Bedding

Where Applicable:

Bedding is perhaps the most widely used forest cultivation technique in the south. Bedding is usually conducted on relatively level cutover or clearcut tracts that have been sheared and piled and contain poor surface drainage. This practice is also applicable in low-lying poorly drained open fields where seedlings could be submerged in water for long periods of time. The elevated beds will lift the seedlings out of the excessively wet areas, improve rooting conditions, and increase seedling productivity allowing conversion of typically hardwood sites to productive pine plantations. This practice should be avoided on sites that may be subject to summer drought.

Description:

Bedding both disks and mounds the topsoil and nutrient-rich organic matter in long, continuous strips. The bedding plows have several scalloped disks that cut the soil and throw it into the center of the bed. A compaction roller then firms the bed into place. A crawler tractor usually pulls the bedding plow, although faster rubber-tired skidders are sometimes used. The beds should be elevated enough to allow planting of seedlings above standing water and should be oriented to channel excess water away from the planting site. Water outlets should be provided at locations that will minimize soil movement and water should be discharged onto a vegetated surface.

Benefits:

Bedding gives landowners the option of converting typically hardwood sites to more productive pine plantations. As mentioned, bedding concentrates topsoil nutrients while also increasing the soils water holding capacity. Bedding also provides for improved soil aeration allowing critical oxygen to young seedling roots. This combination results in increased growth and greatly increases seedling survival on poorly drained sites. Because of the increased growth rates, trees reach merchantable sizes in shorter periods of time. This shortened rotation will allow landowners the option of harvesting pulpwood and sawlog class materials at a younger age providing faster returns on their initial investment.

Other Recommendations:

Bedding should be done fairly close to planting season, otherwise the beds may lose shape and slump, particularly on wet sites. However, this practice should be applied at least six weeks prior to planting to allow for the freshly bedded soil to settle. Bedding alone does not improve areas with compacted subsoil. In fact, bedding on compacted soils may restrict future rooting of seedlings and interfere with drainage. These compacted soil types should be considered for alternate site preparation methods such as 3 in 1 plowing or ripping. Following the planting operation, it is usually recommended that a release spray containing an herbicide mixture sufficient to control the herbaceous weeds and grasses be applied.

Cost:

The cost of this practice can range from $80-$120/acre depending on the tract size, accessibility, availability of vendors, etc.