

## MAMMALIAN PESTS IN THE GARDEN: CONTROL THEM, LIVE WITH THEM, OR BOTH.

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Many of us "Foothill Dwellers" love it here, for the enjoyment of the natural world surrounding us. Sometimes however, that natural world comes in the form of critters, large and small, that love the same veggies, flowers, and trees that we do. It's a tough decision to make, when you and the critters come face to face (metaphorically) in the garden over chewed tomatoes, broken saplings, or disappearing peaches. If you have a garden, it's going to happen. I promise. At that time, you need to make those decisions.

Most pest control articles deal with insect or "invertebrate" pests in the garden. They are small. They are numerous. They have been dealt with in many presentations and articles from local Master Gardeners. But this one deals with mammalian pests. Although lesser in number than the insects, they can cause massive damage to a veggie or flower garden. To mitigate the damage, you need to take appropriate steps.

It is impossible to discuss in 1,200 words, in-depth control methods for every mammalian pest you may encounter in your garden, so please consult the <u>UC IPM Pest Notes library</u> (see references) for any critter you are facing. This library is updated constantly, as laws change, and is filled with great ideas for pest control of all types.

First, determine what pest you're dealing with. In a few instances, you can tell easily. If you see holes dug in pathways or lawns, and you smell that unmistakable odor, it's a skunk...digging for grubs. If you see flowers or tomatoes or ears of corn eaten completely, about four feet off the ground or higher, it's a deer. If you see those mounds of freshly dug earth that often appear spaced out in a line across your garden, and plants either disappear or start to wither and when you pull on them, they come out of the ground without roots, it's a gopher. For a pest control program, you must identify the pest.

It's not always easy, however, to know exactly what creature is causing your damage. The best way is to actually see them. Keep an eye out with binoculars during the day and a flashlight at night. Or better yet, invest in (or borrow) a "Trail" camera or "Game" camera. They do not cost too much and they are a great tool to photograph anything that moves in your yard. The camera can be on the lookout 24 hours a day, is motion activated, and can take still shots or videos. And it's lots of fun once you learn to use it, even if you don't have pests. You can just "see" what is wandering around when you're not looking.

Once you've determined your target pest, here's your first decision. There are two basic pathways of pest control. They are "LETHAL" and "NON-LETHAL." Either the pest ends up dead or alive at the end of your pest control program. You may have strong feelings about this decision, one way or the other. But that choice is sometimes made for you, by the nature of the pest. For example, since it is almost always illegal to shoot, poison, or trap deer that are garden intruders, you must choose a non-lethal control. The recommended methods are the planting of deer resistant plants, exclusion by fencing, individual plant protection, or the use of frightening devices or repellants sprayed on plants. Or perhaps all of the above. See the list of Vertebrate Pest Notes <a href="here">here</a> and in the references below.

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Above: Western gray squirrel. Photo by Dr. Lloyd Glenn Ingles. Below: Adult California ground squirrel. Photo by Monica Dimson, UCCE Orange County,





Above: Adult pocket gopher. Photo by Jack Kelly Clark. Below: Various types of gopher traps. Photo by Roger A. Baldwin.



Another example would be squirrels. In our area, there are ground squirrels and tree squirrels. Ground squirrels are considered by the state of California as a non-game animal and therefore do not have legal protection against trapping/killing. Remember, however, that relocating any trapped wildlife is illegal in California without a permit. So they must either be released where they are trapped or euthanized in a legal manner (like gassing or shooting). Ground squirrel burrows can potentially be controlled by fumigation in early spring or when the soil is still moist. Pressurized systems like the PERC system which releases carbon monoxide into the burrows has been shown to be effective for ground squirrel control and is legal in California (see the referenced Pest Note Library). However, shooting, frightening devices, burrow exploders, and biological control are all considered ineffectual for long-term ground squirrel control.

Tree squirrels present different challenges. The native Western gray squirrel is classified as a game animal and can be taken only during hunting season, with a hunting license. The Eastern fox squirrel (a reddish colored tree squirrel) has been introduced into certain parts of the state and is considered a harmful pest to homes and gardens. It can be trapped and killed, any time, without a permit. But it is illegal to use poison baits to kill any tree squirrel species. Control of tree squirrels is a difficult task and takes a commitment of time and effort. Any squirrel who is removed from an area will soon be replaced by another. Tolerance (or a dog) is often the only way to coexist.

The most common local type of rabbit pest is the jackrabbit. They are the size of a house cat and are commonly seen in daylight even though their preferred feeding time is at night. Most rabbit damage is less than two feet high. This differentiates them from the deer who tend to cause damage at higher levels. California Fish and Game classifies jackrabbits as game animals but they can be controlled in any legal manner, without a hunting license, if they are causing crop damage. Exclusion (fencing) and repellants are the recommended non-lethal methods for jackrabbit control. Note that fencing should be buried at least 6-8 inches below the ground as well as three feet or more above ground. The bottom of the buried fence should be bent outward, to keep rabbits from digging underneath the fence. Trapping is difficult for jackrabbits as they avoid entering enclosed spaces. Shooting can be an effective method to remove small numbers of rabbits in a rural setting where use of firearms is legal.

One of the most difficult pests to deal with is the pocket gopher. Earth mounds signal their presence and the earlier in the spring you deal with them, the better, as numbers will increase. They can cause catastrophic damage to a veggie garden. They can destroy roots or pull complete plants down into burrows from below.

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UC Master Gardeners of Placer County are University of California Cooperative Extension (UCCE) ambassadors to the Placer County home gardening community. Master Gardeners promote environmental awareness and sustainable landscape practices, and extend research-based gardening and composting information to the public through educational outreach. UCCE is part of the Division of Agriculture and Natural Resources (ANR) of the University of California.



For an article on managing deer in the garden see the Summer 2019 issue of <u>The Curious Gardener</u>. Photo by Bonnie Bradt.

Best methods of control are exclusion (plant in gopher baskets), poison baits, trapping, or all three. Note: trapping is preferred. You see the target species successfully dealt with and there is no danger to pets and children. But trapping is an art form, and needs practice. Don't give up!

It is not easy to manage damage to a garden by local mammalian pests, but study, practice, and perhaps willingness to share part of your crop will ensure success and peace of mind in the end.

## References

UC IPM, Statewide Integrated Pest Management Program, Pest Notes. <a href="https://ipm.ucanr.edu/PMG/PESTNOTES/index.html">https://ipm.ucanr.edu/PMG/PESTNOTES/index.html</a>

Salmon, T.P., D.A. Whisson, and R.E. Marsh. *Wildlife Pest Control around Gardens and Homes.* 2<sup>nd</sup> ed. UCANR Publication 21385. 2006.

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