

Appendix A: Mississippi

Introduction and Overview

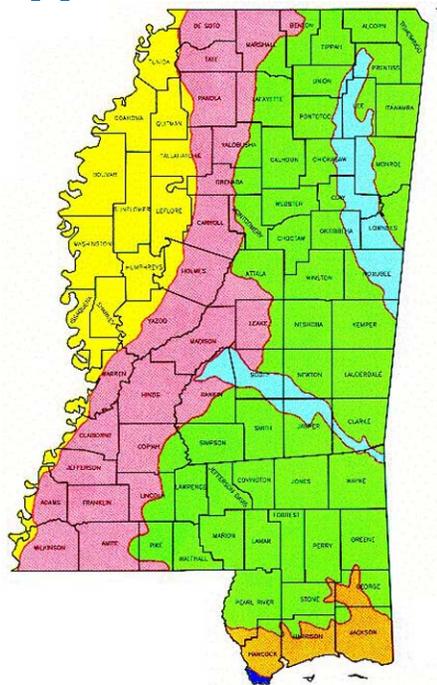
Mississippi is divided into six major land use areas including the Delta, Southern Coastal Plain, Southern Mississippi Valley Silty Uplands (Loess Bluffs), Blackland Prairie (Blackbelt and Jackson), Gulf Coast Wet Prairie and Marshlands, and the Eastern Gulf Coastal Plain Flatwoods.

The major river systems include the Mississippi River, Yazoo River, Big Black River, and the Pearl River. The state covers an area of 48,434 square miles, making it the 32nd largest of the 50 states. Included in this total are 1,520 square miles that are covered with water. Major lakes include the Ross Barnett Reservoir, Arkabutla Lake, Sardis Lake, and Grenada Lake.

Mississippi's generally hilly landscape reaches its highest point (806 ft) in the northeastern corner of the State along the Tennessee River. The most distinctive region in the State's varied topography is the Mississippi Delta, a flat alluvial plain between the Mississippi and the Yazoo rivers in the western part of the state. A wide belt of pine (historically longleaf pine) covers most of southern Mississippi to within a few miles of the coastal-plain grasslands. Most of the State's rivers belong to either the Mississippi or the Alabama river systems, with the Pontotoc Ridge the divide. The climate of Mississippi is subtropical in the southern part of the state and temperate in the northern part; the average annual rainfall is more than 50 inches. Mississippi is in the path of waterfowl migration routes down the Mississippi valley, and home to many species of migratory birds. Along the Gulf Coast, a favorite fishing area, are several resort cities and part of Gulf Islands National Seashore.

Overview of Focus Areas

The Mississippi Partners Program entered into an agreement in 2006 with 21 other federal and state agencies, conservation organizations and private companies. All parties have agreed to work together with a shared goal to establish, restore, improve and protect fish and wildlife habitats on privately owned land. The Partners Program has chosen to use the five habitat categories



Mississippi Physiographic Regions

identified by this partnership group as the focus areas for Mississippi. These habitat types include Wetlands, Uplands, Aquatics, Longleaf Pine, and Native Prairie.

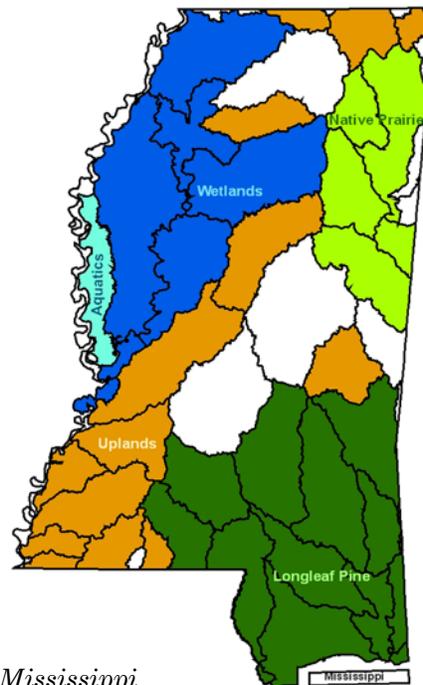


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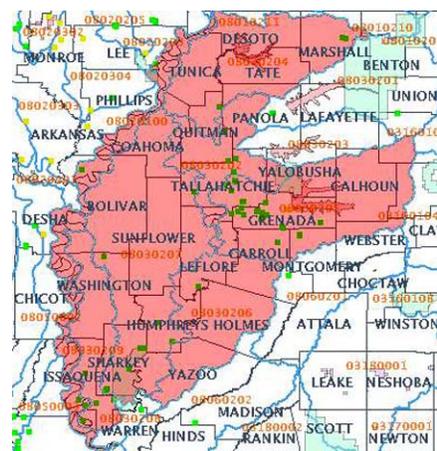
Mississippi Partners for Fish and Wildlife Members

Wetlands Focus Area

The primary location for this focus area is the Delta area of the State. Historically, this area was predominantly covered with bottomland hardwood forests and other wetlands that have been significantly converted primarily to agricultural land uses and significantly affected by flood control measures and drainage of the wetlands. Typical projects that are funded in this area consist of bottomland hardwood tree planting and hydrology restoration or enhancement. These projects provide habitat for black bears (T) and forest breeding birds (SOC) as well as providing wintering habitat for migrating waterfowl and wading birds.



