SPM022704

Site Preparation Methods

PURPOSE: Site preparation is treating land to encourage germination of seed or growth of seedlings. The method, intensity and timing of site preparation should suit the specific site. Type and intensity of site preparation varies according to site, species, weight of seed crop, ground cover and soils.

Bedding - Bedding is creating a raised bed of soil on which to plant seedlings. Bedding improves soil drainage, reduces plant competition and makes planting easier. It is usually seen on poorly drained sites. Limit to areas with slopes of 2% or less.

Blading - Blading removes vegetation with a

straight blade bulldozer. This method is discouraged because it removes topsoil, damaging the site and increasing erosion.

Chopping - Chopping is pulling a rolling drum chopper over brush and small diameter trees, crushing woody vegetation. It minimizes soil loss and is acceptable on sites with moderate to severe erosion.

Disking - Sheared or raked sites, or sites relatively clear of trees and logging debris, may be disked to loosen soil and expose roots of undesired vegetation. Limit disking to slopes of 10% or less.

Herbicides - Herbicides are site specific based on the species to be controlled, soils, proximity to streams and sensitivity of adjacent vegetation. They may be broadcast by air or on the ground. They may also be applied to individual trees by injection, basal spray or soil application. Only pesticide applicators certified by the State of Alabama should be used when applying herbicides.

Logging - Logging may expose sufficient mineral soil to enhance natural reforestation of certain species. Prescribed fire may reduce forest litter allowing more natural reforestation to occur.

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.

Prescribed burning - Prescribed fire is fire applied in a skillful manner to a tract for a specific purpose, under exacting weather conditions. It is an economically sound practice on most pine sites, either alone or in conjunction with some other mechanical or chemical method of site preparation.

Root raking - Root raking usually follows shearing and is used to push felled vegetation and other debris into piles or windrows. Windrows are placed on the contour at intervals of 100-300 feet depending on slope and erodibility of the soil.

Three-in-one combination plow: A three-in-one combination plow or Savannah plow is pulled behind a large bulldozer with a V-blade to clear debris, subsoil and prepare beds in one pass. Plowing occurs in June through November and the bed settles at least three months before planting.



Scalping – Scalping is removing the top layer of soil, leaving a root-free zone, free of white-fringed beetle larvae to allow successful establishment of pine.

Subsoiling – Subsoiling opens up furrows to a depth of 15 inches to increase aeration and waterholding capacity of soils, and breaks up root-constricting hard pans and traffic pans.

Shearing - Shearing prepares sites where vegetation is 6 inches dbh or more. Blades that are angled or V-shaped are used; serrated edges have the best cutting action.

Photo Credit: John D. Hodges, Mississippi State University, www.forestryimages.org



This information is provided by the Alabama Forestry Commission For more information please visit: <u>www.forestry.alabama.gov</u>