Pinus taeda loblolly pine

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Pinus taeda (loblolly pine) is the foundation of the lumber and pulp industry in the Southeast and is found widely planted. *Pinus taeda* was first described as a species in 1753. The scientific name means ìpine used for torches.î Common names include bull pine, oldfield pine, shortleaf pine, Arkansas pine, North Carolina pine, Georgia pine, resin pine, mudhole pine, rosemary pine, frankincense pine, and lob pine. The accepted common name is loblolly pine, which means a ìpine of thick mires and mudholes.î

Pinus taeda native range is from south New Jersey along the Atlantic coast and the Piedmont around through central Florida to east Texas, north to southern Kentucky. In Georgia it is found statewide except for the far northeast corner of the state. See the Georgia range map. The growth Hardiness Zone is 6b - 9b and the Heat Zone is 7-10. The lowest number of the Hardiness Zone tends to estimate the northern range limit of the tree and the largest Heat Zone number tends to estimate the southern end of the range. Coder Tree Grow Zone A-E. *Pinus taeda* grows in a wide range of habitats, forest types and soils. Generally loblolly grows on floodplains, uplands, granite outcrops, wet bottomlands, drier slopes, and on many soil types tending to grow best on deep moist soils. The stem base tends to be buttressed on wet soils. *Pinus taeda* quickly invades abandoned agricultural land forming either pure or mixed hardwood stands.

Pinus taeda is moderately tolerant of shade and competition but grows best where hardwood competition is limited. Loblolly pine has rapid growth, especially when young, and a moderate lifespan (120 years with maximum of 275 years). It is usually found below elevations of 2,000 feet. *Pinus taeda* grows to a height of 85 - 105 feet with a maximum of 160 feet. Diameter growth is usually between 2-3 feet with a maximum of 5.5 feet. The crown form is broad and rounded with dense foliage.

Pinus taeda needles grow in bundles of 3 and are 5.4 - 9 inches long. The needles are dark yellow green to dark greyish green in color. The needles remain on the tree about 3 years. The needles are relatively thick, straight, slender but stiff and can be occasionally slightly twisted.

Pinus taeda becomes sexually mature around age 12. The cones are 2.6 - 6 inches long with an elongated egg-shape, being longer than broad. The cones are open at maturity falling by the following year after opening. The cone is a dull pale reddish-brown in color with relatively thin, keeled scales which have a thick sharp prickle at the end. The scale tips appear wrinkled. *Pinus taeda* generates a good seed crop every 5 years with some seeds produced every year.

Pinus taeda twigs are intermediate in thickness and stiffness compared to other southeastern pines. The twigs are greenish-brown in color when young, aging to a yellow-brown to a reddish-brown color. The twigs are rough and flaky with young shoots covered with reddish brown colored scales. The bark is thin and dark grey to blackish when young, growing progressively thicker and lighter in color (bright red-brown). The bark is scaly-plated early in life becoming deep furrowed with flat scaly plates and ridges with age. The cross-section of the bark has layers of slate grey and brown. There are no resin pockets visible on the bark surface.

Pinus taeda overlaps many pines species in its range and growth characteristics. *Pinus elliottii* (slash pine) can be confused with loblolly pine due to needle length. Slash pine cones are glossy chestnut brown in color with weak prickles, and the needles are dense all along the twigs, shiny, and grow in bundles of 2 and 3. In comparison, *Pinus taeda* cones are dull brown in color with sharp thick prickles, and the needles are crowded toward the end of twigs, are dull appearing, and grow in bundles of 3. *Pinus echinata* (shortleaf pine) has shorter needles and cones than loblolly pine. Shortleaf pine has needles growing 2-3 per bundle and has similar appearing bark except for the resin pockets which are clearly visible on shortleaf pine bark surfaces. *Pinus rigida* (pitch pine) has shorter needles and cones, and *Pinus palustris* (longleaf pine) has much longer needles and cones plus thicker twigs than *Pinus taeda*. *Pinus serotina* (pond pine) has shorter, coarser needles and shorter cones with smaller prickles than loblolly pine.

Pinus taeda does form many hybrids in the field which can generate trees with intermediate characteristics and lead to identification problems. *Pinus taeda* hybridizes with *Pinus echinata* (shortleaf pine) which can have significance rust disease resistance, *Pinus elliottii* (slash pine), *Pinus palustris* (longleaf pine) with some hybrids called *Pinus x sonderreggeri*, *Pinus rigida* (*Pinus x rigitaeda*) which can be more cold hardy than loblolly pine and is used commercially in Korea, and *Pinus serotina* (pond pine).

