



Pocket Gophers: How to Control the Furry Little Root Eaters

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You'll see evidence of a garden invasion first. A half-dozen horseshoe shaped mounds of loose dirt with a plugged hole to one side. Then the healthy plants begin to die -- or suddenly disappear altogether! And the irrigation lines may spring multiple leaks. If you recognize these symptoms, you likely have a pocket gopher that's set up residence in your yard. Thankfully there are multiple solutions to rid your property of these damaging varmints. But, no matter which solution you choose, you need to act *fast*! Left unchecked, a single gopher can wipe out a garden in the blink of an eye. Ignoring the problem can also lead to gopher densities as high as 60 or more per acre!

Beware: a search of the Internet provides multiple, do-it-yourself control remedies – most of which are not recommended or effective. Examples include dropping chewing gum (Juicy Fruit is the best) or flaming car flares into the burrows. Or moth crystals, used cat litter, fox urine, firecrackers or even chocolate laxatives. What's more, each remedy's author swears to its effectiveness. And *we know* everything posted on the Internet is true!

Seriously, an invasion of these furry little root eaters in your garden can be the beginning of a minor catastrophe. You need to act quickly. Several control methods are available, and they typically involve trapping and/or poison baits. No one method has proven to be fail-proof, so it may be necessary to use a combination of techniques. There are also protective, non-lethal barrier solutions you can use.

It's important to figure out if it's a mole or gopher. The first clue is that moles primarily eat only grubs and earthworms. Moles burrow just beneath the surface, leaving a raised ridge to mark their shallow path. Their burrow entrances are marked by circular dirt mounds with a plug in the middle. Mole and vole controls will be discussed in a separate article.

Gophers prefer herbaceous plants, shrubs and trees. Their key trademark is a crescent shaped mound of loose dirt with a plugged hole that is off to one side of the mound. These holes lead to an intricate network of tunnels containing food caches, nests, dumps for feces, and sump holes to help prevent flooding. A gopher's burrow system can cover an area of up to 2,000 square feet. Gophers seldom venture above ground except to push out dirt from their latest tunnel.

Gopher traps are safe and effective in reducing a gopher population. Plus, they give the added satisfaction of knowing when you've "eliminated" one of the nasty little critters. Gopher traps are typically placed directly inside an active underground burrow (which is marked by fresh mounds of dirt) by digging into the burrow. When the trap is set, cover the burrow with wood or sun-blocking material. Alternatively, trap-sets can be left uncovered, which encourages the gophers to visit the trap site because they want to plug the opening (however, be careful if children or pets could have access to the site). Gophers do not like open systems.

Several types and brands of gopher traps are available at local nurseries and garden centers. They are easy to use, but be sure to read and carefully follow the instructions. It isn't necessary to bait a gopher trap although some experts claim baiting might give better results. Check the traps often. If you haven't captured a gopher within two days, reset the traps in different locations. Keep trapping until no new mounds are formed.

Toxic bait is another approach - the key to being effective is to place the bait in multiple locations along a main underground tunnel. You can find these tunnels by using a gopher probe which can be purchased where you buy the traps and baits. There are also combination probes that are tunnel locators and bait release applicators.

Baits containing strychnine or zinc phosphide are the most common type used for gopher control. They are lethal after a single feeding. Anticoagulant baits work only after a gopher has consumed the bait over five or more days. The anticoagulant chemicals interfere with the animal's blood-clotting mechanisms, which eventually leads to death. Anticoagulants are the safest type of bait for use around homes and gardens where children, pets and non-target wildlife are present. This is because the chemicals are slow acting and they must be consumed repeatedly. They also have an effective antidote: vitamin K1. Anticoagulant baits are available at most retail nursery and garden centers.

Avoid products and methods that are not proven effective. Fumigation with smoke or gas cartridges usually isn't effective because gophers can quickly seal off their burrow when they detect smoke or gas. No gopher repellents, natural or chemical, currently on the market successfully protect plants and their roots. This also includes planting gopher purge, castor bean and garlic plants. Research trials have also debunked the effectiveness of commercial frightening devices such as vibrating stakes, ultrasonic emitters and wind-powered pinwheels. Installing owl boxes to attract owls, a gopher's natural predator, is also unlikely to completely reduce gopher numbers enough to be effective.

Subterranean gas explosive devices, which use a mixture of propane and oxygen, are somewhat effective. But they can be dangerous when used by inexperienced gardeners, and are therefore not recommended. Of course one final alternative is to hire a licensed exterminator.

For smaller planting areas such as raised beds and vegetable gardens, use underground fencing. This is simply burying hardware cloth or heavy-duty 3/4-inch mesh poultry wire at least two feet below the surface (with an additional six inches of mesh bent at a 90-degree angle away from the planting). When planting larger trees and shrubs you can also install poultry wire baskets around the root balls. Be sure to leave room for root growth.

Once you've controlled the pocket gophers be vigilant and watch for reinfestations. This can happen literally overnight, especially if your property borders wildlands, vacant lots and open areas.

Master Gardeners Gail Fulbeck and Debbie Hillel will teach a Plant Propagation class on Saturday, February 9th. Discussions include, how, when, and under what conditions seeds can be

germinated, perennials divided and cuttings taken. Class includes “hands-on” demonstrations. There is no charge for this three-hour event. It starts at 9:00 a.m. and is held in the Veterans Memorial Building, 130 Placerville Dr. in Placerville.

Master Gardeners are available to answer home gardening questions Tuesday through Friday, 9 a.m. to noon, by calling (530) 621-5512. Walk-ins are welcome. The office is located at 311 Fair Lane in Placerville. For more information about our public education classes and activities, go to our Master Gardener website at http://ucanr.edu/sites/EDC_Master_Gardeners/. Sign up to receive our online notices and e-newsletter at <http://ucanr.edu/mgenews/>. You can also find us on Facebook.