Site Preparation

For establishment on existing pasturelands, the use of herbicides or tilling is recommended to remove competition and establish suitable rows for tree planting. This improves the ease of planting and improves rooting conditions for young seedlings, thus insuring better growth and survival.

In some areas, a prescribed burn in the late fall or pesticide treatment may be needed to control rodents prior to tree planting. Follow-up treatments with a selective herbicide may be needed for two to three years until trees are well established.

Subsoiling is highly recommended when planting into pasture due to the potential compaction that may be present from many years of grazing. Subsoiling must be done on the contour or water erosion following the sub-soiling channel will blow the trees out of the ground. Generally sinking the shank and ripping to a depth of 18 to 24 inches is adequate to eliminate compaction layers and improve water infiltration. Disking is sometimes uses to help break up the sod and incorporate some herbicides.

Apply an herbicide or till a strip two to four feet wide for each row of trees to be planted. If the soil has a compacted layer, rip or subsoil down the planting rows to loosen soil.

For compacted soils, a typical single shank sub-soiler mounted on a tool bar should suffice for soil preparation.
Herbicides

Weeds and woody brush may be suppressed by grazing, mechanical treatment or chemical herbicide application. A common approach to planting trees in established pastures is spraying a strip or circle around trees to provide a 4-6 foot diameter “competition-free zone” around each tree until the root system and canopy of the seedlings are well-established.

Young seedlings are affected by the vigorous root system of forage grasses. There is concern that fescue could be toxic to trees in the seedling stage. It is highly recommended that an extra wide strip of herbicide application be used during establishment of trees into fescue.

Here are just a few of the common herbicides used for herbaceous weed control during tree establishment.

- **Arsenal**: common forestry herbicide used to control grasses and weeds throughout rotation of pine plantations.
- **Stinger**: primarily used in seedbeds of southern pine to control a number of broadleaf weeds.
- **Accord**: when used with Oust, controls many broadleaves, grasses, sedges, and suppresses brambles/blackberries.
- **Roundup Ultra**: controls perennial weed growth during plantation establishment of pines
- **Velpar**: effective for contact and residual control of many annual and biennial weeds and woody plants. May be sprayed in wet areas.
- **Oust**: pre and post emergent herbicide. Commonly applied with fertilizer treatment before seedling establishment.
- **Fusilade**: for post-emergent control on grassy weeds.
- **Oustar**: broad-spectrum contact and residual herbicide. Requires rain/soil moisture to be absorbed into root systems of weeds.

**Scalping** is highly recommended when planting into sod (especially for longleaf pine). Because grass is such a tough competitor for young seedlings a herbicide strip four to six feet wide per tree row is recommended for most grasses with a strip 8 feet wide or wider for very aggressive grasses such as Bermuda grass.

There are many herbicides on the market. Make sure the herbicide used is compatible with the tree species and approved for the target herbaceous weeds. Contact your local herbicide dealer or resource professional for the proper herbicide to use for the local conditions and species.