

Getting Rid of Ground Squirrels At the Scioto Country Club

The Scioto Country Club, Columbus, Ohio, has been pestered with the 13-line ground squirrel on its course for the past nine years, to the extent, as Mr. George Sargent advises us, of nearly undermining the entire course. The problem was laid before the United States Biological Survey, through the Green Section, and the following poison bait was recommended as the most effective means of exterminating the squirrels:

Mix 1 tablespoonful of gloss starch in $\frac{1}{2}$ teacup of cold water, and stir into $\frac{1}{2}$ pint of boiling water to make a thin, clear paste. Mix 1 ounce of powdered strychnine (alkaloid) with 1 ounce of baking soda (bicarbonate), and stir with the starch to a smooth, creamy mass free of lumps. Stir in $\frac{1}{4}$ pint of heavy corn sirup and 1 tablespoonful of glycerin, and finally 1 scant teaspoonful of saccharin. Apply to 20 quarts of oats and mix thoroughly to coat each kernel. Each quart of poisoned grain is sufficient for 40 to 60 baits. This quantity, scattered (1 teaspoonful to a place) along squirrel trails, or on clean, hard surfaces near the holes, will not endanger stock.



Columbia Ground Squirrel

The bait was prepared and scattered as suggested, under Mr. Sargent's direction, and he writes that the following day the men on the course gathered up between 150 and 200 dead squirrels, and that since then a live ground squirrel has not been found on the course.

More than 50 species and races of ground squirrels occur in the United States and Canada. They comprise a group of long, slender animals, of grayish or grayish-brown color, sometimes mottled or striped, and with a medium or long tail, usually less bushy than that of the larger of the tree squirrels. These ground squirrels are often,

but wrongly, called "gophers," and are locally called "digger squirrels" and "picket pins." They dig numerous deep burrows, and are very destructive to both crops and turf.

Among the largest and most destructive of these animals is the California, or "digger," ground squirrel. It is gray in color and has a long, rather bushy tail. It occurs in the Southwest and West from western Texas to California and Oregon. In parts of California the race known as the Beechey ground squirrel is especially abundant and menaces not only crops and irrigation ditches but also human life, in that it is a known carrier of bubonic plague. Another large and destructive species is the Columbia ground squirrel, occurring within the United States in parts of Montana, Idaho, eastern Washington and eastern Oregon. Another species, destructive and widely distributed, is the Richardson ground squirrel. In its larger form it is found in much of Montana, the Dakotas and northward into Canada. A somewhat smaller race is found in southeastern Oregon, northern Nevada, southern and eastern Idaho, southern Wyoming and southern Colorado. The striped ground squirrel, the Franklin ground squirrel and some other species are less gregarious and seldom occur in great numbers in any locality.

Trapping is a slow process to use effectively against large colonies of ground squirrels; the use of poison baits is therefore recommended for their extermination. The same bait can not, however, be used effectively against all of the species, and three different formulas are therefore recommended. The formula given above has been used successfully against the Richardson ground squirrel and the striped ground squirrel. For the California or "digger" ground squirrel the same preparation is used except that 16 quarts of clean barley are substituted for the 20 quarts of oats.

For the Columbia ground squirrel the following formula is advised: Mix 1 ounce of powdered strychnine (alkaloid), 1 ounce of powdered bicarbonate of soda, 1 teaspoonful of saccharin, and $\frac{1}{2}$ pound of dry powdered laundry starch, and stir with enough cold water to make a smooth, creamy paste. Apply to 12 quarts of good, clean oats in a metal tub or other vessel, and stir thoroughly to distribute the poison evenly. When the poisoned grain is dry, scatter it along squirrel trails or on hard soil on the surface near the squirrel burrows. A quart of the grain should make 40 to 50 baits, and if properly distributed stock will not be endangered by this quantity.

A word of caution must be given when the use of poison of any kind is contemplated on a golf course. All poison containers and all utensils used in the preparation of poisons should be kept plainly labeled and out of reach of children, irresponsible persons and live stock.

The foregoing data on ground squirrels and exterminating them with poison are taken from Farmers' Bulletin 932, "Rodent Pests on the Farm," which may be obtained free upon application to the United States Department of Agriculture. The bulletin also discusses field mice, cotton rats, kangaroo rats, pocket gophers, prairie dogs, woodchucks, rabbits, and other native rodents.

"The Case for the Caddie."—Under this title the Metropolitan Golf Association, New York City, has issued a very attractively printed pamphlet dealing with the caddy problem. It contains very helpful advice and suggestions.