

Introduction and General Description

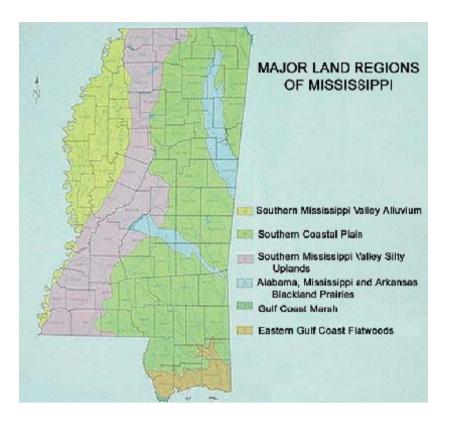
Mississippi presents a unique opportunity for the Partners for Fish and Wildlife Program based on its diverse soil types and vegetation. Mississippi has two main land regions: (1) the Mississippi Alluvial Plain, and (2) the East Gulf Coastal Plain (see map).

The Mississippi Valley Alluvial

Plain known as the Delta covers the entire western edge of the State (yellow on the map). It consists of fertile lowlands and forms part of the 35,000 square mile Alluvial Plain of the Mississippi River. The Plain starts out quite narrow south of Vicksburg. North of the city; the Plain spreads out and covers the area between the Yazoo. Tallahatchie, and Coldwater rivers. Flood waters of the rivers have enriched the soil of the region with deposits of silt. The fertile soil of the area is famous for its large cotton and soybean crops.

Most of the Delta has been significantly impacted by large drainage and flood control projects. These projects have allowed landowners to clear most of the trees for crop production. However, much of the area should never have been cleared. These sites represent soil types that even with

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drainage and flood control still present a major challenge to farming. The largest remaining bottomland hardwood site is the Delta National Forest. The small remaining bottomland forests consist mainly of oaks, sweet gum, tupelo, green ash and bald cypress.

The **Coastal Plain** extends over all the State east of the Delta (green on the map). Most of the region is made up of low, rolling, forested hills. The coastal plain also has prairies and lowlands. Yellowish-brown loess soil (blown by winds) covers the region in the west. This area is known as the Loess Hills. The Tennessee River Hills rise in northeastern Mississippi. They include the highest point in State, Woodall Mountain -- 806 feet in elevation. The lowest point is sea level at the coast. The Pine Hills, often called the Piney Woods, rise in the southeastern part of the State. They are covered largely with longleaf, loblolly, and slash pine forests.

The main prairie areas are called the **Black Belt or Blackland Prairies** because their soils are largely black in color (blue on the map). This long narrow prairie lies in the northeast section of the State. The Black Belt stretches through 11 counties. Small prairies also lie in central Mississippi, east of Jackson. Along the Mississippi Sound, lowlands or **Flatlands** stretch inland over the southern portion of the region (brown on the map).

Mississippi has several main river basins. The rivers of the western and north-central basin drain into the Mississippi River. These rivers include the Big Black, and the Yazoo with its tributaries, the Coldwater, Big Sunflower, and Tallahatchie rivers. Rivers of the eastern basin drain into the Gulf of Mexico. They include the Pearl, Pascagoula, and Tombigbee.

The Pascagoula River is the last remaining unobstructed waterway in the continental USA. For this reason alone, it is ecologically significant.

National wildlife refuges in the Delta region include the Yazoo Complex which consists of Yazoo, Panther Swamp, Hillside, and Morgan and Matthew Brake NWRs. In the north-central part of the State the Mississippi Wetland District includes Dahomey, Coldwater Creek, and Tallahatchie NWRs. The Noxubee NWR is located in the eastern part of the state near Starkville. The Mississippi Sandhill Crane NWR is located near the coast in southern Mississippi. St. Catherine Creek NWR is located in the southwest part of the State near Natchez.

