in this species, ranging from black with two red spots, to red with 19 black spots, with every combination in between. The most common color seems to be deep orange. There is a black marking on a white background in the shape of the letter "W" on the thorax. Because they overwinter in masses, lady beetle invasions can sometimes be overwhelming.

- Crickets. We have already receive calls of crickets invading homes.

See **FALL INVADERS** on page 11

Environmental Focus



Woolly Bears



Woolly bears, like other caterpillars, hatch during warm weather from eggs laid by a female moth. There are two generations of caterpillars each year. After feeding on dandelions, asters, birches, clovers, maples, weeds, and other vegetation, the second generation of woolly bears disperse and search for overwintering sites under bark or inside cavities of rocks or logs. (That's why you see so many of them crossing roads and sidewalks in the fall.) When spring arrives, woolly bears spin fuzzy cocoons and transform inside them into full-grown moths.

The best-known woolly bear is called the banded woolly bear. The caterpillar is the larval form of the Isabella tiger moth. This medium-sized moth, with yellowish-orange and cream-colored wings spotted with black, is common from northern Mexico throughout the United States and across the southern third of Canada. As moths go, the Isabella isn't much to look at compared with some of the other 11,000 species of North American moths.

Typically, the bands at the ends of the banded woolly bear caterpillar are black, and the one in the middle is brown or rusty-orange, giving the woolly bear its distinctive striped appearance. According to legend, the wider that middle brown (rust-colored) section is (i.e., the more brown segments there are), the milder the coming winter will be. If the middle section is narrow, there will be a harsh winter. As you might expect, science has

debunked this legend by showing that the amount of black varies with the age of the caterpillar and the moisture levels in the area where it developed.

Woolly bears do not feel like wool. They are covered with short, stiff bristles of hair. In field guides, they're found among the "bristled" species. Children and adults alike enjoy picking up and handling "woolly bear" caterpillars. Their fuzzy appearance and large black and rust-colored bands, and many "tickling" feet, make them a childhood favorite.

Woolly bears are one of the few caterpillars people can identify by name. It is also called the black-ended bear, woolly worm (throughout the South) and even the Hedgehog caterpillar, because it curls into a tight bristly ball and "plays dead" when picked up or disturbed.

Schools have turned woolly bear forecasting into science projects. Nature Centers and journalists report on woolly bear forecasts. For the past ten years, Banner Elk, North Carolina, has held an annual "Woolly Worm Festival" each October, highlighted by a caterpillar race. Vermilion, Ohio (east of Cleveland) holds an annual "Woolly Worm Festival" claimed to be the largest one-day festival in Ohio. Festivities include a parade, woolly bear races, and "official" analysis of the woolly bears and a forecast for the upcoming winter.

If you find a "woolly bear" caterpillar scurrying across your path, pick it up and enjoy it for a moment. For fun, examine the bands on the caterpillar and see if you can make a prediction for the winter. Then, place the caterpillar back down near leaves and other debris so it can find shelter.

Sources: Don Lewis, Iowa State University and the 2000 Old Farmer's Almanac. (SC)

Last Household Hazardous Waste Collection for 2000

Cleaning closets, basements, or garages? You have one last opportunity to get rid of hazardous substances before winter sets in. Bring household waste items to the 4-H Youth Complex at State Fair Park on Saturday, October 28 from 9 am to 3 pm. Items that you can bring for disposal include:

- Heavy metals: items containing mercury such as thermometers and thermostats.
- Solvents: mineral spirits, turpentine, paint strippers and thinners, oil-based paints, varnishes, stains, polishes, and waxes.
- Pesticides: weed killers, garden sprays, wood preservatives, roach powder, rat poisons. You may also bring EPA banned products, like DDT, chlordane, 2,4,5-T, pentachlorophenol, silvex.
- PCB's: Ballasts from old fluorescent fixtures and capacitors from old appliances including radios, motors, and televisions.



Leave products in their original container and keep the label intact. Open, leaking, or rusted containers should be placed in a clear plastic bag during transport. Do not mix chemicals.

Do not bring latex paint, medicines, explosives or ammunition, fertilizers, used oil, general household trash, antifreeze, or batteries.

Remember, this program is available only to Lancaster County-Lincoln residents. For more specific information, call the Lincoln-Lancaster County Health Department at 441-8040. (BPO)



Head Lice Information in Spanish!

Muchos gracias to Lincoln Public Schools, ESL translation department, for translating one of our head lice fact sheets into Spanish. Call the extension office (441-7180) and ask for fact sheet #021-00, Guía Rápida para Eliminar los Piojos Eficientemente (Quick Guide to "Removing Head Lice Safely"). This fact sheet can be printed from our website at: <http://www.ianr.unl.edu/ianr/lanco/enviro/pest/factsheets/021-00.htm> (BPO)