



TreeLines

September 2021 - 1st Edition

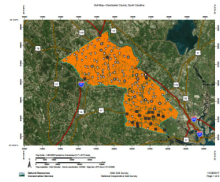


Soil – The Decision Maker for Species Selection

Soil classification is an essential and often overlooked component used for species selection before planting. We have all seen stands of timber age 10, 20 or older that have performed poorly. We call these “off-site” stands. Some of the stands may be 20 plus years of age, and many trees are un-merchantable or barely merchantable. This is a result of poor species selection based upon the type of soil present. Choosing the incorrect species can result in losses up to 50 percent timber volume potential.

Today there are many helpful tools to assist forest owners and forestry professionals in deciding the best species – soil combination. The USDA Natural Resources Conservation Service (NRCS) has classified most soil series. Understanding and interpreting the data requires forestry training and soil management experience as is the case with each [ArborGen Reforestation Advisor](#).

It is helpful to have an understanding of soil taxonomy or classification. For a simplified approach, we can use some simple rules of thumb. For instance, there is a wide range of soils in south Alabama, south Georgia and north and central Florida with the transition from Upper Coastal Plain to Flatwoods landforms. These soils can range from very deep sands to heavy clay soils. To identify the pine species to plant on a given soil, we need to understand the presence or absence of clay, the geographic location, and the drainage class.



Loblolly Pine: Extensively grown throughout the Southeast U.S. About 80 percent of the pine seedlings grown and planted in the Southeast U.S. each year are loblolly pine. Loblolly grows well on various soil types but grows best on soils with an argillic horizon (some clay content) such as Ultisols and Alfisols. Typical soil types for loblolly are Bonifay, Orangeburg, Dothan, Tifton, etc. Loblolly pine prefers sites where the root system will not be saturated with water. If planting upon poorly drained soils such as wet flats, then bedding is recommended.

Slash Pine: Grows along the lower coast and parts of the upper coast from the Carolinas to Texas. Slash pine is naturally adapted to grow on a wide range of soil types, including deep sands that are excessively drained; moderately well-drained soils, with little to no clay content (Lakeland, Troup, Blanton); and poorly drained soils such as Spodosols (Leon, Allanton) having a high presence of organic matter and lack an argillic horizon with no clay content. However, because loblolly pine outperforms slash on all but the most poorly drained soils, only about 10 percent of the seedlings planted in the Southeast U.S. are slash pine. The decision between loblolly and slash pine is truly soil-based and requires good familiarity with soil classes and series.

Longleaf Pine: Heavily logged during the late 19th century and early 20th century, longleaf pine once dominated the Southeast U.S. during the settlement period. It is a favorite for those who enjoy this particular species' aesthetics. It is often grown for quality sawtimber, quail and other wildlife habitat, and cultivated for straw production as intermediate income. It grows best on upland sites with some clay content. It is often planted on deep sands but tends to grow slowly on these soil types where sand pine may perform better. Like slash pine, nearly 10 percent of the seedlings planted in the Southern U.S. are longleaf pine.

Sand Pine: Growing best on deep, excessively well-drained soils, such as Blanton and Lakeland drought-hardy sand pine tends to develop root rot when planted in soils with clay causing the tree to become wind thrown. Commonly used for wind breaks, it is a minor species with a few million planted each year.

Virginia Pine: Often found on some of the poorest soil types, but can grow on many soils. It is commonly found on sandy, rocky soils, but can also grow on heavy clay soils. This species is often used for wind breaks.

Shortleaf Pine: This species grows best in deep, well-drained soils. Ultisols are predominantly the best soils for shortleaf pine, soils that are fine sandy loam or silty loam. They thrive on south and west facing slopes above the loblolly range.

Using the advice of a trained [ArborGen reforestation professional](#), you can successfully launch a pine forest that aligns with your goals of forest productivity and financial returns.

