

# Steps Before Ordering Your Seedlings

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The first step in ordering seedlings is to decide which species you wish to plant; that is, pines (longleaf, loblolly) or hardwoods. Second, decide if you need bareroot or containerized seedlings. Third, decide from which nursery you wish to purchase the seedlings. After these steps have been taken, order your seedlings as early as possible because many suppliers sell out every year.

## Pine species selection

Landowners plant loblolly for many different reasons. First, there is a strong record of high survival and low mortality rates across a variety of soil types. Second, they are low maintenance. You may or may not need to release them with a herbicide depending upon your initial site preparation method. Third, there is a long standing history of genetic studies where trees have been selected for their growth, disease resistance, and ability to grow on even the wettest or driest of soils. And finally, this is probably the most available seedling provided by the SC Forestry Commission, industry and private companies, thus, giving you an opportunity to choose which genetic stock you may need.

Longleaf is often not selected as the species of choice for several reasons. First, foresters generally do not have the successful survival rate that is seen with loblolly. It is a “pickier” species about how it is planted, thus, less tolerant to planting depth error. The longleaf seedlings do not go into a true dormancy, making care and handling prior to planting very important.

Another reason some landowners are reluctant to plant longleaf is because of its history of staying in the grass stage for several years. This can be overcome by the use of herbicides over the top of the seedlings to release them from the surrounding herbaceous weeds and/or by using larger diameter seedlings.

If longleaf is your choice, make sure you hire a planting crew that has had successful experiences with the planting of these trees. To ensure survival, utmost care should be taken with the seedlings until they are in the ground. Therefore, pick up seedlings

as needed to plant, protect them from heat and wind until they are planted, make sure the site has been prepared in such a way as to help ensure seedling survival, and hire a crew that has had experience with planting longleaf seedlings correctly.

## Hardwood species selection

With the continuing emphasis on wildlife and ecosystem management, planting valuable hardwood species for both timber and wildlife has become more popular. Across the southeast, there has been a variety of site preparation methods researched for planting hardwoods (which is enough to confuse anyone). What it amounts to is that every landowners’ situation is different and the methods for site preparation prior to hardwood planting should be dependent upon the needs of the site to create successful survival.

One thing that has been constant through the research in the past few years is that the larger and healthier the root system, the greater success for the landowner. Hardwood species such as willow oak, Shumard oak, cherrybark oak, swamp chestnut oak, ash, sycamore, yellow poplar, and bald cypress prefer wet loam soils and some wet clay soils. These sites have a high competition from all kinds of weeds because the soils are so suitable for a wide array of plant life. Unless it is cleared agricultural land, the weed population can be overwhelming to young seedlings. However, if you choose seedlings with large roots, they will compete with weeds better than less developed hardwood seedlings.

Right now, large roots mean it will take two to three dibble holes to get all the roots in the soil. This will skyrocket your planting cost. However, most landowners will be planting 300 (or a lot less) seedlings per acre. Generally, hardwoods are planted to enhance the existing hardwood timber stand.

## Hardwoods for wildlife

A lot of landowners have planted sawtooth oaks because it has been said they produce acorns earlier than some of our native oaks. However, if you wish to choose a quick native acorn producer, water oak (red oak family) begins producing acorns much quicker than other oak species.

If your timber stand has a high number of deer, rabbits, or other animals that eat small hardwoods, you will need to consider the cost of tree shelters to protect the trees from being eaten. However, this will NOT work with beavers. If you are planning to go to the expense of planting hardwoods and have beavers anywhere near the area, you will need to find a way of eradicating the beavers such as trapping them yourself or hiring a professional trapper.

### Bareroot or containerized seedlings

Both loblolly and longleaf are grown bareroot or in containers. Containers are trays that have individual spaces for each seedling, thus providing a uniform tree with planting medium. The seedlings are planted in a soil medium that encourages root growth. The individual space for each seedling is about the size of a five or nine inch test tube. Thus, when the seedlings are taken out of the tray, they are planted with soil and fertilizer surrounding the root system. This enables the landowners to plant seedlings through spring or to begin planting seedlings in mid to late fall. Many foresters feel that a landowner is ensured a higher survival rate with containerized seedlings while others say they get just as good of survival with bareroot seedlings.

Whether you need bareroot or containerized seedlings will depend upon your site, the tree planters' experience, and possibly the type of site preparation used on the site. Containerized seedlings are more expensive than bareroot seedlings. Your forester can help you decide which will be best.

As for hardwoods, unless you are planting an agricultural field, you should consider well developed bareroot stock. An exception is that some forest nurseries are using deeper containers for growing containerized hardwoods. Also, certain hardwood species may be difficult to find and your only choice may be containerized seedlings.

### How to select where to purchase the seedlings

When ordering loblolly seedlings, you have an abundance of choices. Many forest industries have nurseries within South Carolina. Some of these industries have programs that assist landowners with technical advice

and free seedlings. It may be that the forest industry which harvested the land may offer you seedlings. You will not know until you ask. The South Carolina Forestry Commission seedlings go on sale July 1 of each year.

For longleaf pine, you may not have a large selection from which to purchase. The South Carolina Forestry Commission has both containerized and bareroot stock for sale each year. A private company in Statesboro Georgia, International Forest Seed Company, sells containerized longleaf. Some of the forest industries may also have them for sell.

If you are selecting hardwoods, you have a variety of choices for most species. What may change is which variety one forest industry nursery will have from one year to the next. Thus, what they may plant to sell one year may not be the same the following year. Again, select the species you wish to plant and then try to find the seedling source with well developed root systems.

### Places to find seedlings

SC Forestry Commission (order forms in each county office); Champion International, Swansea, SC; Westvaco, Ravenel, SC; International Paper Company, Blenheim, SC; Weyerhaeuser Corp., Aiken, SC; International Forest Seed Company, Statesboro, Ga.

### Final thoughts

Because of climate and soils, try to keep your seedling source local to your planting area. Unless it is your last choice, do not plant trees from as far away as Alabama or Virginia. Furthermore, within South Carolina, we have a variety of climates and soils. Do not expect a mountain species such as eastern white pine to do well in the Coastal Plain or Sand Hills. On the other hand, do not expect coastal and piedmont species to do well in the mountains. Be wary of salesmen who claim his seedlings will grow 16 feet in one year. This may be true, but research the rest of the work that must be done to create and maintain this high rate of success.