

Fourth Graders Explore Management at Experiment



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Fourth grade students from the W.S. Neal Elementary School in East Brewton, Alabama, recently visited the Escambia Experimental Forest (The Escambia) to get first-hand experience with the plants and animals of the longleaf pine ecosystem. After several days of instruction about the history and ecological significance of longleaf pine from guidance counselor Marina Chancery, 100 children were able to apply and expand their new knowledge through a variety of activities.

Managed by the U.S. Forest Service Southern Research Station (SRS) Restoring and Managing Longleaf Pine Ecosystems unit, the Escambia provides an ideal location for a field trip because it contains so many different communities of the longleaf pine ecosystem on one contiguous property. Not only does the experimental forest exhibit forest stands between two years old and greater than 100 years old, but it also contains habitats ranging from dry uplands to seepage slopes and bogs, to mixed pine-hardwood forests along streams. This property provides demonstrations of different cutting and prescribed burning regimes as well.

With such a variety of forest types, ages, and management systems in one place, students were able to better grasp the significance of the longleaf pine ecosystem and its importance for notable wildlife species such as the eastern fox squirrel, gopher

tortoise, and eastern indigo snake, in addition to how the forest can be managed to protect them.

Forest superintendent Ronald Tucker teamed with Ms. Chancery to let the students experience a day in the woods and learn why sustainable management is important. After a walking tour on which students discovered gopher tortoise burrows, pocket gopher mounds, wild turkey tracks, and a variety of native plant and tree species, forester Madeline Hildreth and rangers Woody Jackson and Dustyn Tyer of the Alabama Forestry Commission taught the students about forest products and wildland fire safety.

The tour ended with a ride through the experimental forest that helped the students further understand the role scientific research plays in forest management and how forestry research improves forests' ability to produce clean air and water as well renewable wood products. Equally important, students saw how science generates the information they learn in a classroom.

Brewton, Alabama, is located near the center of the largest remaining tracts of intact longleaf pine forest, but many youth know very little about the natural world around them. "Many of our students know more about the giant pandas than the rare plants and animals right outside our window," noted Ms. Chancery. ♣

Longleaf Forest Ecology & the Escambia Experimental Forest



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This 3,000-acre field laboratory, located 7 miles south of Brewton, Alabama, was established in 1947 by the U.S. Forest Service (USFS), Southern Forest Experiment Station (now Southern Research Station), primarily to study problems associated with the ecology and management of longleaf pine forests. A forest superintendent employed by the USFS manages the Escambia Experimental Forest on site. Research operations and general administration of the Forest is handled by the USFS “Restoring and Managing Longleaf Pine Ecosystems Research Project,” located on the campus of Auburn University.

The T. R. Miller Mill Company of Brewton provided land for the Experimental Forest, at no cost, under a 99-year lease to the government. Products derived from operations on the Escambia go to the company. Through 1996, 4.03 million cubic feet of pine, 65 percent in poles and logs, plus 231 thousand cubic feet of hardwood had been harvested.

A little over 80 percent of the Forest is in the longleaf pine type with the remainder in slash pine-hardwood bottoms. Research operations here have developed many age classes of longleaf pine, from newly germinated seedlings to stands with trees up to 160 years old. Most of the second-growth timber on the forest is about 85 years old (1997). About 1,200 acres have been naturally regenerated, and more than half of this is in stands ranging from 35 to 50 years of age. Many stand densities have been created, particularly in connection with growth and yield studies. Site quality for longleaf is extremely varied but averages between 70 and 75 feet at 50 years of age. No other location has the combinations of stand ages, sites, and conditions that are found on this Experimental Forest.

Research on the Escambia has investigated many longleaf problems including regeneration, stand management, management alternatives, growth and yield, site evaluation, fire ecology, woods grazing, and a few studies in the branch bottom type. Most of the research and development of the shelterwood system for longleaf pine natural regeneration was done on the Forest. Cooperative studies with other USFS research units and universities have also been conducted on this Experimental Forest. The regional longleaf pine growth and yield study was initiated here in 1964, and has since spread to other locations in Alabama, Mississippi, Florida, Georgia, and North Carolina. Nearly half of the 305 plots in this long-term cooperative study are located on the Escambia Experimental Forest.

Due to its central location in the longleaf pine belt that extends from the Carolinas to eastern Texas, the Escambia Experimental Forest is well situated for the study of this species. Over 20 percent of the remaining longleaf pine forests in the Southeast are within 75 miles of this location. In the heart of the Middle Coastal Plain Province, where much of the second growth longleaf was growing, it is near four other provinces that contain natural longleaf: the Lower Coastal Plain, Upper Coastal Plain, Piedmont, and Mountain. 🌲