Dealing with unwanted guests

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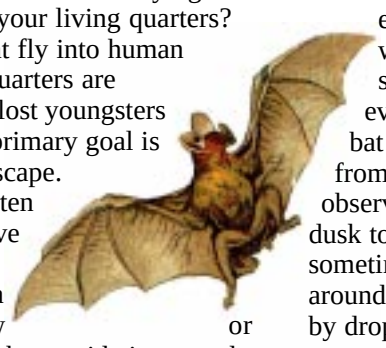
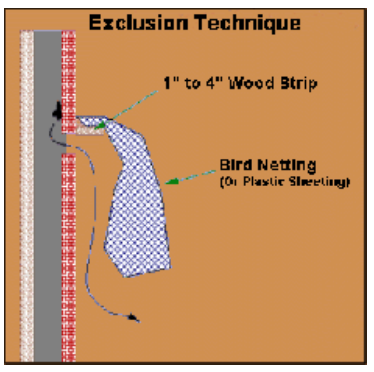
Have a lost bat flying around your living quarters? Bats that fly into human living quarters are usually lost youngsters whose primary goal is a safe escape. They often will leave on their own if a window or door to the outside is opened while others are closed. Bats are not aggressive, even if chased, but may bite if grabbed. As with any wild animal, bats should not be handled with bare hands. An exit can be hastened by catching the bat in flight with a hand net (swung from behind), or when the bat lands, covering it with a coffee can and slipping a piece of cardboard over the opening, and then simply releasing it outside. Or you may also catch it by hand using leather work gloves to avoid being bitten.



Excluding an entire colony from your house

Bats can be excluded from living quarters by covering chimneys and vents with half-inch hardware cloth screens, by installing draft guards beneath doors, and by sealing any other possible access routes, especially around screen doors, windows and plumbing. Bats potentially can enter holes as small as 3/4" in diameter or 3/8" by 7/8". They do not chew insulation or otherwise make new holes. Their entries can be plugged with silicone caulking, steel wool, or temporarily even with tape. If a large bat colony must be evicted from a wall or attic, careful observations should be made at dusk to find entry holes (also sometimes recognizable by stains around used holes or crevices or by droppings beneath). The bats must emerge each summer evening to feed. Once roost entrances have been located, the bats can be excluded, though this should not be attempted when flightless young may be present (usually June or July in the U.S.).

Starved young could create a serious odor problem, not to mention needless cruelty. Most bat species leave in winter, permitting exclusion in their absence. When this is not the case, or when one does not wish to wait for winter, there is a relatively simple exclusion technique using polypropylene bird netting (or plastic sheeting). This inexpensive netting* often is used to protect fruit trees from birds and can be obtained in quantity to cover areas of nearly any size. It can be hung during daylight hours above areas where bats emerge, using duct tape or staples. A strip of netting at least two feet wide, hung one to four inches in front of bat exit holes, and extending at least two feet below the lowest exit point (see illustration), will allow the bats to emerge, but later they will fail to find their way back. Thus the netting acts as a simple one-way excluder until repairs can make the exclusion permanent. During cool periods in the fall or spring, allow at least a week.



Other methods. . .

Harmless repellent devices would seem ideal, but none are known to be effective. The U.S. Environmental Protection Agency once fined a Chicago manufacturer $45,000 for misleading claims involving an ultrasonic device. All ultrasonic sound generators thus far tested by reliable bat experts have proven ineffective and some may endanger people or even attract bats. Naphthalene flakes

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Environmental Focus

Household hazardous waste collections:
September 25 and October 23

Lancaster County residents can bring household hazardous wastes to the following collection site:

9 a.m. - 3 p.m.; Saturday, September 25, Pfizer Animal Health, 601 West Cornhusker Highway

9 a.m. - 3 p.m.; Saturday, October 23, Lincoln-Lancaster County Health Department (LLCHD) 3140 “N” Street, south parking lot

Items that you can bring for disposal:

* Heavy metals: items containing mercury such as thermometers and thermostats. Fluorescent bulbs and many batteries contain heavy metals but can now be recycled locally.

* Solvents: mineral spirits, turpentine, paint strippers and thinners, oil-based paints, varnishes.

* Pesticides: weed killers, garden sprays, wood preservatives, roach powder, rat poisons. You may also bring banned products, like DDT, chlordane, 2,4,5-T, pentachlorophenol, silvex.

* PCBs: 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, fertilizers, used oil, general household trash, antifreeze or batteries. For more specific information, call the Lincoln-Lancaster County Health Department at 441-8040. (BPO)

What’s living in your mulch?

