



Tree/Shrub Establishment

Conservation Practice Job Sheet (612)
Kentucky

Natural Resources Conservation Service (NRCS) April 2011

Participant Name

CRP Practice If Applicable

INFORMATION ON THIS JOB SHEET IS CONSIDERED TO BE PART OF THE CONTRACT AND/OR CONSERVATION PLAN.

Purpose

To establish woody plants for forest products, provide wildlife habitat, provide long-term erosion control and improvement of water quality, treat waste, reduce air pollution, sequester carbon, conserve energy, and enhance aesthetics.

Conditions Where Practice Applies

On any area where woody plants can be grown.

Plant Materials

When possible, plant materials and seed for establishing plant materials should be from within a 150 mile radius of the planting site. If possible, seedlings shall be lifted within one week of planting and shall not be lifted until November 5th or until the seedlings have become dormant which ever is later. All seedlings will have a root collar diameter of at least 3/8 inch and roots of at least 5 inches in length.



Seedling Care

Seedlings should be protected from sun and wind during shipping and the planting operation. Seedling roots should be kept moist during transportation, storage, and during the planting operation. Seedlings should be planted immediately after delivery. If planting will be delayed for more than 5 days, place them in cold storage at 35 to 45 degrees F. If cold storage is not available, seedlings should be heeled-in. Spread roots against the back of a trench that is slightly deeper than the root system. Cover roots with soil and tamp the soil firmly to eliminate air space.

Site Preparation

Site preparation for tree planting may include mowing, disking, and/or herbicide application. Mowing heights shall be 8 inches or shorter. Mowing or disking shall be done in late summer or fall prior to planting and before any planned herbicide application. If program rules permit, remove existing vegetative growth prior to herbicide application. If herbicide application is planned, allow at least 4-6 inches of regrowth after mowing prior to applying herbicide to ensure adequate uptake. Herbicide application

for burn down purposes should be done when vegetation is actively growing. Site preparation shall be done according to Table 2.

Temporary Cover

If needed, temporary cover can be seeded to prevent erosion and control competition during establishment. Follow guidelines under the additional program requirements section on Page 4.

Seedling Planting

- 1) Trees will be planted between November 15th and April 15th in western Kentucky and between November 15th and May 1st in eastern Kentucky when the ground is not frozen.
- 2) Planting rates and spacing shall be according to the specific planting purpose in the Tree/Shrub Establishment (612) standard. See Table 2 for specific planting rates and spacing.
- 3) Rows may contain the same species but shall not exceed a maximum of three consecutive rows of the same species. To achieve optimum interspersion, plant at least 2 species per row alternating species within the row.
- 4) Trees shall be planted with conventional planting equipment such as the dibble or planting bar, spade, mattock, shovel, or mechanical tree setter.
- 5) Plants shall be placed in a hole or slit of sufficient depth and width that the root system is fully accommodated in its natural form and position. They shall be set deep enough that the root collar is at or slightly below ground level. Soil shall be packed firmly around the roots.
- 6) Plants will be carried so roots remain moist during planting.

Direct Seeding of Acorns

Acorns may be planted from November through April when the ground is not frozen. To avoid rodent depredation of planted acorns, direct seeding will only be acceptable when the site is 300 feet from existing forestland. One or more of the following seeding methods should be used.

- 1) Broadcast: On a well prepared seedbed, broadcast the seed evenly over the planting area and cover seeds with mineral soil (1/2 to 1 inch).
- 2) Spot: Plant 1 seed per spot, 2 to 3 inches deep. The spots should be 3 to 4 feet in the row to compensate for low germination rates. Cover with mineral soil.
- 3) Machine: Plant seeds 2 to 3 inches deep in mineral soil every 3 to 4 feet in the row to compensate for low germination rates.

Operation and Maintenance

Competing vegetation should be controlled on a case by case basis as recommended by NRCS or TSP until the desired species are established.

Replanting failed spots may be required when survival is inadequate according to NRCS standards.

The trees and shrubs will be inspected periodically and protected from adverse impacts including insects, diseases or competing vegetation, fire and damage from livestock.

See the additional requirements section on Page 4 of this job sheet for program specific requirements or additional technical recommendations.

If tree and/or shrubs are being established under a program, the participant must follow management requirements as outlined on the conservation plan and program specific Management and Maintenance job sheets that are attached.

Table 1. This table contains several options for controlling competing grasses and weeds during vegetation establishment. If two burn downs are planned, records should indicate that herbicide was applied to the field twice. A double rate of herbicide applied once over a field does not constitute two burn downs and will be paid for a single burn down. Two burn downs are recommended when the dominant species in a field is either fescue or orchard grass. Apply all herbicides according to label recommendations.

Option	Current Condition	Timing	Method
1 Single Burn Down	Cropland Or Grassland	Fall	Remove excess vegetation in late summer (Aug./Sept.) Apply tank mixture after vegetation has grown 4 to 6 inches. Apply just prior to planting. Tank Mixture: per acre in Sept – Oct. 1.5 to 2 Quarts Roundup Ultra* or similar Glyphosate based product. Note: Ammonium Sulfate or other additives may be used when applying herbicide at lower rates.
2 Single Burn Down	Grassland	Spring	Remove excess vegetation in fall or winter. Apply tank mixture just prior to planting and after remaining vegetation grows 4 to 6 inches. Tank Mixture: per acre in early April. 1.5 to 2 quarts Roundup Ultra* or similar Glyphosate base product. Note: Ammonium Sulfate or other additives may be used when applying herbicide at lower rates.
3 Two Burn Downs	Grassland	Fall And Spring	Remove excess vegetation in late summer (Aug./Sept.) Apply tank mixture after vegetation has grown 4 to 6 inches. Tank Mixture: per acre in Sept./Oct. 1 to 1.5 Quarts Roundup Ultra* or similar Glyphosate based product. Note: Ammonium Sulfate or other additives may be used when applying herbicide at lower rates. And Apply tank mixture just prior to planting and after remaining vegetation grows 4 to 6 inches. Tank Mixture: per acre in early April. 1 to 2 Quarts Roundup Ultra* or similar Glyphosate based product. Note: Ammonium Sulfate or other additives may be used when applying herbicide at lower rates.

****NRCS does not require specific herbicides by trade name. The active ingredient in Roundup is glyphosate. Other brands of herbicide containing these ingredients may be substituted; however, application rates, application timing, and results may vary.***

