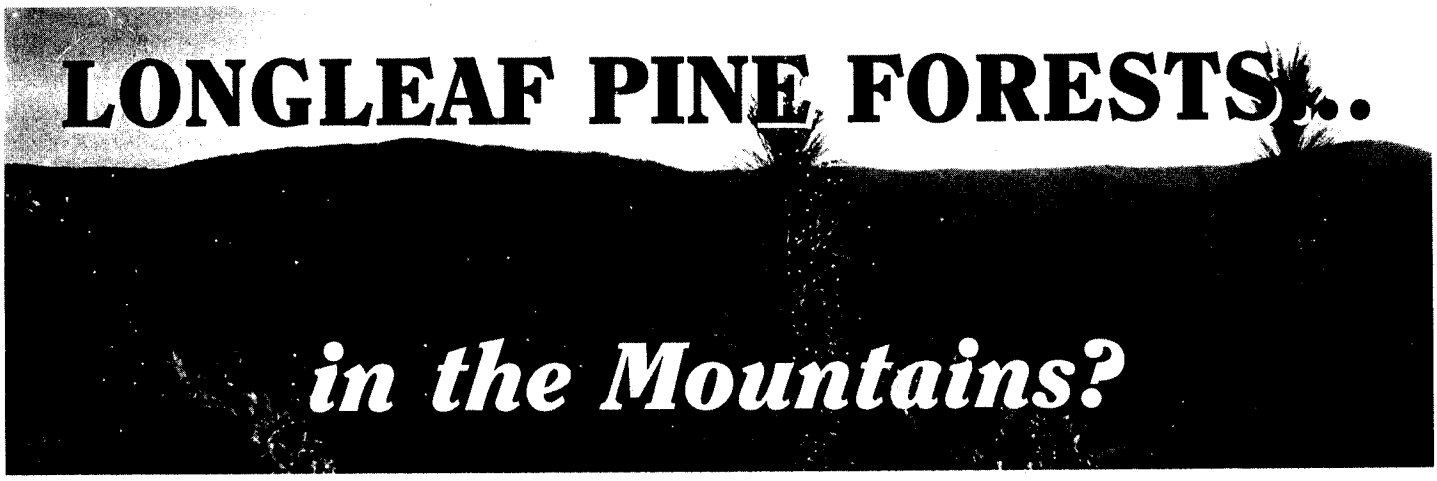
PINE

LONGLEAF PINE FORESTS... in the Mountains?



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View of Choccolocco Mountain of Fort McClellan. (Below) While cone crops in most longleaf pine forests are infrequent, mountain longleaf pine crops are much more reliable, making longleaf an excellent management option in Alabama's mountain region.

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While most people familiar with Alabama's forests associate longleaf pine with the gently rolling hills of lower Alabama, longleaf pine forests extend up into the hills, ridges and mountains of north Alabama. These forests, termed "montane" or "mountain longleaf," still thrive in several spots, but are becoming increasingly rare. These rare and breathtaking forests offer a glimpse of what was and could be again.

What Was the Mountain Longleaf Pine Forest?

In the late 19th century, Dr. Charles Mohr, an early University of Alabama professor of botany, described north Alabama's longleaf pine forests in this way: "At the foot of Rebecca Mountain (present-day Talladega National Forest near Hollins) I saw more timber today than any area east or west of the Mississippi River." He noted that diameters averaged 24 to 25 inches, with heights exceeding 120 feet. Along the ridgetops, he observed that the longleaf pines were "shorter, knottier, and more infected with dry rot."

Roland Harper, State Geographer, botanist, and naturalist described his beloved longleaf pine, so far from its Coastal Plain home, this way: "It naturally thrives best on sunny southern slopes, but is not confined to them. On the flanks of Cheaha Mountain, even on its north side, it ascends to 1,900 and perhaps 2,000 feet."