Habitats of Special Concern

Bottomland hardwoods and associated wetlands in the Delta, the Black Prairie and upland hardwoods in the eastern part of the State, and longleaf pine ecosystem in the southern part of the State are habitats of special concern. Coastal resources such as pine savannahs, pitcher plant bogs, coastal dunes and marshes in Hancock, Harrison, and Jackson Counties are also of concern. Aquatic habitat including most rivers, lakes and streams are also of special concern throughout the state.

Threats

Most of the bottomland hardwood forests have been cleared in the Delta for intensive agricultural production. Drainage and flood control projects allowed this clearing to take place. Water quality as well as water quantity has suffered with this intensive production.

Most of the original Black Prairie has been cleared and planted to row crops or non-native grasslands.

Upland hardwoods are decreasing at an alarming rate. Most areas are planted back to loblolly pine when cut.

Very few longleaf pine stands remain on private lands throughout its natural range. Most stands have been cut and planted back to loblolly or slash pine.

Most aquatic systems are threatened by increased degradation of water quality mainly attributed to sedimentation and agricultural chemicals.

Conservation Strategies

The Partners Program works with private landowners and Federal and State agencies to restore the longleaf pine ecosystem on private and tribal lands. Reforestation costs \$145 per acre.



Hydrology being restored to a floodplain that had been converted to agricultural use.

The Partners Program works with interested private landowners to restore bottomland hardwood forest and associated marsh wetlands. This work includes reforestation as well as hydrology restoration.

The average cost to restore water to a site is \$300 per acre

Riparian (streamside) vegetative buffers are being restored along rivers and streams. This work involves replanting trees and shrubs and stabilizing any eroding streambanks. Buffers about 200 feet wide are usually established along the streams. The work costs \$3,000 per mile.

The Partners Program works with the agricultural industry to promote the use of conservation practices in harmony with agricultural production.

The Partners Program works with USDA to implement the Wetlands Reserve Program to restore bottomland hardwood wetland systems.

Accomplishments

There has been an active private lands program in the state for the past 15 years that focused on restoring bottomland hardwood habitat in the Mississippi Delta. Two years ago we revised our private lands program to include the entire state and renamed it the Mississippi Partners for Fish and Wildlife Program which includes 21 federal, state, and non-governmental partners.

In the past 5 years, we have restored:

- 30,000 acres of wetland hydrology
- 32,500 acres of bottomland hardwood reforestation
- 30 miles of riparian buffer
- 3,500 acres of longleaf pine
- 3,000 acres of native prairie
- 750 acres of wildlife field buffers
- 750 acres of upland hardwood

CONTACT

Gil Ray

Partners for Fish and Wildlife Program

U.S. Fish and Wildlife Service 6578 Dogwood View Parkway Jackson, MS 39213 601- 321-1138 (Fax) 601- 321-4340

Partners

The Mississippi Partners for Fish and Wildlife consists of: Audubon Mississippi, Delta Wildlife Inc., Ducks Unlimited Inc., International Paper Company, Mississippi Department of Agriculture and Commerce, Mississippi Department of Environmental Quality, Mississippi Department of Transportation, Mississippi Department of Wildlife Fisheries and Parks, Mississippi Farm Bureau Federation. Mississippi Fish and Wildlife Foundation, Mississippi Forestry Commission, Mississippi Soil and Water Conservation Commission, Mississippi State University Extension Service, Mississippi Wildlife Federation, Mississippi Wildlife Fisheries and Parks Foundation, Mississippi Chapter - National Wild Turkey Federation. Natural Resource Conservation Service, **Ouail Unlimited**, Tara Wildlife, U.S. Fish and Wildlife Service, Weyerhaeuser Company.

Future Needs

- Over 300,000 acres of wetlands need to be restored in the Mississippi Delta. All the streams in the Delta are degraded because of sedimentation and agricultural runoff. Other streams in the State are only in fair to good condition, meaning that there are hundreds of miles of degraded streams that need to be restored.
- Approximately 25,000 acres of prairie could be restored.
- 100,000 acres of the longleaf pine ecosystem could be restored.
- 250,000 acres of upland hardwood forest could be restored.





Mississippi Focus Areas developed in collaboration with our partners.

