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AN IMPROVED CYLINDRICAL SEED SPOT SCREEN AND SETTER

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The usual method of protecting seed spots against rodents is by use of cone shaped screens of galvanized hardware cloth. These wire cones are well adapted to Lake States conifers but not to oak and larger leaved or fast growing species, because the cones have very limited space for normal lateral development of leaves and are difficult and slow to set in the field and to keep free of weed growth.

An improved seed spot screen was designed especially for oak. It is made in the shape of a cylinder 8 inches high and about 6.9 inches in diameter (figure 1). A flat cap of 8-x 8-inch hardware cloth is held in places with two or three 12-inch galvanized wire pins of No. 10 gage.

A special tool was devised for setting the cylindrical screens. The tool consists of a cylindrical band of quarter-inch iron, 3-1/2 inches high, welded to a pipe to make a tool 48 inches long (figure 2). The setter is thrust into prepared ground vertically to a depth of 1 to 2 inches and pulled out, and the screen cylinder is inserted into the circular slot in the ground and firmed by a few tamps of the heel.

The cylindrical screen has these advantages over cones: (1) It permits normal development of leaf and stem of larger seedlings such as oak. (2) It is easier to set to greater depths, with or without a setting tool,

than a cone because of having vertical sides. (3) Examinations, counts and eradication of weeds can be done more quickly and easily by merely pulling out the pins that hold the cap in place. (4) Since the cylinder itself is not disturbed in counts or weeding, it remains firmly seated in the soil. A removed cone, however, must be carefully reset in a scooped-out ring, and the soil again refirmed on the outside after each examination or weeding.

A larger cylinder--19.15 inches in diameter by 24 inches in height--is used in studies of the reproduction of yellow birch and similar species when rodent protection is needed for 3 or more years.

The several types of cylindrical screens discussed here are especially useful in experimental work which has as its objective the appraisal of rodents as a factor in the failure of direct seedings.



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Figure 1. — The cylindrical seed spot screen with cover.



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Figure 2. — Tool for setting the cylindrical screens in the field.