The rugged topography of northern Alabama provided an excellent target for lightning and the fires it created. Fire in these forests, as with all longleaf pine forests, was frequent. Frequent fire created open canopies with diverse ground covers, blanketing the mountains of north Alabama and Georgia. As in south Alabama, fires originating in the upland longleaf forests traveled down into adjacent communities. Mountain examples include the federally protected green pitcher plant (*Sarracenia oreophila*) and white fringless orchid (*Platanthera integrilabia*) bogs that are scattered within the mountain longleaf pine forest.

Aside from topography, the only other major difference between mountain longleaf pine and the Coastal Plain longleaf pine seemed to be cones—mountain longleaf pine has them. The infamous characteristic that for so long has haunted longleaf pine—its infrequent and erratic seed production—ceases as you move to the mountains. William Boyer, retired research forester with the U.S. Forest Service and noted expert on longleaf pine, says, "Mountain longleaf not only produces more cones, but does it more often than Coastal longleaf."

What Is the Mountain Longleaf Pine Forest Today?

Today, a visitor to north Alabama would hardly notice longleaf pine, and probably couldn't imagine the forests that were so common not too long ago. The contemporary mountain longleaf pine forest exists as either Dr. Mohr's "ridgetop" variety—the short and gnarled trees that dot even metropolitan Birmingham's ridgelines—or as an ever-decreasing component of a mixed oak-pine forest. Both varieties are common; however, true *forests* of mountain longleaf pine number fewer than 75,000 acres in north Alabama. Of this total, 70 percent is managed by the U.S. government (Talladega National Forest and Fort McClellan Army Post). Even on these pristine lands, longleaf pine is usually found only on dry, southerly aspects or as a component of a mixed hardwood forest. Without fire, the mountain longleaf pine forests are destined to be seen only in old museum photos and forgotten.

How Do We Get It Back?

Rising interest from both public and private landowners in longleaf pine restoration is catching on in the mountain longleaf pine region. First, closure of Fort McClellan—an 18,000-acre U.S. Army post near Anniston—sparked interest from the U.S. Fish and Wildlife Service. Bill Garland, a wildlife biologist with the agency, says, "Ironically, due to decades of Army training, Fort McClellan contains the closest example of a pristine mountain longleaf pine forest in existence." Recent research by Auburn University's School of Forestry has located 12 old-growth mountain longleaf pine stands. John Kush, a researcher

in the AU School of Forestry, refers to Fort McClellan's mountain longleaf pine forests as "the biggest, oldest, and most intact." Presently, the U.S. Fish and Wildlife Service is negotiating to create the Mountain Longleaf National Wildlife Refuge out of a portion of the Fort's wildlands.

Interest in restoring mountain longleaf pine in Alabama's National Forests began to increase in the early 1990s. Eugene Brooks, forester for the U.S. Forest Service's Talladega National Forest in Heflin, recalls, "Longleaf was naturally here, and to meet the diverse goals of ecosystem management, it was a natural choice." Brooks adds, "We plan to continue our restoration efforts, with an aggressive education program to help bring back mountain longleaf."

The keys to restoring mountain longleaf pine forests are 1) understanding fire, 2) obtaining sufficient quantities of high-quality seedlings, and 3) garnering public support. Fire research and management in mountain longleaf pine are in their infancy. Complications involving heavy accumulations of fuels, smoke liability in an increasingly urban north Alabama, and watershed effects can be severe and unforgiving. As is the case throughout the region, seedling supply over the next few years will dictate the extent of any restoration activities. Finally, convincing a pine plantation-weary public that this pine is a "good guy" will be critical for restoration, both public and private.

Mountain longleaf pine forests offer landowners many benefits: natural regeneration, insect and disease resistance, drought tolerance, and high quality wood products. Finally, as our state tree and a symbol of our southern biological heritage, it offers something special that a price tag can't replace.

Places to See Mountain Longleaf Pine Forests

1. Fort McClellan near Anniston, Calhoun County
2. Talladega National Forest—Oakmulgee, Talladega, and Shoal Creek Ranger Districts
3. Cheaha State Park