

Declining Habitats – Longleaf Pine

Suitable area – Southeast Virginia, primarily in sandy/low fertility sites

It is estimated that longleaf pine (LLP) covered anywhere from 60-90 million acres prior to colonial times, stretching from Virginia down to Florida and over to eastern Texas. In Virginia, about 900,000 to 1 million acres occurred in some far Southeast coastal counties. Today, only an estimated 400-1000 naturally occurring trees still exist. In addition, a few hundred acres have been planted in the last several years.

Under natural conditions, LLP occurred in mostly savannah (widely spaced trees with an early successional mix of fire tolerant grasses and woody plants) communities. Fire is vital to establishment and maintenance of a functioning longleaf community.

In Virginia, (LLP) requires infertile, sandy or sandy loam soils, with pure sand often best. In more fertile conditions, competition with other plants often leads to less than ideal results, and requires more intensive management for success. Surface scalping and sub-soiling may be needed in some cropland conditions.

Growth of LLP is slow at first compared to loblolly pine. However, these two species will have comparable growth in the long term; with LLP out competing loblolly in low fertility/sandy sites. LLP also has greater resistance to disease and insect damage when compared to loblolly pine. LLP is considered a superior timber tree, and is suitable for poles, pilings, sawlogs, plywood and pulp.

To establish longleaf pine, container grown (small tube) plants are required for good results. Plants should be retained from a local source, usually from North Carolina. The Virginia Department of Forestry is in the process of developing a Virginia seedling source.

It is very important to make sure the plants are established to the correct depth to protect the growing bud and to make contact with mineral (sandy) soil below the duff layer. Ten by ten or twelve by twelve foot spacing will

usually provide for good survival, some limited harvest, and creation of savannah conditions over time.

Correct planting time is also important, usually in late fall – winter. Under good conditions, reproduction from cones should be available about 15-20 years from planting.

Prescribed fire will often be needed prior to planting and during the first year or two to reduce plant competition and allow establishment of adequate root growth. Fire will then be needed on a regular basis thereafter....whenever adequate fire materials are present. Periodic herbicide application may also be needed, especially in more fertile sites.

Note: If prescribed fire for management is not an option on the site, establishment of a longleaf pine community is NOT RECOMMENDED. Periodic site review by a person experienced in management of LLP is required, more so in the first five years.

Longleaf Pine Establishment Timeline

