



LOUISIANA



Louisiana bottomland hardwood swamp habitat and resident.

Introduction and General Description

Louisiana is a biologically diverse State with a subtropical climate moderated by the Gulf of Mexico. Topographically, the State consists of uplands and upland terraces in the southeastern, northwestern, and north-central regions dissected by the Mississippi and Red River alluvial valleys; a prairie terrace in the southwestern portion and extensive coastal marshes bordering the Gulf of Mexico.

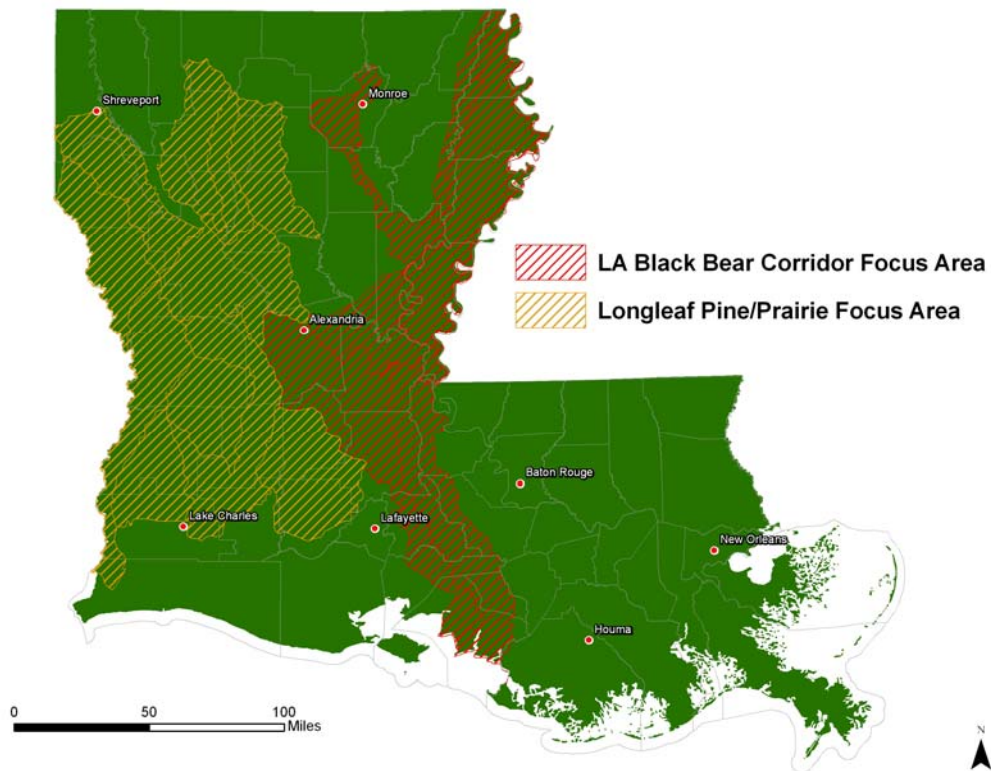


Louisiana Ecoregions illustrating locations of major plant communities.

In Louisiana there are 23 national wildlife refuges totaling over 480,000 acres. Plant communities found within these refuges are representative of the five major plant communities in Louisiana: longleaf pine, mixed pine and upland hardwoods, bottomland hardwoods, prairie, and coastal marsh.

Habitats of Special Concern

Louisiana has four major habitat types of special concern due to historical and/or current habitat losses: coastal marsh, bottomland hardwoods, prairie, and longleaf pine and associated savannahs. Louisiana has lost approximately 20 percent of its coastal marshes over the last century, and continues to lose approximately 24 square miles each year. The State has lost approximately 70 percent of its original bottomland hardwood forests, almost 90 percent of its longleaf pine communities, and 99.9 percent of its native prairies. The Louisiana Department of Wildlife and Fisheries has identified many different ecoregions and terrestrial, aquatic, and marine sub-habitats within these four major habitat types as part of their Comprehensive Wildlife Conservation Strategy. For more detailed information about these ecoregions and their representative habitats, browse the Departments web site at: <http://www.wlf.state.la.us>



Geographic focus areas in Louisiana (developed in collaboration with our partners) where most of our project activities are expected to occur over the next five years.

Threats

Louisiana's coastal marshes continue to be threatened by sediment deprivation (due to levees and upstream dams), erosion, subsidence, canal dredging, saltwater intrusion and other causes.



Conversion of bottomland hardwood swale to agricultural fields.

