What Happened to the Longleaf Pines?

Longleaf Pine forests once covered a large portion of the Southeastern U.S., from Virginia to Eastern Texas. It now covers only 3% of this original range and is considered an endangered ecosystem.



Longleaf Pines are well suited for this coastal environment due to their strong taproot and resistance to wind, so what caused such a decline? Overharvesting and a lack of fire have contributed greatly to the loss of this species. Historically, the Longleaf was harvested for its resin to be used for naval stores and other pitch products. They were also harvested for timber purposes due to the strength of their wood. Fire suppression techniques have also caused a decline in Longleaf populations, as these trees rely on fire to successfully take root in forests.

How is the Longleaf Different?

The Longleaf Pine is a slow-growing tree that reaches heights of 60 to 110 feet at 50 years of age. In early stages of life, it appears as a tuft of grass sprouting from the ground and is often mistaken as grass or weeds. The needles can reach lengths of 17 inches and the cone can reach lengths of 11 inches. The root system of this tree sets it apart from other pines This species has a taproot that extends up to

15 feet below the tree, as depicted at right. This taproot can be the width of the trunk and helps anchor the tree where it stands to prevent falling during high winds and hurricanes.



Benefits of the Longleaf Pine

The Longleaf Pine offers many benefits to the landscape and environment around it. This species of pine is home to many endangered or threatened species that inhabit the Wilmington area, one example being the Red-Cockaded Woodpecker. This species is also beneficial for landscaping compared to other pine species. The

Longleaf
begins
developing
strong and
deep
roots during
its early
stages of
life.
Therefore,
the deep,
established



taproot and lateral root system of this tree provides stabilization under high wind and storm conditions. It is rare to see one of these trees uproot and topple over. This tree also has very strong wood, increasing its resistance to wind. Studies have shown that following a hurricane event, Longleafs compared to Loblolly and other pines had lower mortality and damage rates. This species also provides much-needed shade in the warm summer months, cooling the air under them. These trees also help with erosion, as they stabilize the soil around them. Homeowners appreciate that the long needles of this species may also be used as landscaping mulch around shrubbery or other small trees.

Pine Species of North Carolina

North Carolina is home to several species of pine, including the Loblolly, Longleaf, Shortleaf, and Pond Pines. The Longleaf Pine holds the richest historical and environmental significance, while the Loblolly is the most common pine found in North Carolina. The easiest way to tell the

difference between the two pines is to look at the needles and cone. The Longleaf will have longer needles and a much



larger cone than the Loblolly (as depicted above). Longleafs can be found throughout Wilmington in neighborhoods, parks, and other undeveloped areas. Many Wilmington residents take pride in the old-growth Longleafs present in their yard and work to preserve them. The University of North Carolina at Wilmington works to maintain Longleaf Pines across its campus. Environmental organizations are working to preserve and plant this important native tree.

How Can You Help?

As the Longleaf Pine forests continue to diminish, it is important to preserve the mature trees that we have left. By allowing Longleafs to remain in your yard, you can help contribute to the preservation of this vital ecosystem. Before deciding to remove Longleafs from your property, consider the history and benefits this species brings to our area. What would North Carolina, the land of the Longleaf Pine, be without its coastal Longleaf?

Sources

This brochure is provided by The Alliance for Cape Fear Trees, a non-profit organization located in Wilmington, NC;

https://www.allianceforcapefeartrees.com/
or its Facebook page,

https://www.facebook.com/capefeartrees

Taproot image : Forest History Society, Durham, NC

Longleaf Pine information: The Longleaf
Alliance; NCPedia; NC Longleaf Coalition;
ChasingTrees; Longleaf Pine: Its Use,
Ecology, Regeneration, Protection, Growth,
and Management by WG Wahlenberg;
"Blowing in the Wind: Advantages of
Longleaf Pine in Wind Storms" by
Dr. David Coyle

Saving Our Longleaf Pines



Surveys have shown that fewer than 10% of Wilmington area residents know the difference among native pine trees. Fearful of pines falling during hurricanes, many property owners remove all pine trees without recognizing the Longleaf Pine has the stability and strength to stand tall in hurricanes.