

CHALKBOARD

TIPS FROM THE PROS

CONTROLLING THE UNWANTED ADMIRERS OF QUALITY TURF

Well-groomed golf courses and athletic fields attract more than golfers and athletes. Certain types of wildlife thrive on the tender roots, seed, worms and insects in the cool, moist soil beneath sports turf. Nearly everything a landscape manager does to provide resilient, uniform turf also invites pocket gophers, moles and ground squirrels that tunnel beneath the turf to live and feed.

The problem is common at turf facilities located near large natural areas or farmland. As parks, schools and golf courses are built on the edge of spreading suburbs, turf managers find their beautiful turf being riddled with mounds of dirt, soft spots and ridges above burrows dug by these vertebrate pests. A trend toward naturalizing areas around golf courses and parks by replacing mowed turf with wildflowers and tall grass may be encouraging these animals to increase their populations. Construction in areas that were formerly natural can cause escaping pests to move onto the sports turf site.

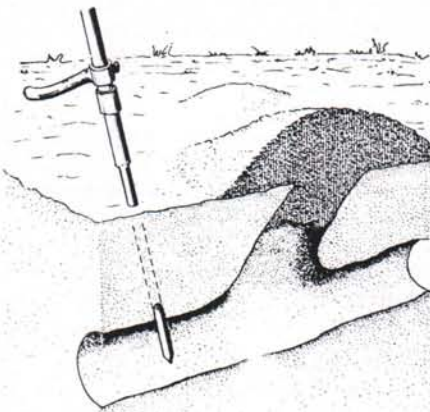
Extension wildlife specialists know how difficult controlling these pests can be and urge turf managers to contact them before taking control measures into their own hands. Poorly selected or implemented control methods can cast a very negative image on the sports turf manager since the public in general is very protective of wildlife. Trapping, fumigating and baiting must be carried out in humane ways and without hazard to nontarget wildlife or domesticated animals. Once a problem is recognized, it may be wise to hire a pest control specialist to do the work.

Pocket gophers are short-legged rodents six to 12 inches in length that live alone in burrow systems from four inches to a foot below the surface. They feed on a wide assortment of roots, tubers, grasses and seeds damaging turf, ornamental and trees in the process. Using their large front teeth they can gnaw through plastic irrigation lines. Damaged irrigation pipe can seriously hamper the distribution of water intended by the system designer.

The mounds of pocket gophers are fan-shaped instead of round like those made by moles. The hole, usually filled with a plug of dirt by the gopher, is on one edge of the mound instead of in the middle. The mounds are usually located at the end of short tunnels that branch out from a main burrow system. One gopher may cause several mounds in a single day.

Success in pocket gopher control entails

locating the main burrow. The gophers rarely leave their burrows to move about on the surface. Traps and baits inserted into main tunnels are most effective and create the least disturbance to the infested area. To find these main burrows use a pointed metal rod and probe starting at the mound. You should find the short, lateral burrow leading away from the side of the mound with the exit hole. Follow it to the main burrow. Burrows are about two inches in diameter.



Probing to locate main runway.

Carefully remove the soil above the main burrow with a spade. Bait or traps can then be inserted. Place two traps in each hole with the triggers facing away from the hole into the burrow. The hole must then be covered with dirt clods or sod to block out any light from entering the hole. Check the traps in three days. Serious infestations may involve up to 50 gophers per acre. Set traps in numerous burrows and check them frequently.

Grain baits containing strychnine or anticoagulants (chemicals which cause the animal to bleed internally) can also be placed in the main burrows and replenished every week or two. Level and tamp down old mounds in order to judge gopher activity following treatment. Special tools to insert bait into burrows from the surface are available. Pest control companies in regions with serious gopher infestations will have the specialized equipment needed.

While pocket gophers prefer open areas and meadows, moles like sites where the soil remains cool and moist. They are frequently found in turf areas shaded by trees near streams or ravines. Another difference is moles eat worms and grubs (insect larvae) in the soil in addition to tender roots.

Sports turf infested with grubs can actually attract moles. By tunneling near the surface to feed they create ridges in the turf. Their main burrows, however, are as deep as 16 to 30 inches below the surface. They also create mounds distinguished by the exit hole located in the center. These mounds are often in a line connected just below the surface by burrows.

Moles are shorter than gophers, have pointed snouts and lack external ears. Their front legs are paddle-shaped and have long claws for digging. Their tails are bare and they appear blind with very poorly developed eyes.

The primary method of mole control is trapping. These traps must be properly placed in the lower burrows to be effective. The sports turf manager may elect to have a pest control specialist trap infested areas. He can discourage future mole infestation by reducing the number of grubs in the soil with applications of soil pesticides.

Ground squirrels feed above ground, not in their burrows. They construct burrows to give birth, sleep, hibernate and store food. Colonies of up to 20 ground squirrels will set up burrow systems near buildings, tall grasses, fences, piles of debris or ditches.

In the spring they are active on warm, sunny days feeding on grasses, herbs and leaves. They switch their diet to seeds in summer and fall. For these reasons bait treatments are most effective when placed on the surface near burrows in early summer and fall. Caution is advised in spreading baits. Bait boxes can be used to guard against feeding by pets and non-target animals. Traps can also be effective when placed on the surface near burrows in the summer and fall. Serious infestations may require treating burrows in the spring with fumigants.

Ground squirrels can be discouraged from digging burrows by removing debris near buildings, in plant beds, along fences and in ditches. Removing their protection makes them more vulnerable to natural predators and harsh weather.

Since ground squirrels feed above ground and are active during the day, instruct members of the grounds crew to recognize and report ground squirrels in parks, on campuses and golf courses. Once they are sighted, locate the burrows and implement a control program quickly.

Editor's Note: This story is based upon information provided by Terrell P. Salmon, extension wildlife specialist, University of California, Davis, CA.