Mississippi Focus Areas



Wetlands Focus Area

Priority Habitat Wetland

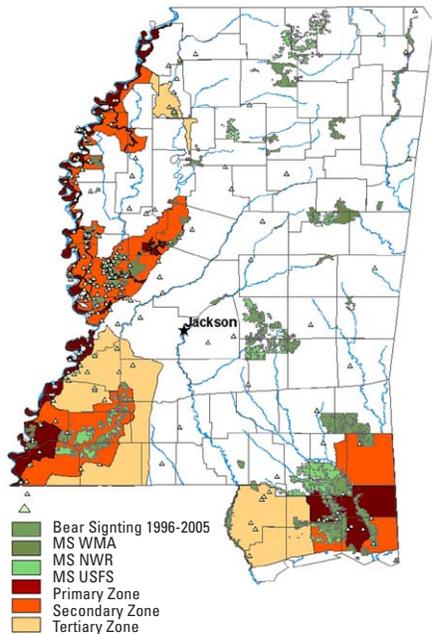
Five-Year Target (FY 2007-2001)
1,000 acres

Focus Species*
Black bear (T); waterfowl (SOC);
American woodcock and other
neotropical migratory birds (SOC)

Threats
Lack of suitable habitat

Action Strategies
Work with partners and private
landowners to restore or establish
bottomland hardwood and hydrology
to marginal agricultural sites.

Priority Habitat
Riparian



Black Bear Priority Zones

Five-Year Target (FY 2007-2001)
10 miles

*Focus Species**
Black bear (T); neotropical migratory birds (SOC)

Threats
Lack of suitable habitat

Action Strategies
Work with partners and private landowners to restore or establish riparian buffers through the Mississippi Partners for Wildlife Program and existing Farm Bill programs.



Restoring wetland depressions and hydrology are important activities.

Native Prairie Focus Area

The Native Prairie focus area is located in east central Mississippi in the Blackland Prairie physiographic region of the State. Much of the area was converted to agricultural use during the late 1800's, with cotton being the primary crop. The 1900's



Native Prairie Focus Area

saw the conversion from cotton to soybeans, grazing lands and other agricultural crops. Excessive grazing and the exclusion of fire have allowed the expansion of eastern red cedar and other noxious species. This area has been listed as one of the critically endangered ecosystems in the nation.

Priority Habitat
Upland: Native Grasslands and Prairie

Five-Year Target (FY 2007-2001)
750 acres

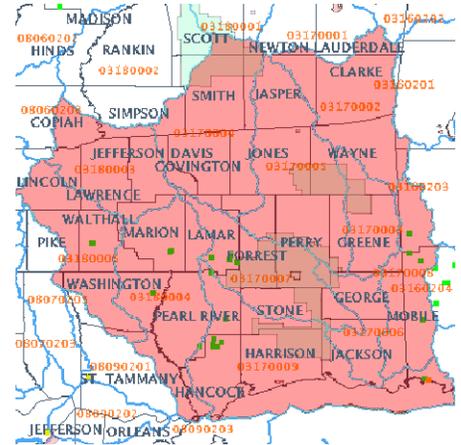
*Focus Species**
Price's Potato Bean (E); neotropical migratory birds (SOC)

Threats
Lack of native prairie habitat

Action Strategies
Work with partners and existing conservation programs to restore native prairie by establish native plants to lands that were converted for agricultural use.

Longleaf Pine Focus Area

The longleaf pine focus area is located in the southern part of the state in the Southern Coastal Plain and the southern extreme of the Eastern Gulf Coastal Plain Flatwoods. This area is about 69 percent woodland, 17 percent cropland, and 11 percent pastureland. About 3 percent of the area is used for rangeland, urban development, or other purposes. The woodland is mostly privately owned (private individuals and industry). Timber production is important to the State's economy. Following the initial harvest of native longleaf pine,



Longleaf Pine Focus Area

much of the area was reforested to fast growing short rotation pine, including improved varieties of loblolly and slash pine.

Without the open, fire dependent stands of longleaf, several wildlife species including the gopher tortoise, black pine snakes, gopher frogs, and red cockaded woodpeckers begin to lose their important habitat.

