

TREE/SHRUB SITE PREPARATION LIGHT SITE PREP

Georgia Practice Job Sheet-490

Prepared for: _____

Prepared by: _____

Farm: _____ Tract Number: _____ Date: _____



Definition

Treatment of areas to improve site conditions for establishing trees and/or shrubs.

Criteria

Light site preparation and intensity should be suitable for the specific site. The type and intensity of light site preparation will vary according to site location, species desired, ground cover and soils. Methods of light site preparation should be used which will minimize soil erosion. Georgia's Best Management Practices (BMPs) should be followed.

Mechanical Light Site Preparation

Disking

Use of heavy disks or harrows to break up thick grass sods, loosen the surface soil and cut small roots. This method is used primarily on sites where little large debris remains and in old fields.

Subsoiling and Ripping

Use of shanks on large tractors for ripping to a depth of 1½ to 2 feet to break up hardpans, fragipans and plowpans. Ripping/Subsoiling should be limited to slopes less than 30 percent and done along slope contours to prevent surface runoff from channeling into the furrow.

Allow the subsoiled furrow to settle to eliminate air pockets before planting. Seedlings should be planted 2-3 inches to the side of the subsoil furrow to prevent settlement into the furrow and excessive planting depths (*especially important for longleaf pine*).

Scalping

(For longleaf pine being planted on cropland or pastureland sites)

Removing the first 1-2 inches of soil/sod from the soil surface. Scalping involves the use of plow disks in a fire plow configuration or sweep type plow to throw the soil/sod out from the center of the planting row to a minimum width of 24-30 inches. This reduces competition from grasses, and exposes the mineral soil for better chance of survival. This measure also reduces the need for potential multiple herbicide applications to control early grass and weed competition. The following are scalping recommendations for successful tree planting:

- Scalp on the contour
- Do not scalp wet sites
- Don't scalp deep furrows -just beneath sod
 - 4-5" deep on pasture grasses
 - 3-4" deep on cultivated fields
- Scalp in the fall
 - Months ahead of planting for bareroot seedlings
 - No waiting period for container-grown seedlings

Mowing

Any type of rotary cutting device such as a bush-hog is used to cut standing herbaceous vegetation to a height of less than 3 inches to prepare a site for tree planting.

Chemical Site Preparation

Herbicides provide several alternatives to mechanical site preparation. They are particularly useful on sites where mechanical site preparation leads to erosion. Depending on the site conditions and vegetation, herbicides are applied using several methods.

Foliar Sprays

For treating large tracts using helicopter or with specialized ground spray equipment. Treatment is also possible using backpack sprayers provided the competition is less than 5 feet tall. After leaf fall (six to eight weeks) the area should be burned.

Soil Application

Broadcast of liquid or granular soil-active herbicides using helicopters or ground units. Soil texture, organic matter and moisture are key factors in determining the selection, rate and effectiveness of soil-active herbicides.

Note: Always read and carefully follow the herbicide label directions when selecting and using any herbicide. Herbicides currently registered for site preparation treatment in Georgia are listed in the "*Georgia Pest Control Handbook*". The handbook is available on the web at <http://www.ent.uga.edu/pest2001/>. Contact the Cooperative Extension Service for information.

Prescribed Burning

Fire can be used effectively for natural regeneration systems and direct seeding where a mineral soil seedbed is required for pine seed to germinate. However, fire alone will not usually provide adequate competition control in a seedling plant situation. Fire increases the effectiveness of mechanical and chemical site preparation treatments. Fire is used to dispose of debris placed in windrows and piles, and is an integral part of chemical

herbicide treatments. Treatment with herbicides in early spring to the new leaves or soil, followed by a mid-summer burn, will substantially reduce competition and prepare for fall planting or seeding.

OPERATION AND MAINTENANCE

Operation and maintenance requirements are not applicable for this practice.

Summary

Proper site preparation is essential for the successful regeneration of desired tree species. For recommendations, contact a consulting forester, Georgia Forestry Commission forester, an industry forester or a natural resource professional from the Natural Resources Conservation Service or the University of Georgia Cooperative Extension Service.

Certification Job Sheet:

Prepared by: _____

Title: _____ Date: _____

Approved by: _____

Title: _____ Date: _____

Installation:

Circle: YES or NO to the following:

Was light site preparation utilized correctly to regenerate a forest stand?
Circle yes or no

What type of light site preparation was utilized to accomplish practice _____?

If prescribe burning was utilized as a light site prep tool, is there a burning plan present within the conservation plan? Circle yes or no

Is there a forest management plan present within the conservation plan?
Circle yes or no

I certify that this practice has been installed in accordance with NRCS standards and specifications.

Certification by: _____

Date: _____

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