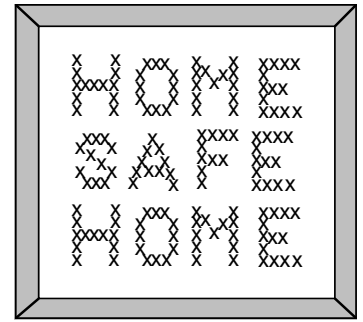


Alternatives

A Washington Toxics Coalition Fact Sheet



Keeping Molehills from Becoming Mountains

by Philip Dickey



Cast-out soil may indicate mole activity and often leads homeowners to go to extreme measures while attempting to eliminate the moles.

As soon as I get outside the city, the number-one question I hear from audiences is “how can I get rid of moles in the yard?” If on some imaginary scale insects cause irritation, diseases cause distress, and weeds cause worry, then by comparison moles cause mayhem. The fact that they perform some pest control themselves while mixing and aerating soil generally isn’t appreciated by John Does on their John Deeres. Just look at the array of things that frustrated homeowners have tried in order to stop the tunneling in their lawns: toilet bowl cleaner, mothballs, gasoline, Ex-Lax, smoke bombs, razor blades, barbed wire, flooding, shooting, lethal traps, and even insecticide to kill the grubs and earthworms that moles eat. These tactics range from ineffective to illegal, and some are more hazardous to the homeowner than to the moles. The fact is that mole damage is not easy to prevent. Fortunately, there is an excellent fact sheet from the Washington Department of Fish and Wildlife. I’ve summarized some of the control suggestions here, but you should read the full publication.

Digging It

Moles are perfectly designed for what they do, which might be thought of as swimming underground. They have small weak eyes—seeing isn’t especially helpful below ground—and large strong front claws oriented for digging. The rest of their body is designed to minimize resistance as they slide through the tunnel they have created. Although there are three species of moles in Washington, the Townsend’s mole (*Scapanus townsendii*) is the largest and most likely the one to be piling up soil in Western Washington lawns. They are 8 to 9 inches long and black in color, not that you’re likely to see them above ground. Moles in Washington eat mainly worms and grubs, but they may occasionally eat some vegetation, especially roots and bulbs. Based on population estimates of from one adult mole in 6 acres to more than five per acre, a typical lot in the city probably doesn’t have more than one or two moles.

Pocket gophers also build tunnels and mounds that can be confused with mole handiwork unless you know how to tell the difference: mole tunnels may be visible above ground but gopher tunnels are not, though both make visible mounds at entrances. Why would you care whether you had moles or gophers? Not just because gophers are cuter, but because some gophers are becoming rare and certain control methods may not be legal for them. If you think you have gophers, you should contact your local Fish and Wildlife office before trying to control them.

Moles are mild-mannered creatures that go about their business underground and wouldn’t cause us any irritation if it weren’t for their tunnels and the mounds of earth they throw up at the entrances. Generally this behavior is most problematic in lawns, where the mounds are highly visible and definitely make playing croquet a challenge. Although the occasional garden plant can be undermined when its roots are left high and dry in a tunnel or pushed out of the ground entirely, gardens usually suffer less impact than lawns.

Be Realistic and Flexible

It is important to be realistic about what is achievable in pest control, especially where moles are concerned. The so-called “silver bullet” or “quick fix” are not available, and depending on whether mole habitat exists adjacent to your property an ongoing commitment to control may be needed. This means that whatever strategies turn out to be effective may have to be repeated at intervals. With this in mind, changes to the landscape designed to minimize mole headaches begin to seem more attractive.

Since moles are most problematic in lawns, consider reducing the size of your lawn to an area that is practical to maintain. Consider dividing your turf area into a smaller, highly maintained area nearest the house, and a more natural area outside that where the grass is mowed or whacked above the molehill level. Alternatively, install native plants in this area instead of lawn for a low maintenance landscape that will not show the mole damage. Nearer the home, consider increasing the size of ornamental beds. In addition to reducing mole headaches, these changes will reduce your water use and need for mowing.

Control Strategies

This section explains a range of tactics you can employ, beginning with the obvious and leading up to the deadly.

Damage Control

Before resorting to killing moles, consider controlling their damage instead. Rake out the molehills as they appear, stomp down tunnels, and fill in depressions with soil. Reseed these areas as necessary to cover the bare soil. Reposition plants that have been moved or covered with soil.

