## CONTROLLING MOLES by Stan Rachesky Entomologist, University of Illinois

Moles destroy turf and ornamental plants or bulbs by direct feeding. The main damage is done when plant roots are dislodged as the animals work through the soil in search of earthworms and insects (grubs), which form the bulk of their diet. Plant seeds, roots, and bulbs in mole runs are usually destroyed by mice or other rodents that use the passages. Earthworms are beneficial in maintaining good texture porosity of the soil. However, soils containing many earthworms and insects, larvae or grubs will attract moles and their removal or reduction may be desired in some locations.

Moles produce one litter of about four young each year. Nests are usually deep, beneath the protective cover of a large stone, tree, sidewalk or roadway. The hard-working little animal has keen senses of smell, touch, and hearing, but is almost blind. Moles are most active on damp, cloudy days in spring and fall.

If deprived of their food supply (earthworms, insects), moles will be forced to move to other areas. The use of insecticides will reduce this food supply.

Chlordane or dieldrin are the insecticides to use to control earthworms and turf insects. Following are suggested formulations:

Insecticide	Amt. per	Amt. per
Dieldrin	1,000 sq. ft.	acre
18.6% EC 5% granules Chlordane	1/2 pt. 11/2 lbs.	2 gals. 60 lbs.
45% EC	1/2 pt.	21/2 gals.
10% granules	21/2 lbs.	100 lbs.

The best time to trap is in early spring, when the first ridges are noted, or after the first fall rains. Trapping is difficult in midsummer or in winter, when moles are deep in the ground.

Since all runways may not be in use, find the active ones by rolling and leveling the ridges, or by stepping down on several ridges around the edge of the turf area to see which ones the moles will raise again. Flagging these spots will help to keep track of which ones were rolled or flattened. Assume these to be the main runways and trapping should start here. Do not leave a trap set in a spot more than one day if it fails to make a catch. Re-set it in another runway.

## Choker Trap

Press down a small section of the runway lightly (Fig. 1) with the hand or foot to make a base for the trigger pan. Make slits in the ground (Fig. 2) for the loops. Set choker loops in the slits (Fig. 3) so that the loops encircle the runway. Be sure that the bottoms of the loops (Fig. 4) are at least an inch below the original passage.

Inspect traps after a rain. If the soil has washed away, leaving a space beneath a trap trigger, insert a chip or flat stone in this space to insure quick trigger action.

## Harpoon Trap

After finding the active runway, level the ridge as in Fig. 1. Set the trap with the two pointed supports astride the runway and inserted into the ground deeply enough to prevent recoil when the trap is sprung (Fig. 5). The prongs should be poised about an inch above the original runway. Raise and release the prongs several times before adjusting the trigger so that earth will not prevent full trap action. Always re-set after a rain.

