The Forestry (Timber) Component

The timber component in a silvopasture system is the long term crop. Depending on the species chosen (loblolly pine, slash pine, or longleaf pine) the landowner must plan on managing their tree crop for the long term (20-40 years). Pruning and thinning (and possibly fertilization) are practices that must be carried out to successfully manage the timber component in a silvopasture system.
**Seedling Considerations**

If possible, using genetically improved seedlings that are disease resistant is recommended to reduce the risk of Fusiform rust. Bare root seedlings are cheaper, but container grown seedlings can also be used.

Genetically improved tree seedlings are preferred for establishment of silvopastures. It is especially important to use fusiform rust resistant seedlings if slash or loblolly pines are planted. Large seedlings grow at low density in a nursery have much more desirable root characteristics than smaller diameter seedlings grown in crowded nursery beds. Well-developed, fibrous root systems speed up successful seedling establishment. Bare root seedlings are cheaper than containerized trees, but they need to be planted during winter. Containerized seedlings work well, especially for longleaf pine, and they can be planted either during the winter or after summer rains begin.

**Ideal Pine Species for Silvopasture:**

**Loblolly pine** (*Pinus taeda*): Loblolly pine is the most commonly planted commercial yellow pine species in the southeast and typically has the fastest growth of the pine species. Loblolly is suitable to plant in well drained upland areas or clay soils. Loblolly typically requires more frequent pruning as it has more branches and produces more shade than the other southern pine species. There are a number of improved varieties of loblolly pine currently available to reduce rotation length.

**Slash pine** (*Pinus elliottii*): good self-pruner, grows well in moderately to poorly drained sandy soils. Light canopy cover produces less shade. Slash pine is commonly planted throughout the coastal plains of Florida, South Carolina, Georgia, Louisiana, and Alabama. However, with smaller branches, slash pine is susceptible to ice damage which should be considered in more northern latitudes.

**Longleaf pine** (*Pinus palustris*): Much of the southeastern US used to be naturally covered in Longleaf pine. Due to overharvesting, replanting in loblolly, and fire suppression, there are few remaining natural stands. Longleaf has the highest value timber of the southern pines, but traditionally required the longest rotation length due to the “grass-stage” that seedlings may remain in without proper burning or use of herbicide to ‘release’ the trees from this stage. New herbicides are available to release longleaf from this grass stage within one year. Longleaf can be planted in upland or wetter sites.
Seedling Sources

Seedlings can be purchased through commercial nurseries or from a state operated nursery. Many state forest agencies maintain nurseries to supply private forest landowners with seedlings:

Alabama Forestry Commission  
513 Madison Avenue  
Montgomery, AL 36104  
(334) 240.9300

Florida Division of Forestry  
3125 Conner Boulevard  
Tallahassee, FL 32399-1650  
(850) 488-6591

Georgia Forestry Commission  
5645 Riggins Mill Road  
Dry Branch, GA 31020  
1-800-GATREES

Mississippi Forestry Commission  
301 N Lamar, Suite 300  
Jackson, MS 39201  
(601) 359-1386

Louisiana Department of Ag and Forestry  
Forestry, Suite 1068  
P.O. Box 1628  
Baton Rouge, LA 70821  
(225) 925-4500

Tennessee Division of Forestry  
Ellington Agricultural Center  
Box 40627, Melrose Station  
Nashville, TN 37204  
(615) 837-5520

North Carolina Division of Forest Resources  
1616 Mail Service Center  
Raleigh, NC 27699-1616  
(919) 733-2162

South Carolina Forestry Commission  
5500 Broad River Road  
Columbia, SC 29212  
(803) 896-8800
Tree Planting Guidelines

Seedlings should be stored in a shady place and roots kept moist until planted.

Trees can be planted with a mechanical planter or by hand with a dibble bar, hoe-dad, or shovel. Maintaining straight rows and uniform spacing are important considerations for silvopasture. If area to be planted is sloped, make sure to plant along the contour of the site.

When planting seedlings, make sure the root collar (the area between the seedling’s roots and stem) is even with ground level. Seedlings that are planted too deep, too shallow, or ’J-rooted’ (pushed into the ground with the tap root facing up) might not survive. After planting, soil should be packed around the seedling. For longleaf pine, soil should not cover the terminal bud.