Priority Habitat
Upland: Longleaf Pine

Five-Year Target (FY 2007-2001)
1,000 acres

*Focus Species**
Gopher Tortoise (T); black pine snake (C); Mississippi gopher frog (E); bobwhite quail (SOC)

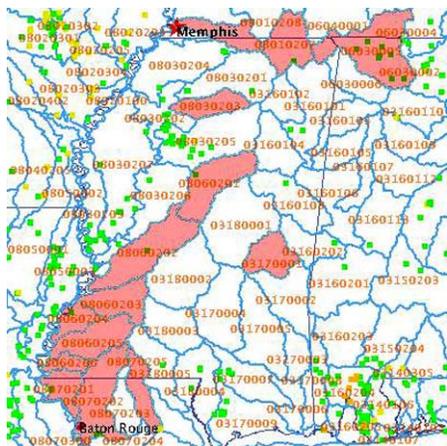
Threats
Lack of longleaf pine habitat due to conversions to other uses

Action Strategies
Work with partners and existing conservation programs to restore native longleaf pine stands by converting short rotation pine stands and marginal pastureland to longleaf pine.

Uplands Focus Area

This focus area is located in the Southern Mississippi Valley Silty Uplands and the more northern part of the Eastern Gulf Coastal Plain Flatwoods. Much forest remains in this region, with about 46 percent in mixed pine and hardwoods. About 35 percent of the area is cropland. The proportion varies greatly from county to county, depending on the soils and the topography, which is mostly steep and dissected.

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Uplands Focus Area

Where agriculture is feasible, it consists mostly of cash crops such as cotton, corn, soybeans, and wheat. Feed grains and forage are grown on dairy farms.

Priority Habitat
Uplands

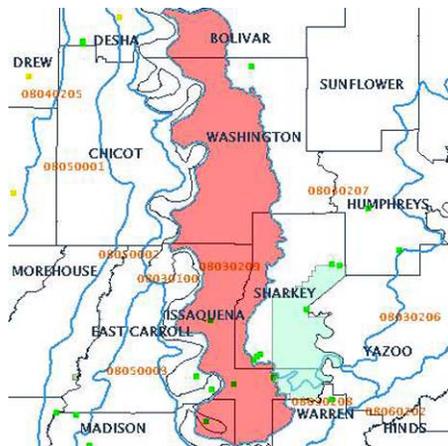
Five-Year Target (FY 2007-2001)
1,000 acres

Focus Species*
Black bear (T); neotropical migratory birds (SOC); bobwhite quail (SOC)

Threats
Extensive agricultural practices did away with small “patch” type fields and fence rows that provided food and shelter for upland birds. Pastures were planted in exotic grass species that provided little or no habitat. Also, some programs allowed cropland to be planted back to short rotation pine instead of upland hardwood.

Action Strategies
Work with partners and existing conservation programs to restore upland hardwood stands and native grasses and other plants essential to good quail habitat.

Deer Creek Focus Area
This focus area is located within the Mississippi Delta physiographic region within the Deer Creek watershed. The Deer Creek watershed is a perched stream that stretches from the central delta to the south delta where it empties into the Yazoo River. Many stream crossings have been installed to provide access to agricultural fields. In many cases these crossings have restricted or eliminated flow in the creek.



Deer Creek Focus Area

Priority Habitat
Aquatic In-Stream

Five-Year Target (FY 2007-2001)
Five structures

Focus Species*
Black bear (T); fish and aquatic species (SOC)

Threats
Fisheries habitat will be lost to this creek if flow is not restored to this creek.

Action Strategies
Work with partners and existing conservation programs to restore flow to the creek by removing culvert crossings and replacing them with bridges. Also riparian areas will be planted to bottomland hardwood species to improve water quality and provide shading.

*E=federally listed endangered species; T=federally listed threatened species; C=federal candidate species; SOC=species of concern

- Stakeholders Involved**
- Audubon Mississippi
 - Delta Wildlife Inc.
 - Ducks Unlimited Inc.
 - Farm Service Agency
 - 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



Stream crossing following culvert removal

- 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
- Quail Unlimited
- Tara Wildlife
- Weyerhaeuser Company

References
Mississippi Department of Wildlife Fisheries and Parks. 2005. Mississippi comprehensive wildlife conservation strategy (Online). <http://www.mdwfp.com> (Accessed 9/29/2006).

Natural Resources Conservation Service (Online). http://www.mo.15.nrcs.usda.gov/technical/mlra_ms.

Dr. Samuel Faulkner: Major Land Use Areas of Mississippi. <http://www.marshdoc.com/soil/soil7/soil7> (Accessed 9/29/2006).

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