U.S. Fish and Wildlife Service

Okefenokee National Wildlife Refuge
Upland Forest Management

Background

Okefenokee National Wildlife Refuge (NWR) has 44,026 acres of upland forest out of a total of 406,650 acres. About 21,000 acres of Okefenokee's uplands are located in forest management compartments located around the perimeter of the Okefenokee Swamp. In addition, Forest Investment Associates manages the timber and recreation on 6,654 refuge acres along Trail Ridge. The remaining uplands are located on islands within the 353,981 acre Okefenokee Wilderness Area.

The main emphasis of management activities in Okefenokee's uplands is the restoration, management, and protection of longleaf pine communities. This diverse habitat supports a vast association of wildlife species including the red-cockaded woodpecker, Bachman's sparrow, gopher tortoise, indigo snake, flatwoods salamander, gopher frog, Sherman's fox squirrel, and many other native wildlife species common to the Southeastern Coastal Plain.

Okefenokee's uplands, like the rest of the Southeastern Coastal Plain, were once dominated by fire dependent longleaf pine communities. Because of changes in the fire regime, indiscriminate timber harvesting, stand conversion, clearing, and settlement of the area, only 3% of this historical habitat remains in the southeast. Many of Okefenokee's longleaf communities are located in poorly drained areas where other species rapidly invade with the absence of fire. Without fire, the understory becomes a tangle of tall hardwood shrubs and vines. Through the use of prescribed fire, the refuge's pine habitat is in good condition with older trees reaching approximately 100 years old with a life expectancy of over 300 years and an open park-like understory.

Management

Management activities conducted on Okefenokee NWR to restore or manage longleaf pine communities include:

- Restoration of pure longleaf pine stands in mixed pine stands by selective thinning, promoting natural longleaf pine regeneration, and planting seedlings.
- Establish new age classes in large, even-aged, longleaf pine stands for a sustainable forest.
- Periodic use of dormant and growing season fire to destroy slash and loblolly pine seedlings, kill hardwood midstory, and to stimulate growth and reproduction of grasses, blueberry, ground oak, and other longleaf pine community species.

Habitat management surveys are conducted on forest management compartments and wilderness islands periodically to determine management needs. Through these surveys age, size, crown density, basal area, and species composition of each stand is determined. Areas are identified for promoting regeneration and establishment of longleaf pines along with determining improvements needed to provide habitat for existing RCW colonies. Monitoring also evaluates the need and effects of prescribed burning and other management practices.