Don't let this vital native tree disappear from Oklahoma

How can you help?

Plant Shortleaf Pines and Manage Existing Trees!

Where You Can Find Shortleaf Pine

Much of the land management and restoration work may be found on public lands, where long-term conservation of native species is the focus. Some areas where shortleaf remains a valued part of our native landscape and can be easily seen include:

Ouachita National Forest Talimena State Park Robbers Cave State Park Clayton Lake State Park McGee Creek State Park Lake Wister State Park Pushmataha Wildlife Management Area



This publication is issued by the Oklahoma Department of Agriculture, Food, and Forestry as authorized by Secretary of Agriculture Jim Reese. 2,000 copies have been prepared at a cost of \$546.65. Copies have been deposited with the Oklahoma Department of Libraries.



OKLAHOMA FORESTRY SERVICES www.forestry.ok.gov/shortleaf-pine

Shortleaf Pine Is Disappearing In Oklahoma

Shortleaf pine is Oklahoma's most widespread native pine species, historically dominating landscapes in the eastern part of the state. Today, native shortleaf pine habitat is being displaced by other land uses such as loblolly pine plantations and open pastureland, causing speculation about its future.

Why Does Oklahoma Need This Tree?

The possible loss of shortleaf pine is important to Oklahoma's landscape for two reasons:

- It provides important habitat for many wildlife species.
- It is well-suited to the drier, hotter weather that climate scientists anticipate for Oklahoma.

Wildlife Habitat

At all ages, shortleaf pine provides a food source for a variety of wildlife species, including deer, squirrels, rabbits and birds, including the endangered red-cockaded woodpecker.

Shortleaf Pines are Oklahoma Hardy

Well-adapted to fire, drought and harsh sites, shortleaf pine is also very resistant to ice and wind damage.

For the state's forests, this means resilience against climate change and disastrous weather events. For landowners, shortleaf pine can reduce land management risks and help protect their investment from extreme weather conditions.

Why Is It Disappearing?

Once widespread

Prior to widespread clearing of forests in the early 1900's, there was more shortleaf pine than any other conifer in the southeastern United States. It grew mostly on upland sites, thriving through frequent fires. Its seedlings, which adapt to low-intensity fire, were able to flourish in the cleared spaces or where agricultural lands were abandoned. Vast tracts of shortleaf pine in southeastern Oklahoma drove the state's large commercial timber industry.

Now struggling to survive

After large tracts of shortleaf pine were converted to farming land in the early 1900's, shortleaf pine was slow to return. Several factors have contributed to its decline:

- Because shortleaf requires full sunlight to reproduce successfully, landscape disturbances events that thin out the forest - are needed because they allow the sunlight in. Decreases in fire and other landscape disturbances - whether natural, such as fires caused by lightning, or severe weather events, or human-caused, such as timber harvesting or burning - have reduced the reproduction of shortleaf and allowed oak-hickory forests to dominate.
- Efforts to plant pines have focused on loblolly pine as a timber tree, because it is faster growing and potentially more profitable.
- Crossbreeding between shortleaf and loblolly pine may put shortleaf at further risk of extinction in the long run, by reducing its genetic integrity.

What Is The Solution?

Plant Shortleaf Pine

Although shortleaf pine forests can be grown for timber in a productive plantation, they are challenging to establish by planting. Occasional prescribed burns or fire alternatives (like mechanical or herbicide treatment) must be used to keep hardwood trees in check. Because loblolly pine consistently out-produces shortleaf, loblolly tends to be the preferred species for pine plantings in Oklahoma.

Manage Existing Trees

Where native shortleaf is present, it is recommended that it be grown in a less-intensive means, using natural regeneration. Shortleaf pine can be grown using even-aged or unevenaged systems, and stand densities can range from closed-canopy forests to pine-bluestem woodlands to pine savannas (or barrens, as they have been called.) These diverse structures attract different kinds of plants and animals, so landowners have many options.

Assistance is Available

Oklahoma Forestry Services personnel are available to advise you about best practices for planting and encouraging regeneration of shortleaf pine to meet your land management objectives. For assistance contact your local forester or call Oklahoma Forestry Services at (405) 522-6158.