Barb Ogg
Extension Educator

There are many reasons to use mulch around landscape plantings in your yard. Not only is it an attractive ground cover, but it prevents moisture loss and prevents weed growth. But, many people do not realize that mulch is the preferred habitat for some pests that may move inside the house later. The more mulch or wood chips you have, the more likely there will be pillbugs, sowbugs, millipedes and crickets living in it. Predators that feed on these critters, like spiders and centipedes, will also be found in the mulch. This summer, we have heard from many people who have millipedes invading their home. Without exception, every caller admitted to having large quantities of wood mulch close to their house. Undoubtedly, the cool, very wet spring and early summer weather has had something to do with this unusual millipede invasion. Most years, millipedes and these other pests are more of a problem in the fall of the year.

One way to use mulch and still reduce the likelihood of pests invading the house is to simply use it farther away from the house. Another strategy is to seal cracks and crevices in your house exterior to prevent entry. Another strategy might be to anticipate these pests and use an insecticide barrier around the house to help prevent entry. Sealing cracks and crevices, while time consuming, is the most permanent solution to this problem.

Another reason to keep wood mulch away from the house is because termites will feed on it. Termites feed on wood and wood that touches the soil is most likely to be eaten (mulch). So, it is prudent to keep mulch several feet away from the foundation of the house. New mulch or wood chips made from cedar or redwood may be initially more resistant to termites. But, as it weathers, the oils that make it resistant will disappear and termites will begin to feed on it.

I don’t want to give the impression that you shouldn’t use mulch because it has many benefits to ornamental plants and it looks nice. But, you should be aware many small pesky critters also like it. (BPO)

Water treatment equipment considerations

Can water treatment equipment be purchased in anticipation of possible water quality problems? The answer depends on knowing the amount and type of contaminants to be removed. It is highly unlikely that a person would have this information prior to an actual contamination.

No single water treatment method treats all water problems and all methods have limitations. Common treatment equipment includes filters, reverse osmosis units and water softeners, all of which must be used with bacterially safe water. Chlorinators, ultraviolet units and ozone units are specifically designed to provide disinfection. Although distillers aren’t normally used specifically for disinfection, they can be used with bacterially contaminated water and remove more contaminants than any other treatment method. Identifying the type and amount of contaminants is important in selecting appropriate treatment equipment for the situation.

Purchasing and installing unneeded equipment is costly and virtually all water treatment equipment requires maintenance and service which incurs addi-

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Monarch butterflies and Bt corn

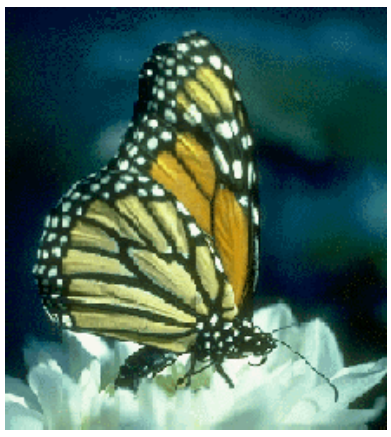
A study by a university researcher was recently published indicating that Bt corn pollen killed monarch butterfly larvae. The media latched onto this information and it was widely circulated in the press-implying that these genetically altered crops are bad for this insect. But, as you might suspect, there is more to this story.

Cornell researcher John Losey and his colleagues conducted the experiment in their laboratory. They collected corn pollen from Bt corn and nonBt corn plants and dusted the leaves with the two types of pollen. After monarch larvae fed on these leaves for four days, the experiment was terminated. Larval mortality, weight and milkweed leaf consumption was measured.

Results from this lab study showed 44% of the larvae that fed on the Bt pollen-coated leaves died vs 0% of those that ate nonBt pollen-coated leaves or untreated milkweed leaves. The larvae that survived were less than half the size of those larvae which fed on leaves with no pollen. One problem with this study is the actual pollen dosage which caused the mortality was not reported so we cannot know for sure how much pollen killed the larvae. This makes it difficult for other scientists to repeat the study.

Another problem with this lab study was, it was not a very realistic representation of what actually happens in the field. Monarch butterfly females locate milkweed plants by sight and lay their eggs on small milkweed plants 3-18 inches in height. They prefer plants in open areas, such as fence rows, ditches and pastures—not in cornfields. The most likely scenario is that Bt pollen drifts and lands on milkweed plants outside the cornfield. Corn pollen is relatively heavy—70% of the pollen will be within 20 feet of the field margin.

A study conducted at Iowa State University showed more pollen landed on milkweed



plants located closer to the field edge and the highest concentration of pollen was found on plants within the cornfield. In their study, more monarch larvae died after feeding on Bt pollen-

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