

NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

TREE/SHRUB SITE PREPARATION

(Acres)

CODE 490

DEFINITION

Treated areas to encourage natural seeding of desirable trees or to permit reforestation by planting or direct seeding.

PURPOSE

To prepare land for establishing a stand of trees to conserve soil and water, improve watersheds, or to produce wood crops.

CONDITIONS WHERE PRACTICE APPLIES

In understocked areas or in areas of undesired vegetation where the soils are suited to growing trees for wood crops or Christmas trees.

PLANNING CONSIDERATIONS

Three conditions are necessary for regeneration of tree species. These are a good seed supply or good seedlings, a suitable seedbed, and minimum competition from undesirable vegetation.

Regeneration may be either by natural or artificial methods and the extent of site preparation for either varies with the current site conditions.

The product the landowner wishes to produce will affect the selection of species to plant. Select species adapted to the planting site. Consult Section II-F Woodland Suitability Groups and Section II-N Windbreak Suitability Groups for guidance.

SPECIFICATIONS

A. Chemicals

Chemicals used in performing this practice must be Federally and Locally registered and must be applied strictly in accordance with authorized registered use, directions on the label, and other Federal or State policies and requirements.

B. Natural Seeding

For natural seeding, seed-bearing trees must be located on or next to the area, preferably along the windward side. Some acceptable species for natural seed source are white pine, pitch pine, shortleaf pine, Virginia pine, yellow-poplar, white ash, and maple. Use of other species whose seed is dispersed by wind may be planned, if needed, to meet the objective of the landowner. Expose mineral soil just prior to seedfall by disking, scraping, shallow plowing, or other similar means.

C. Tree Planting

Planting sites must be properly prepared before planting trees. The main purpose of site preparation is to reduce competition from undesirable species but it can also be helpful in preparing the soil for planting or seeding. Specific methods of site preparation for the different types of existing vegetative condition are:

1. Grasses and Forbs:

a. Scalping sod ahead of tree planting.

Hand planting—scalp a 24"-36" diameter circle 1-2 inches deep (plant tree seedling in center).

Machine planting—scalping blades should remove 18" sod strip on each side of tree planting slit, approximately 1-2 inches deep.

b. Applying Herbicides.

Timing of application:

Apply early enough before tree planting to allow the herbicide to kill the vegetation. Repeat treatment as needed. Follow manufacturer's directions for use.

Spot application should be 24 inches to 36 inches in diameter covering the area where the trees are to be planted.

Band applications should be 24 to 36 inches wide depending upon density and vigor of existing vegetation. Ensure that band centerline coincides with the proposed planting line of tree seedling row.

c. Plowing. Plow the area two times during the year before the area is planted to trees.

Spring plow before June 1 (before grasses and forbs develop seed). Naturally occurring vegetation will provide ample cover to prevent erosion.

Fall plow to further weaken perennial root systems and to set back summer annuals. Sites subject to erosion shall be plowed and seeded to annual ryegrass at the rate of 15 pounds per acre before September 30.

2. Shrubs and Bushy Vegetation

a. Clear the land with a bulldozer using a land-clearing blade and follow-up with an application of an approved herbicide to control sprouts as needed. On sites subject to erosion, if naturally occurring vegetation will not provide ample cover seed to annual ryegrass at the rate of 15 lbs. per acre before September 30.

b. Or, apply approved herbicides as a basal or foliage spray in accordance with manufacturer's directions.

3. Trees

a. Large trees, over 5 inches in trunk diameter at 4-1/2 feet above the ground.

Frill-girdle tree with axe about knee high or lower. Apply approved mixture of herbicide to frill.

b. Small trees, less than 5 inches in trunk diameter at 4-1/2 feet above the ground.

Wet the root collar and base of the tree thoroughly all the way around, to a height of about 15 inches above the ground using an approved mixture of herbicide.

4. Crop Residue

If the site is in small grain, sorghum, corn, or similar clean-tilled crop, and it is reasonably free of weeds, plant trees in the stubble without prior preparation. It may be necessary to till a narrow strip with a disk or other implement to kill weeds or volunteer grain, or to prevent stalks and other residue from clogging the tree planter.

D. Protection

The area is to be protected from livestock grazing and fire.

*REFERENCES:

Ohio Christmas Tree Producer's Manual, Bulletin 670, The Ohio State University, Cooperative Extension Service; Brown, Cowen, and Heiligmann, 1/81.

*Caution: Working tools and reference material may list chemicals that are no longer approved.