

CULTIVATION TOOLS FOR NEWLY ESTABLISHED WINDBARRIERS IN NORTH DAKOTA

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Clean cultivation of newly planted windbarriers is absolutely essential to the satisfactory survival and development of trees in North Dakota. We have found that over-the-row cultivation of these windbarriers during the first year or so is perfectly feasible with any of several common farm implements, such as a hay rake (fig. 1), Melroe-type harrowweeder (fig. 2), finger weeder, or spring tooth harrow. Trees with an upright habit of growth, such as green ash, American elm, and caragana, can safely be cultivated in this manner for 3 or 4 years, depending upon the type implement used. Those with a spreading type growth, such as Siberian elm, Russian olive, or willow, can be cultivated in this manner for at least the first year.

Farmers and ranchers appreciate the over-the-row cultivation because it can be done from the tractor seat without additional manpower other than the tractor driver. The secret of the system is to cultivate when the weeds are one-half inch high or less.



Figure 1.--Hay-rake tree cultivator.--This outfit is used to cultivate young trees by the over-the-row method. Note that sulky plow wheels have replaced the regular wheels. Oswald Pfeiffer (right), farmer at Fessenden, developed this outfit. Shown with him is Orville Overboe, SCS.

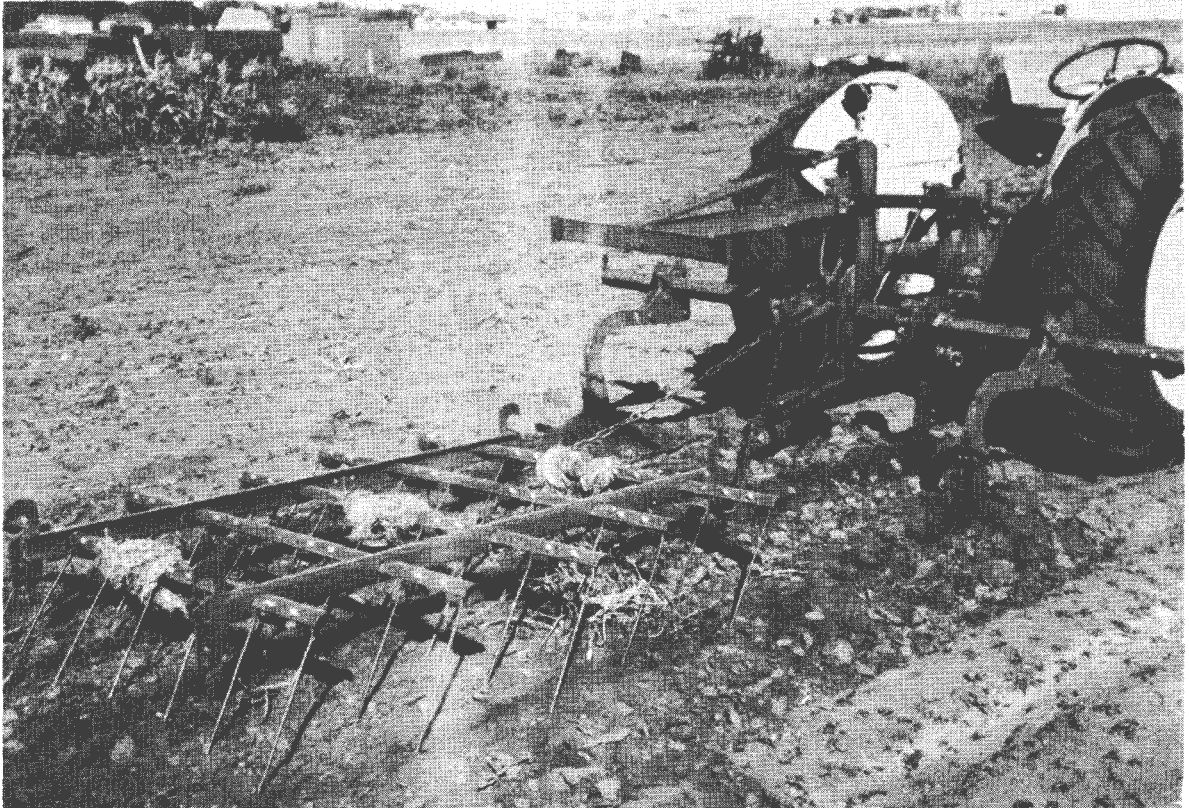


Figure 2.--Picture of Melroe-type harrowweeder behind shovel cultivator. Note that the cross bars are wrapped with burlap to prevent abrading the trees. A speed of 4 to 6 miles an hour is recommended.