Boom Boxes

Although 7-Eleven reportedly drove off loitering teenagers by playing Mozart through outdoor speakers, moles are either less skittish or more tolerant. According to the Department of Fish and Wildlife, moles are not frightened off by the various noisemaking devices on the market.

Repellents

Once you’ve seen what mole traps look like, repellents may seem more appealing (to you, not the moles). Unfortunately, here we enter an area of great debate and conflicting results with little science to guide us. There is no harm in trying mole plants, garlic, or other natural repellents, but there is no consensus on what you can expect.

Commercial mole repellents (and some homemade recipes) are generally based on castor oil, either in liquid or pelletized form. This material is spread over the lawn and watered in, the idea being that it coats earthworms and grubs making them taste bad and perhaps even giving the moles diarrhea. Although the reviews are mixed, this certainly seems a more effective way to give moles diarrhea than putting a package of Ex-Lax in the tunnel. Expect to apply more than once before the moles pack up and leave, and don’t be surprised to see them back again in a few months, but it may be worth a try.

Trapping

According to both Fish and Wildlife and WSU Cooperative Extension, lethal trapping is the most effective method of control, but even it has to be repeated from time to time. Before embarking on a trapping program, you need to be sure you have moles and not pocket gophers. Read the Fish and Wildlife fact sheet for details on the effectiveness of various kinds of traps. **You also must get a written permit from DFW to use lethal traps.** Do not bury razor

Summary of Control Methods

- ❖ Tolerate some mole damage.
- ❖ Reduce lawn area and make landscape less susceptible to damage.
- ❖ Rake out mounds and fill in collapsed tunnels.
- ❖ Try castor-oil repellents.
- ❖ Consider trapping if necessary (a permit is required for lethal trapping, see text).

To Learn More

Here are links to the two DFW fact sheets on moles and gophers.

Moles (<http://wdfw.wa.gov/wlm/living/moles.htm>)

Pocket gophers (<http://wdfw.wa.gov/wlm/living/gophers.htm>)

Disposal of Mole Baits

Poison baits for moles are pesticides and may be dangerous to have around the house. They should not be put in the trash or flushed down the toilet. Take unwanted mole baits to a household hazardous waste collection site. In the Seattle/King County area, call the Hazards Line at 206-296-4692 or visit www.metrokc.gov/hazwaste for more information. Statewide in Washington, call 800-RECYCLE.

The Washington Toxics Coalition is a non-profit organization dedicated to protecting public health and the environment by preventing pollution. Visit our Internet website at www.watoxics.org.

blades or other sharp objects in the tunnels in hopes of injuring moles or driving them away. You may injure someone who digs there later.

Poison Baits, Bombs, Floods, and other Underground Catastrophes

The problem with poison baits, of course, is that moles eat insects and worms, "food that moves," as Extension Agent George Pinyuh used to say. Baits are not likely to be effective on moles, and they endanger other wildlife and pets. At Seattle's first household hazardous waste collection event in the 1980s, a product called Death to Moles was brought in. The small bottle contained pills laced with cyanide, a deadly poison. See the box at the lower left for information on disposal of old or unwanted mole baits or other pesticides.

Devices that fill the tunnel with toxic gas (smoke bombs and gas cartridges) can work, but success depends on the details of the tunnel system. Similarly, flooding the tunnel with water works best if the tunnel system is small and can be filled very rapidly with water. The appeal of this approach may be somewhat dimmed by the realization that you are supposed to whack the exiting moles with a shovel.

Don't Apply Insecticides to Deter Moles

Since moles eat grubs and earthworms, some folks have reasoned that if you kill those, the moles will go away. Grubs, such as the larvae of crane flies can be a pest when present in high numbers, but recent research indicates that they seldom reach those levels. In addition, they make up a relatively small portion of moles' diet, so killing them won't necessarily solve the problem. Earthworms are highly beneficial, and while some insecticides will kill quite a few of them, you really need them in the lawn to keep good soil texture. In any case, insecticides aren't labeled for controlling moles, so to do so in this indirect manner might be considered illegal.

A Final Thought

When we have conflicts with moles, deer, and other wild animals it is usually because we have invaded their territory rather than the other way around. We should try to keep this in mind and consider whether the "solutions" we propose are sensible, practical, and humane. Another approach is to sit back and enjoy the show!

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