



BIRD HABITATS

Mississippi Sound

The Mississippi Sound is a large, protected water body that extends between the mainland of Mississippi and western Alabama and the barrier islands located offshore about 10 miles to the south. The sound is relatively shallow, averaging 10 feet in depth. Only the cuts between the islands and the channels are significantly deeper. This habitat supports large numbers of wintering waterfowl, pelicans and seabirds such as Northern Gannets. During the summer, many shorebirds, gulls and even Magnificent Frigatebirds forage for food in these waters to feed themselves and their young.

Shell Islands and Bars

Shell islands and bars are typically made up of relic oyster shells that accumulated during the food-gathering activities of early American Indians. The best known example of this habitat is Bangs Island, located near the mouth of Bayou Cumbest. These habitats provide loafing, nesting, foraging and roosting areas for a variety of birds including American White and Brown Pelicans, shorebirds including Wilson's



Grand Battures Washover – Photo courtesy of Olivia Graves ©

Plovers, Spotted Sandpipers, Whimbrels, Long-billed Curlews, Ruddy Turnstones, American Oystercatchers, gulls and several species of terns.

Sand Beaches

Sand beaches are predominantly found along the shores of Point aux Chenes and the Grand Battures. Coastal birds of conservation interest, in particular Wilson's Plovers, Gull-billed and Least Terns, and Black Skimmers commonly use these habitats for nesting. Other species, such as Black-bellied Plover and Sanderling are commonly seen feeding and roosting in this habitat as well.

Bays

Bay habitats are larger, open water areas typically surrounded on three sides by land. In the Grand Bay NERR/NWR area, the bays typically open into the eastern Mississippi Sound and are very shallow. The two most prominent bays in the Grand Bay area are Middle Bay and Point aux Chenes Bay. These areas provide important habitat for large



Catch 'em All Bar – Photo courtesy of Jake Walker ©

numbers of wintering waterfowl, such as Redheads and Lesser Scaup, and provide feeding areas for other species such as Common Loon, Brown Pelican, Osprey, Bald Eagle, Laughing Gull, and Caspian, Royal and Least Tern.

Bayous

Bayous are larger estuarine tidal creeks and channels found throughout the area. The major bayous in the area include Bayou Heron, Crooked Bayou, Bayou Cumbest, and Bangs Bayou. These typically deep-channel waterways provide foraging habitat for many species of birds. During the winter, Hooded and Red-breasted Mergansers and Horned Grebes are commonly seen diving below the surface for food. Throughout the year, Great Blue, Little Blue, and Tricolored Herons as well as Great and Snowy Egrets can be observed foraging in the shallows along the bank. Royal, Forster's and Least Terns, Ospreys and Belted Kingfishers often patrol these channels from the air, periodically diving into the water in pursuit of prey.

Salt Marshes

Salt marshes along the northern Gulf of Mexico in Mississippi are wetland habitats dominated by stands of periodically-flooded black needlerush that are often fringed with a zone of emergent smooth cordgrass. The salt marshes of the Grand Bay NERR/NWR are brackish in nature but are often dominated by the high salinity waters of the Mississippi Sound. Characteristic bird species found in this habitat are



Bayou Heron South – Photo courtesy of Gretchen Grammer ©

nesting Mottled Duck, Least Bittern, Clapper Rail, Willet, Seaside Sparrow and Red-winged Blackbird. Species such as Reddish Egret and White Ibis can be found in this habitat year-round; whereas, Northern Harrier, Black Rail, Sora, Short-eared Owl, Tree Swallow, Marsh Wren and Nelson's Sharp-tailed Sparrow are strictly winter residents.

Mud and Sand Flats

Mud and sand flats are typically unstable lumps of mud or sand that are exposed during low tides. These areas can be extensive, given the shallow nature of the waters of Grand Bay NERR/NWR. Their size is most dependent on the speed and direction of the wind. Two of the more extensive and regularly exposed areas are Catch 'em All Bar, located along North Rigolets Bayou, and the Grand Batture Washover. Shorebirds are the most commonly observed birds using this habitat on a regular basis. Species such as American Oystercatcher, Black-bellied Plover, Semipalmated Plover, Greater Yellowlegs, Willet, Least and Western Sandpiper, Short-billed Dowitcher, and Dunlin are commonly observed at these sites. Less commonly observed, although not necessarily less important, are Marbled Godwit, Red Knot, Semipalmated, White-rumped and Stilt Sandpiper.

