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Gophers and Moles and Voles, Oh My!  
By Susan Burnside  
UCCE Master Gardener of El Dorado County

When your garden develops more holes than a golf course, it's time to identify and manage the source of the damage. In our area, there are three common hole-digging, plant destroying culprits: gophers, moles, and voles. The tips below can help us identify the type of pest and find more information for managing them.

Let's start with gophers. There are five species of pocket gophers in California, the most widespread being the Botta's pocket gopher. Pocket gophers get their name from the external cheek pockets that they use for carrying food and nesting materials. Gophers have hard-working large-clawed front paws and four large incisor teeth; in fact, they can close their lips behind their teeth to keep the dirt out of their mouths when digging.

Gophers are herbivorous and are active year round. They breed in the late winter and early spring, resulting in one to three litters per year. Each litter usually averages five to six offspring.

Gophers live in a burrow system. Their feeding burrows are usually six to twelve inches below ground, and their nests and food storage chambers can be up to six feet deep. Gophers create sloping tunnels to connect the main burrow system to the surface. As they push dirt to the surface, mounds of loose soil are created which are crescent or horseshoe shaped when viewed from above, and one gopher can create several mounds in a day.

If you suspect that you have a gopher problem, there are several management options. Visit the UC IPM website for the Pocket Gophers Management Guidelines at <http://ipm.ucanr.edu/PMG/PESTNOTES/pn7433.html>

Moles are small insect-eating animals, and are not part of the rodent family. They live almost entirely underground in networks of interconnecting tunnels, which they create just below the

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surface. Moles have cylindrical bodies and pointed snouts, with large flipper-like limbs. Their eyes are poorly developed, and their ears are not visible. We will typically find only one mole per tunnel, except during breeding season, and females will have one litter of three to four babies per year.

Because moles eat insects, they create temporary surface burrows or “runways” when searching for food. The surface feeding burrows appear as ridges along the ground that result from the animal forcing its way through the soil and are one of the tell-tale signs that a mole is present. Except during periods of extreme cold, heat, or drought, moles are active throughout the year, with most of their activity occurring after rainfall or when the ground has been watered; this is when digging new tunnels is the easiest for moles.

When a mole pushes up soil to the surface from an underground runway, a mound forms. Unlike the typically crescent shaped gopher mound, a mole mound is circular and almost volcano shaped, and the soil will likely be in small chunks. You may even notice single mounds spaced in a line along the runway. There are several methods of control available for mole problems; see the UC IPM website for the Moles Management Guidelines at <http://ipm.ucanr.edu/PMG/PESTNOTES/pn74115.html>.

If you’ve ruled out gophers and moles as the culprit, consider whether a vole is at work. Commonly known as a meadow mouse, voles are rodents that are mostly herbivorous. Unlike gophers and moles, voles spend considerable time aboveground. They prefer areas of dense vegetation and live in underground burrows that are connected by aboveground runways.

Vole burrows have openings that are about two inches in diameter, and their runways are typically hidden by grass or other ground cover. Most damage by voles occurs during outbreaks of vole populations. A female vole matures in 35 to 40 days and can produce five to ten litters per year, with each litter ranging from three to six young.

Voles cause damage by feeding on a wide range of plants including many garden vegetables, turf, landscape plants, and by gnawing the bark of fruit and nut trees. The good news is that voles usually don’t enter homes or other buildings, and they are poor climbers. For more information about managing voles, visit the UC IPM website for the Voles (Meadow Mouse) Management Guidelines at <http://ipm.ucanr.edu/PMG/PESTNOTES/pn7439.html>.

Join us on March 16 for an exciting presentation on “Pests and Pollinators” where Master Gardener Kit Veerkamp will discuss biodiversity and pest control in the context of the ecologically-sustainable garden. Class is free and will be 9:00 a.m. to noon at Government Center, Building C-Hearing Room, 2850 Fairlane Circle, Placerville.

UCCE Master Gardeners of El Dorado County are available to answer home gardening questions Tuesday through Friday, 9:00 a.m. to noon, by calling [\(530\) 621-5512](tel:5306215512). Walk-ins are welcome at our office, located at [311 Fair Lane in Placerville](#). Visit us at the Sherwood Demonstration Garden, located at 6699 Campus Drive in Placerville, behind Folsom Lake College – El Dorado Center. The garden is open on the second Saturday of each month, 9:00 a.m. to noon, till April 2019.

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For more information about our public education classes and activities, go to our UCCE Master Gardeners of El Dorado County website at <http://mgeldorado.ucanr.edu>. Sign up to receive our online notices and e-newsletter at [http://ucanr.edu/master\\_gardener\\_e-news](http://ucanr.edu/master_gardener_e-news). You can also find us on Facebook.