

use, for diluting a compost heap in order to make it possible to apply a light compost dressing over an extensive area, and possibly for numerous other purposes peat of good quality may have a considerable value. There are peat deposits, however, that because of infiltration with bog iron or other materials may be actually injurious to plants. In using any peat deposit, therefore, it is important to learn something of that particular deposit. It is doubtful if the use of peat on clay soils, either as a top-dressing or as a mixture in an effort to improve the physical condition of the surface, is ever advantageous.



A compost and soil sifting machine which was tried out during the season of 1924. It is claimed that this machine in one case screened more top soil at a labor cost of \$15.50 than was screened through a rotary screen by 5 men over a period of 3 weeks, at a labor cost of \$455.

Destroying Pocket Gophers

By W. B. Bell, U. S. Biological Survey

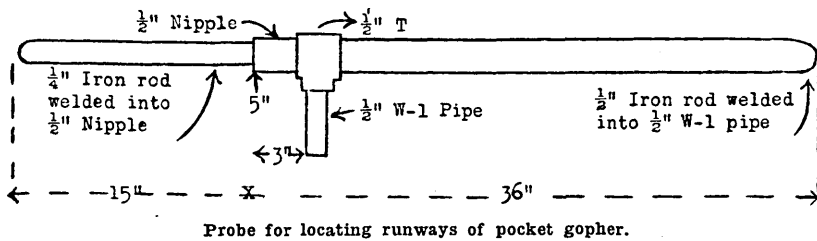
Pocket gophers are readily caught in any one of several makes of special traps commonly on the market, and a few traps will be all that are necessary to keep small areas free of these pests. For larger areas, such as fairways, a very successful and much more practical method is to poison the rodents by use of baits of vegetables or grain. Either the vegetable or the grain bait gives splendid results, but some gophers will not eat a poison bait, and these individuals must be trapped.

The following formulas for preparing poison baits have been developed by the Biological Survey of the Department of Agriculture and have been found to be very effective:

For a vegetable bait, cut carrots, sweet potatoes, or parsnips about 2 inches long and $\frac{1}{2}$ inch square, and wash and drain the cuttings. From a pepper box sift slowly a mixture of $\frac{1}{8}$ ounce of powdered strychnine alkaloid and $\frac{1}{10}$ ounce of saccharin over about 4 quarts of the dampened baits, stirring the baits to distribute the poison evenly.

For a grain bait, oats, rolled barley, milo, or feterita are recommended. Dissolve 1 heaping tablespoonful of dry gloss starch in a little cold water and to this add $\frac{3}{4}$ pint of hot water. Boil, stirring constantly until a thin clear paste is formed. Mix together 1 ounce of powdered strychnine alkaloid and 1 ounce of baking soda, and sift this mixture into the hot starch paste and stir thoroughly to a smooth creamy mass. Add $\frac{1}{4}$ pint of corn syrup, 1 tablespoonful of glycerine, and $\frac{1}{10}$ ounce of saccharin, and stir well. Pour this mixture over 13 quarts of the grain selected, and mix thoroughly so that each grain is evenly coated. Allow to dry before using. It is important that only the best grade of thoroughly clean grain be used, as chaff absorbs and wastes much valuable strychnine, and useful birds will be endangered from poisoned weed seeds which the grain may contain.

One or two of the vegetable baits, or a tablespoonful of the grain bait, is dropped through a hole made into the runway. For locating the runs, which are usually 4 to 8 inches beneath the surface, and for making the hole, use a probe made of any strong handle, 1 inch in diameter and 36 inches long. A useful instrument for this purpose is here illustrated. One



end should be pointed bluntly. Into the other end should be fitted a piece of $\frac{1}{4}$ -inch iron rod, protruding about 15 inches and bluntly pointed. A foot-rest aids in probing hard soils. By forcing the iron rod down near the pocket gophers' workings or a foot or two back of their fresh mounds, the open tunnel can be detected as the point of the rod breaks into it. The blunt end of the instrument is then used carefully to enlarge the hole. After the bait is put in place, the probe hole is closed.

If a shovel is used instead of a probe to locate the runways, care should be taken not to disturb the runway more than necessary, and the hole should be closed so as to keep out the light, care being taken that loose dirt does not fall upon the baits placed in the runway.

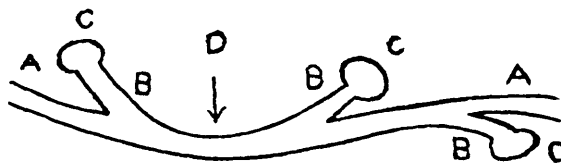


Diagram of portion of pocket gopher's workings.

- A.—Main runway, where the poison should be placed.
- B.—Laterals, where it should not be placed.
- C.—Mounds made by the pocket gopher, usually indicating the direction of the lateral. The lateral should be followed by means of the probe until the main runway is found. The lateral may vary from 6 inches to 4 feet in length.
- D.—Point where probe is used and bait dropped.

One soon becomes expert in locating the runs, and a man can treat 300 to 500 pocket-gopher workings in a day. Baits need be placed only at two points in each separate system of 10 to 30 mounds, which is usually the home of a single pocket gopher. Experience has shown that baits placed fairly in the open runs usually kill the animals. About 2 days after putting out the poison all mounds should be leveled. This permits grass to grow and makes it easy to discover by fresh mounds the location of any animal that may not have been killed and which requires additional effort to destroy.

Caution.—All poison containers and all utensils used in the preparations of poisons should, until thoroughly cleaned, be kept plainly labeled and out of reach of children, irresponsible persons, and livestock.

Taking Care of an Eighteen-Hole Course with Nine Men

By Joseph Valentine, Greenkeeper, Merion Cricket Club, Haverford, Pa.

I believe that any 18-hole golf course in the country can be kept in first-class condition with 9 men used in the manner outlined below, provided they are supplied with the best equipment.

At least four men are required for keeping the putting greens in proper condition. They should first poll the greens of worm casts, dirt, and other debris. They should then mow them, using mowers with 16-inch cut. To do that work thoroughly would take up the entire morning, this including also the early morning watering in the summer months. In the afternoon, these men should be employed in doing the top-dressing, fertilizing, weeding, spraying, and any other work necessary on the greens. This estimate is based on putting greens averaging at least 6,500 square feet in size.

One man should do nothing else but take care of the cups and moving the tee markers every morning. The cups should be moved at least every Monday, Thursday, Saturday, and holiday, and, indeed, more often if necessary. His afternoons should be used in helping the men working on the putting greens, or in any other important work that may come up.

One man should be used in taking care of the fairways and the large tees, with a tractor. When through mowing the fairways and the large tees he should be used on the rough.

One man, with a truck, should do all the hauling. He should haul the top-dressing where it is needed, haul the cut grass from the green, haul the sand that is needed, and haul any other material necessary.

Two men with scythes, rakes, mowers, and other necessary equipment, should look after the creeks and bunkers. They should mow the approaches to the putting greens and such tees as can not be mowed with the tractor. As soon as the dry season comes on, one of these two men should be employed at nights watering the greens.

Greenkeepers' Register

We have the names of a number of greenkeepers who have recently indicated their availability for employment. These names will be gladly given to any club upon request.

We shall be glad to list the names of additional greenkeepers who are seeking positions, provided a statement as to age and experience and the names and addresses of references are furnished with the application.