Weather Conditions & Planting

Excellent Planting Day
- Temperature: 33º–75ºF
- Humidity: 50% +
- Wind: < 10 MPH
- Soil Moisture: 75% +

Marginal Planting Day
- Temperature: 76º–85ºF
- Humidity: 30–50%
- Wind: 10–15 MPH
- Soil Moisture: 50–75%

Do Not Plant
- Temperature: < 33ºF and > 85ºF
- Humidity: < 30%
- Wind: > 15 MPH
- Soil Moisture: < 50%

Spacing Options
Objectives and site need to be considered when deciding on spacing.

Higher Planting Density
- Economic objective
- High site index
- Results in better form

Lower Planting Density
- Wildlife or aesthetic objective
- Low site index

Common Planting Mistakes

J-Rooted
Twisted Roots
Improper Packing
Improper Planting Angle

Mechanical Planting Sequence

1. Hold seedlings horizontal at top of trencher.
2. Start downward arc motion.
3. Place seedling roots at maximum depth.
4. Start an upward motion to pull any J or L-root out of the seedling
5. Hold seedling in vertical position where root collar is 1–2” below
   ground line until soil closes around roots.

Proper & Improper Planting Depths

Bareroot Pine
Ideal Planting Method: Hand or Machine Planting

* Seedling root collar should rest at ground level to 2–3” below the
  surface depending on soil drainage.

Bareroot Longleaf
Ideal Planting Method: Machine Planting

* Seedlings should be planted with bud resting at ground level.

Containerized Longleaf
Ideal Planting Method: Hand Planting

* Seedlings should be planted with plug ½–1” exposed above ground.

Site Considerations
Planting depth should be adjusted based on
drainage, slope, soil texture, and site prep.
Physiographic Regions of Georgia

The Right Tree For The Right Site

Site Preparation

Site preparation is the process of getting your site ready for tree establishment and is one of the most important aspects of achieving a successful stand. The best tools to accomplish this vary on each site. The practices you choose can depend on resources, site conditions, and scheduling. More specific site recommendations are made in the following sections but two factors that are important on any site when considering site preparation are:

2. Vegetative competition: Affects available resources to trees and without control can stunt or cause mortality in stand. Grasses or hardwoods rob trees of light, moisture, and nutrients.

Site Preparation: Old Fields & Pastures

Old field sites require different site preparation compared to cutover sites. Controlling grasses like bermudagrass, johnsongrass, bahiagrass, etc. must happen before planting. Multiple chemical applications may be needed along with scalping. Scalping is the removal of the top 2–4 inches in the planned rows. Hardpans can develop over time and must be broken up using subsoiling down to 18”. Allow 60–90 days for adequate rainfall to settle the air pockets before planting in the rip. Longleaf seedlings should be planted to the side of the subsoil rip to ensure the bud is not buried. It is critical to scalp and subsoil along the contour.

Site Preparation: Cutover Land

After a harvest, a cutover site will often experience heavy vegetative competition and may need some debris cleanup before planting. There are many methods available to you as a landowner and are covered in more detail below.

Debris Cleanup

If residual debris is heavy, cleanup should occur before competition control. Different methods to reduce debris on site are often used in conjunction with one another to achieve best results. How “clean” your site should be depends on planting methods and desired outcomes. Raking is used to move debris into piles which are then burned. Shearing is used to remove stumps on site and is used when converting natural sites to planted pines. Prescribed burning can be used alone or in conjunction to reduce competition and increase planting ease.

Competition Control

Herbicides are commonly used to control competing vegetation and result in long-term growth benefits. Read and follow all labels and choose herbicide based on species present, objectives, and resources. Herbicides are usually applied from mid-summer to fall as the label will specify.

DrumChopping lays fuels down for easier burning, breaks up root mats of waxy leaved species, and reduces debris size before burning. The benefits are short lived compared to herbicide use.

Regardless of management activities used, always follow Georgia’s Best Management Practices for Forestry to prevent excessive soil movement and stream sedimentation.

Seeding Evaluation

Inspect seedlings when picking up and before planting. If seedlings show any of the below symptoms contact nursery representative before planting.

- Foul smell–fermentation
- Yellow needles
- Trees warm
- Bark slips off easily
- Cambium is brown
- Moid developing

Transporting Seedlings

- Cover with light tarp.
- Do not stack more than two bags high.
- Leave 12” of space between cover & seedlings.
- Do not park in direct sunlight.
- Unload seedlings promptly.
- Inspect/repair torn bags.

Seeding Storage

Ideal Storage: 33°–38°F
- Can be kept for 1–2 months.
- Containerized seedlings can be stored at 34°F for 1–2 months.

Storage: 38°–50°F
- Bags can be kept 3–4 weeks.
- Bales with gel/slurry on roots can be kept 2–3 weeks.
- Bales with moss packing can be kept 2–3 weeks but will need watering two times/week.

Storage: 50°–70°F
- Plant within 1–2 days.

Special Considerations:
- Bags should not be stacked > 2 deep unless spacers are used.
- With no cold storage, keep seedlings under shelter in shade and away from wind.
- Bareroot longleaf must be planted by three days after lifted from nursery.