Bottomland hardwood habitats in the State are threatened by urban development and conversion to agriculture, while longleaf pine communities are at risk from development and conversion to other forest types.

The few remnant prairies left in Louisiana continue to be degraded by exotic Chinese tallow-tree invasion and fire suppression. A regular regimen of prescribed fire is essential to maintain the prairie ecotype.

Conservation Strategies

Wetlands

Bottomland hardwood forests in Louisiana are being restored through the Service's Partners for Fish and Wildlife Program. Bottomland hardwood restoration consists of replanting overstory trees and a few understory species on primarily marginal cropland or pasture.

A few Partners projects restored live oak and sugarberry cheniers, which are essentially bottomland hardwood islands in the coastal marshes. The typical Partners project involves the reestablishment of between 15 and 21 species of trees and shrubs at a cost of \$110 to \$150/acre.

Partners projects normally involve efforts to restore the original wetland hydrology on most sites, which typically includes filling drains, ditch plugging, installation of small levees and water control structures, and occasionally reconstructing wetland swales. Restoration costs can vary widely, but most efforts (in addition to filling drains) will cost between \$100 to \$300/acre.



Typical bottomland hardwood tree planting with hand crew.



Shallow water hydrology restoration on Louisiana Partners project.



Bottomland hardwood saplings and excavated swale on Louisiana Partners project site (photo taken 7 years after tree planting).

Longleaf Pine and Prairies

A few longleaf pine and prairie sites are also being restored in Louisiana with Partners and USDA programs funds. Longleaf pine restoration consists of planting seedlings for \$110 to \$150/acre and maintaining a burning regimen to encourage reestablishment of native grasses.



Louisiana remnant prairie habitat.

In Louisiana, the most diverse habitat type is prairie. The remnant prairies have the richest assemblage of insects, grasses and wildflowers, thereby supporting a wide diversity of wildlife species. Because nearly all of the Louisiana prairies are gone, the Partners Program is focusing on restoring them. Prairie restoration involves broadcast seeding of native prairie grass and flower seeds combined with transplanting plugs of prairie sod from remnant prairie sites. Efforts are underway in the state to

establish enough native prairie seed to harvest for future Louisiana prairie restoration projects.



Planting prairie seed on joint Partners for Fish and Wildlife and Wetland Reserve Program project site.

The Fish and Wildlife Service is continuing to work closely with the Louisiana Department of Wildlife and Fisheries to coordinate these conservation strategies in concert with their Comprehensive Wildlife Conservation Strategy to deliver priority conservation actions on private lands in Louisiana.

Partners

The Services' Partners Program has working partnerships with numerous Federal and State agencies, non-governmental organizations, local conservation groups, corporations, families, farmers, ranchers and individuals. Former and current cooperators within the Partners Program include:

Louisiana Department of Wildlife and Fisheries, The Nature Conservancy, Baton Rouge Audubon Society, Cajun Prairie Habitat Preservation Society, Cajun Electric Power Cooperative, Mercury Electric Company, Deltic Farm and Timber Company, Flat River Farms, River Road Plantation, Inglewood Plantation, Brown Land Corporation, Reed Properties, Bel-Kraus Properties, Dixie Plantation, Ophelia Land Company, and Red Delta Land Company.

Accomplishments

Since 1993, the Partners Program has assisted 152 cooperators in completing 15,580 acres of habitat

restoration in Louisiana. This work includes:

- < 13,103 acres of bottomland hardwood reforestation (with 37 acres of chenier planting)
- < 85.5 acres of prairie restoration
- < 172 acres of longleaf pine restoration
- < 53 miles of riparian habitat restoration
- < 2,280 acres of shallow water habitat restoration using ditch plugs, low levee construction, water control structure installation, and excavation of swales.

At least 42 of those projects totaling over 4,014 acres provided direct habitat benefits to the threatened Louisiana black bear, two other projects involving fencing helped protect threatened gopher tortoises and the threatened Louisiana pearlshell mussel, and one stream project reduced sedimentation impacts to a Louisiana quillwort population. Twenty-six of those Partners projects complemented USDA conservation programs (e.g., WRP, CRP, WHIP, DFN, etc.).

Future Needs

- In Louisiana there are 200,000 acres of marginal agricultural lands on a waiting list for restoration. These lands are restorable to productive forested wetlands.
- 3,000 acres of native prairies could be restored.
- 5,000 acres of longleaf pine habitat could be restored

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