



Located at the mouth of Mobile Bay, Dauphin Island serves as a barrier between Mobile Bay and Mississippi Sound and the Gulf of Mexico. The island marks the point where the brackish waters from the Bay/Sound meet the saltwater of the Gulf. Dauphin Island is subject to the meteorological conditions from both directions as well as the strength of the Gulf waters. The Island was constructed by the constant flow of sand eastward from the Florida Panhandle. The movement of this sand has caused the island to build from east to west and in such a location that its character has been shaped by the impacts of the waters, the winds and weather into what we see today; although as a barrier island, it is constantly changing. A dominant feature of the Island is a ridge of dunes, running east-west. Distribution of plants through deposition of seeds from both winds and by birds has resulted in the formation of different ecological features, from maritime forests to the semi-tropical nature of the coastal plain you will find here.

Within this geography are wetlands, creeks and lakes supporting different species of animal and plant life. Sea turtles also utilize Dauphin Island's sandy beaches for nesting, permitting the preservation of several species. Dauphin Island is the first and last landfall for migrating birds on their long journey across the Gulf of Mexico. The species of marine creatures, from both brackish and saltwater, have provided food and recreation for residents of the Island for centuries. As a barrier island, the nature of Dauphin Island is unique. It was colonized by Native American tribes, explored by many European discoverers, and was instrumental in the Civil War. Now we are the stewards of this colorful heritage and these natural treasures. Preservation of the community's unique nature while sharing all the various aspects of the island with both residents and visitors is the responsibility of all of us who live and visit here. Let's continue to work together to ensure that its distinct character will be maintained for generations to come.



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 Dr. Sean P. Powers, Director, School of Marine and Environmental Sciences, USA  
 Carolyn Wood, Neil Sass, Pat Edwards, Rich Colberg and Earl Connell, Editors  
 Photos provided by Colette Boehm and Carolyn Woods



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## WETLANDS

**What are wetlands?** According to the U.S. Geographical Survey, “wetlands are transitional areas, sandwiched between permanently flooded deep water environments and well-drained uplands where the water table is usually at or near the surface or the land is covered by shallow water”.

Wetlands cover a large surface area of Earth and the most common feature shared by them is that the soil is covered or saturated by water most of the time. The water can be fresh, salty, or in-between. Typical examples of wetlands on and around Dauphin Island are lagoons, lakes, marshes (salt, brackish, intermediate, and fresh), swamps, forested wetlands, and vernal pools. Vernal pools are seasonal pools or ponds of water that sustain, like all wetlands, distinct flora, and fauna.

Wetlands are one of the most precious habitats on earth and Dauphin Island. They harbor a staggering number of diversified plants, animals, birds, reptiles, and insects. Wetlands link organisms on land and in water in a way that allows them to co-exist together for years.

Dauphin Island contains numerous wetlands which embody important physical, economic, social, historic, archaeological, aesthetic, recreational and ecological assets, including diverse wildlife habitat, open space enhancement and educational opportunities for residents and visitors alike. Wetlands can be found all around the island – at the airport, in Shell Mound Park, in the Bird Sanctuary, along the north shore of the island and throughout the maritime forested areas.

### Wetland Fauna

Many of the U.S. breeding bird populations – including ducks, geese, woodpeckers, hawks, wading birds and many song-bird – feed, nest and raise their young in wetlands. Migratory waterfowl use coastal and inland wetlands as resting, feeding, breeding, or nesting grounds for at least part of the year. All types of water birds as well as woodpeckers, hawks and songbirds, some resident, and some migrant, depend on wetlands for their survival. Mammals such as otters, beavers, alligators, and nutria, live, eat, and cavort in them.



Then there are myriad species of fish, snakes, and invertebrates. Wetlands provide food, water, cover, and nesting sites to all types of animals, birds, and insects.

### Wetland Flora

Wetland plants, also known as hydrophytes, are specifically adapted to grow in water. They can be submerged, floating, or have their roots firmly embedded in one place. Examples of a few wetland species of plants are cattails, water lilies, sedges, tamarisk, and many kinds of rush. Wetland plants are adapted to the saturated conditions that persist for most of the year.



### Why Are the Wetlands Important?

Wetlands do wonders for the health of Dauphin Island. Pollutants are trapped in their soils and transform nitrogen into a form that’s easier for plants to absorb. They physically and chemically break down dangerous bacteria. The healthier plants keep the ambient or surrounding air fresh by soaking up carbon resulting in pure water and clean air.

Wetlands provide a carbon sink for leaves, debris, animal waste, and other carbon laden matter that is detrimental to habitats. Wetlands also provide important flood mitigation and storm runoff management. Wetlands are indispensable habitats. Far from being useless, disease-ridden places, wetlands provide values that no other ecosystem does. These include natural water quality improvement, flood protection, shoreline erosion control, opportunities for recreation, and artistic appreciation of their natural beauty. Wetlands provide natural products for us in ways that may not be immediately obvious. Here on the coast, for example, nearly all the commercial catch and over half of the recreational harvest of fish and shellfish depend on the estuary-coastal wetland system for parts of their development cycle.

Protecting wetlands can protect our safety and welfare. If wetlands are not saved, not only will important wildlife habitat be destroyed, but coastal areas will have increased exposure to hurricane damage. Fisheries and timber resources will be impacted as well. Wetlands do many things for the earth and for Dauphin Island – take a second, pause, and absorb all the good they provide us and help keep them protected by doing your part.

