

The Forest Built by Fire



Historically, low intensity fires frequently moved through the landscape.

Today these fires are mimicked using prescribed fire.



Immediately after prescribed fire.



Fire reduces competition from hardwoods and other pines, maintaining open conditions necessary for longleaf pines and native plants, while providing food and habitat for wildlife.



Regrowth two weeks after fire.

Fire resistant, not fire-proof

Longleaf is resilient to frequent fires but is vulnerable to fire at certain stages:

- Prior to the grass-stage as new germinants.
- During height growth before bark thickens.
- While “candling” in early spring before needles emerge on new growth.



Sapling:

Lateral branches emerge at 6-10 ft in height.



Mature:

Lower pine limbs are pruned by fire, keeping the canopy above most flame heights.

Thick plates of bark protect the inner trunk from fire.

Native understory plants and longleaf needle litter provide fine fuels to carry fire across the forest floor.



Seeds:

Fire consumes litter on the forest floor, creating optimal conditions for germination.



Grass Stage:

Young longleaf resemble a clump of grass. The dense needle cluster protects the bud from fire and will quickly regrow post burn.

Rapid height growth increases longleaf's competitive advantage for sunlight and moves the growth bud above typical flame heights.

Bottlebrush:

Longleaf bolts in height with no branching.



Fire recycles nutrients back into the soil.

Most grass-stage growth occurs underground as seedlings develop extensive root systems.