[Find Your Reforestation Advisor](#)

Top Clipping at ArborGen Nurseries



Top-clipping seedlings is a practice that makes a significant difference in seedling performance. This practice controls the shoot-to-root ratio, which is the leading reason for good survival. Seedlings with a shoot-to-root ratio of less than 2:1 tend to survive better. We want those roots to be rock stars. So, we clip the tops to keep them in check.

[Learn More](#)

Get to Know Your ArborGen Team: Kylie Burdette



Kylie Burdette is the ArborGen U.S. Sales Manager. She has been a significant member of the ArborGen team for five years. Before becoming the U.S. Sales Manager, she was the Reforestation Advisor in South Carolina and Southern North Carolina. Kylie grew up around timber, and her family is very timber-oriented. She loves meeting with landowners, going out in the field when they're planting, and checking on the seedlings.

[Learn More](#)

Client Results



MCP® at 12 years
Williamsburg County, SC



MCP® at 3 years
Slaughter, LA

[See More Client Results](#)

[Click here for the previous editions of TreeLines.](#)



Download a Copy of this TreeLines Edition

Need a trusted partner to guide the way? Get in touch with a Reforestation Advisor to explore your options!



Paul Jeffreys, Ph.D.
Alabama & Northern Mississippi
Manager Special Projects & Sustainability
205-712-9582

[See More About Paul](#)

Austin Heine
North Carolina & Virginia
910-660-3209

[See More About Austin](#)

Blake Sherry
Florida, Southern Georgia, & Southern
Alabama
912-433-5407

[See More About Blake](#)

Drew Fasano
South Carolina & Northern Georgia
843-530-6865

[See More About Drew](#)

Jeff Slaga
Arkansas, Louisiana, Oklahoma & Texas
936-212-1029

[See More About Jeff](#)

Kylie Burdette
U.S. Sales Manager
864-650-4454

[See More About Kylie](#)

Jason Watson
Director, U.S. Sales
404-840-7489

[See More About Jason](#)

FIND AN ADVISOR OR NURSERY



GET IN TOUCH

2011 Broadbank Court
Ridgeville, S.C. 29472
888.888.7158

QUICK LINKS

- Find a Reforestation Advisor
- ArborGen TreeLines - News & Updates
- Join Our Team
- Helpful Resources



- Blenheim, SC Nursery
- Belville, GA Nursery
- Shellman, GA Nursery
- Selma, AL Nursery
- Bluff City, AR Nursery
- Bullard, TX Nursery
- Livingston, TX Distribution Point
- Jasper, TX Nursery

info@arborgen.com



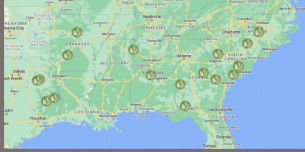
[Request Catalog](#)

[ArborGen Tree Lines](#)

- [About ArborGen](#)
- [In the News](#)
- [Press Releases](#)
- [Search Website](#)

[Get Treelines](#)

FIND AN ADVISOR OR NURSERY



- [Blenheim, SC Nursery](#)
- [Belville, GA Nursery](#)
- [Shellman, GA Nursery](#)
- [Selma, AL Nursery](#)
- [Bluff City, AR Nursery](#)
- [Bullard, TX Nursery](#)
- [Livingston, TX Distribution Point](#)
- [Jasper, TX Nursery](#)
- [Florida](#)
- [Louisiana](#)
- [Mississippi](#)
- [North Carolina](#)
- [Oklahoma](#)
- [Virginia](#)

GET IN TOUCH

408 Brighton Park Blvd, Ste 101
Summerville, SC 29488

888.888.7158

info@arborgen.com



[REQUEST CATALOG](#)

QUICK LINKS

[Find a Reforestation Adviser](#)
[TreeLines - News & Updates](#)
[TreeLines Podcast](#)
[Join Our Team](#)
[Helpful Resources](#)
[About ArborGen](#)
[ArborGen Brazil](#)
[ArborGen Holdings](#)
[Press Releases](#)
[Client Payment Portal](#)
[Privacy Policy](#)
[Search Website](#)

[GET TREELINES](#)