The traditional uses for *Pinus taeda* has been for commercial wood and pulp production. It is used for lumber, beams, pulp, plywood, posts, veneer, pine carvings, and canoe making.

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OUTREACH PUBLICATION SFNR06-26

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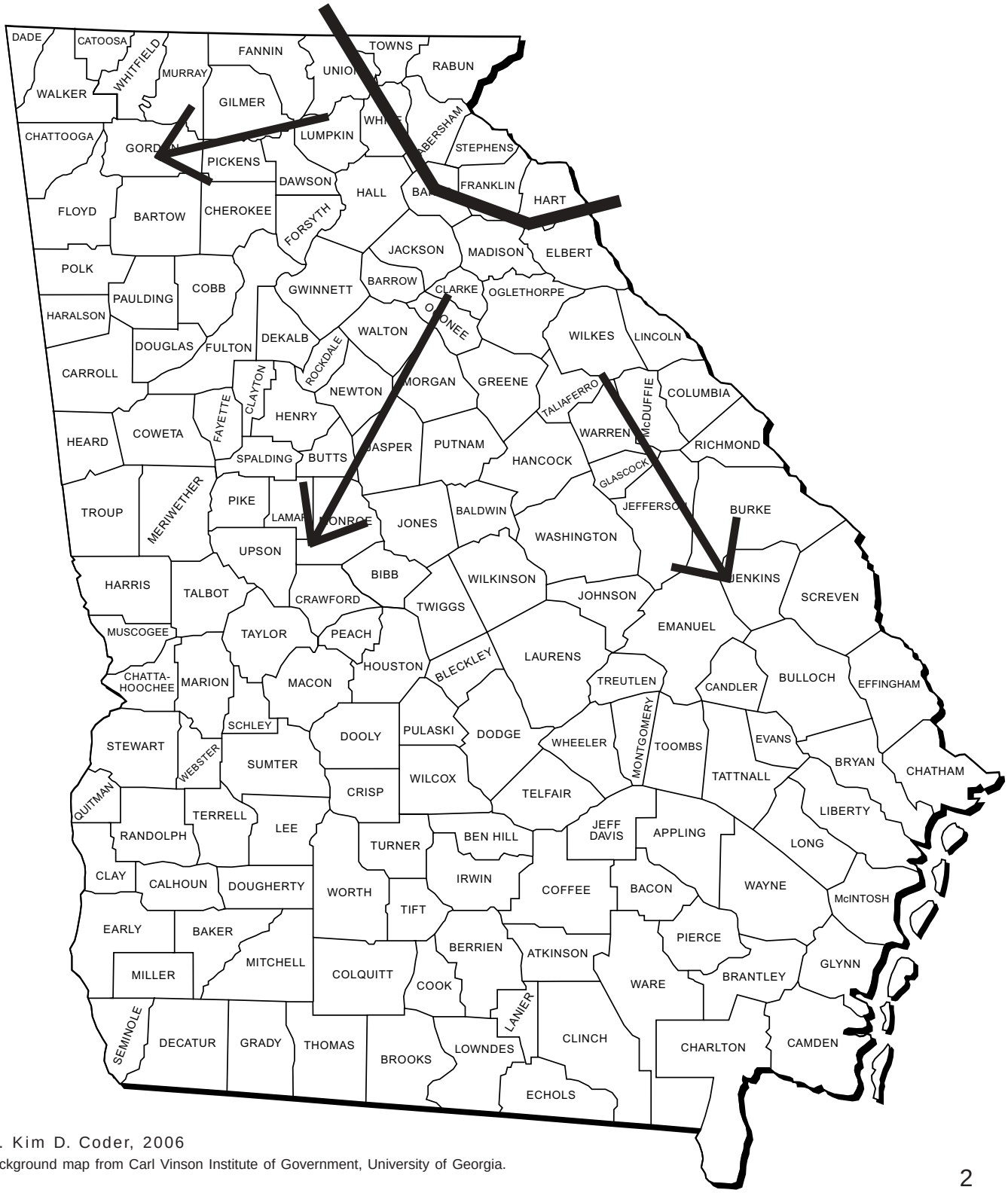
Native Range Of Growth For *Pinus taeda*: loblolly pine

Native contiguous range derived from federal and state maps, herbarium samples and personal observations. The native range includes all areas south and west of the lines on the side of the lines with the arrows.



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Background map from Carl Vinson Institute of Government, University of Georgia.