Salt Pannes

Salt pannes are unique, high salinity, sparsely-vegetated habitats scattered across the NERR with the most extensive areas occurring near Point aux Chenes. These areas are often flooded, especially during high tides, and



Kenny's Island – Photo courtesy of Jennifer Buchanan ©

provide habitat for a variety of bird species including herons, egrets, and ibises as well as several species of shorebirds including Black-bellied, American Golden, and Wilson's Plover, Willet, Whimbrel, Long-billed Curlew, Pectoral Sandpiper and Gull-billed Tern.

Maritime Forests

For this guide, we include both shell midden and slash pine forests under the maritime forest habitat category. These habitats occur at a slightly higher elevation than the adjacent salt marshes and are periodically impacted by saltwater from tidal flooding or by salt spray blown in by high winds. Along the northern coast of the Gulf of Mexico, maritime forests are critically important as stopover sites for landbird migrants that make non-stop flights of 18-24 hours over the Gulf. In the Grand Bay NERR/NWR area, these habitats provide refuge for numerous species of migrant landbirds. Included in this group are raptors such as Cooper's and Sharp-shinned Hawks, cuckoos, Ruby-throated Hummingbirds, flycatchers, vireos, thrushes, warblers such as Tennessee, Magnolia, Black-throated Green, Prairie, Cerulean, American Redstart, Mourning, and Canada, both Scarlet and Summer Tanagers, Rose-breasted Grosbeaks, Indigo and Painted Buntings and Baltimore Orioles.

Wet Pine Savannas and Flatwoods

The majority of freshwater wetland habitats in the Grand Bay NERR/NWR area are wet pine savannas and flatwoods. This fire-adapted community consists of a well-defined herbaceous layer of vegetation with



Pine Savanna – Photo courtesy of Jennifer Buchanan ©

pine trees scattered throughout. The fire frequency in this habitat is 2-3 years and is essential for maintaining the herbaceous understory. In addition, frequent fire appears to be related to maintaining a wide variety of winter grassland bird species. The bird community here, although not very species-rich, contains several species of conservation concern including the American Kestrel, Yellow Rail, American Woodcock, Common Nighthawk, Brown-headed Nuthatch, Sedge Wren, Field Sparrow, Grasshopper Sparrow, Henslow's Sparrow, Le Conte's Sparrow, and Lincoln's Sparrow.

Oak Hammocks

These unique terrestrial habitats are typically associated with abandoned home sites and are dominated by evergreen live oak trees. These small, usually less than 1 acre, patches of forest are often interspersed within larger pine savanna landscapes. Red-tailed Hawks, White-winged Doves, and several species of owls, including Screech and Great Horned, woodpeckers including Yellow-bellied Sapsucker, Hairy, and Pileated and both Ruby-crowned and Golden-crowned Kinglets use this habitat at various times throughout the year. In addition, many species of migrants can be found using these areas during the spring and fall (see list under Maritime Forests heading).

Freshwater Marshes

Freshwater marshes within Grand Bay NERR/NWR typically occur within the more common wet pine savanna habitat or directly adjacent to



Crossvine in a Swamp – Photo courtesy of Jennifer Buchanan ©

small creeks or oxbows. The largest freshwater marsh in the Grand Bay NERR/NWR area is known as Hawkes' Marsh. Bird species commonly found in this habitat include waterfowl such as Wood Duck, Mallard, and Blue-winged and Green-winged Teal, waterbirds such as Anhinga and marsh birds such as American Bittern, Virginia Rail and Sora, Wilson's Snipe and Boat-tailed Grackle.

Swamps and Bottomland Hardwoods

Swamps are regularly flooded, wooded freshwater habitats dominated by cypress and tupelo gum trees. Bottomland hardwoods are forested freshwater wetlands that are periodically flooded when large amounts of rainfall cause the adjacent streams to flood and overflow into these often dry-looking habitats. These bottomlands are dominated by water oaks, sweet bay, and red maples. Located adjacent to our larger streams, such as the Escatawpa River and Franklin Creek, oxbow lakes, swamps and bottomland hardwoods are critical stopover sites for many migrating birds. Prothonotary and Northern Parula Warblers nest in these habitats during the spring and summer. Barred Owl, Wood Duck and Anhinga can be found here year round.

Oak Grove Birding Trail – Photo courtesy of Jennifer Buchanan ©

