

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.



#### ACKNOWLEDGMENTS

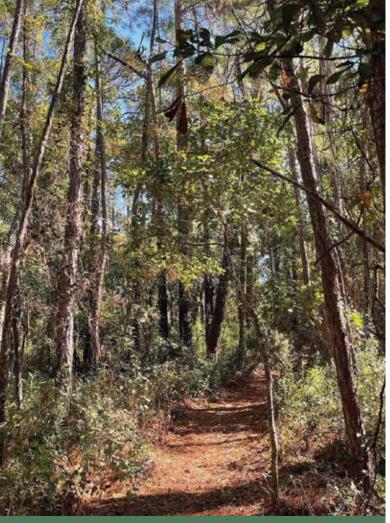
Dauphin Island Bird Sanctuary Dauphin Island Foundation Grand Bay National Estuarine Research Reserve South Alabama Land Trust Town of Dauphin Island Ordinances Two Pines Maritime Forest Project Carolyn Wood, Neil Sass, Pat Edwards, Rich Colberg and Earl Connell, Editors Photos provided by Colette Boehm, Steve Cole, Lori LeBlanc and Tina Miller-Way Island Topography by Brianna Graham



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# MARITIME FORESTS OF DAUPHIN ISLAND





## **MARITIME FORESTS**

#### "Between every two pines is a doorway to a new world." – John Muir

At first sight of Dauphin Island, the mass of trees toward the east end is striking. Towering pine, majestic oak, flowering magnolia, and colorful yaupon are all part of a rare and exceptional environment called a maritime forest. The island's dynamic ecosystem includes ocean beaches, shifting dunes, stable dunes, maritime forests, and salt marsh grasses.

Each part of this ecosystem is vital for the protection of the island from land loss, wind shear, temperature fluctuation, and flooding. Dauphin Island's maritime forest and its surrounding features are threatened by both human activities,like land clearing, and naturally occurring events, like hurricanes. Loss of tree canopy and understory plants due to extensive clearing will increase interior island salt spray from the gulf. This salt spray makes the forest trees and plants susceptible to damage causing irreparable deforestation. Simply put, survival of the island depends on maintaining the integrity of the forest and the entire ecosystem.

Understanding the benefits and dynamics of this ever changing and fragile environment will hopefully aid in conserving and restoring this unique place for all to enjoy far into the future.

## **Impact of Maritime Forests**

#### For Property Owners:

- Reduce hurricane wind force when trees are clustered
- Lessen storm water runoff via evapotranspiration and absorption
- Reduce energy consumption as windbreak and shade
- Provide privacy buffer and screen from noise and light
- Enhance air quality by filtering air pollutants

### For Community:

- Enhance the island's unique natural and aesthetic environment and protect property value
- Provide migratory birds essential habitat, which supports local economy by attracting visitors
- Retain topsoil by providing an entwining mat with surrounding trees and plants
- Provide dense canopy for understory plants and help protect the island from extreme temperature fluctuations
- Provide opportunity for pollinators, like butterflies to thrive
- Offer a unique experience to visit one of the rarest forest environments in the USA

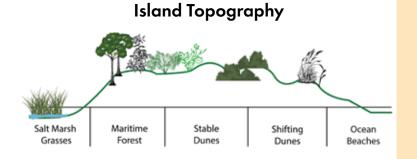
## What Can We Do?

- Educate yourself, family, and friends about these rare and fragile island ecosystems
- Follow building codes to preserve groups of trees and undergrowth on properties
- Retain native trees, vines, undergrowth, and other vegetation as much as possible during new construction
- Reduce areas of planted exotic grasses and trees on existing properties
- Plant native grasses, trees, shrubs, and wildflowers
- Conserve wetland areas by avoiding filling swamps and marshes
- Remove invasive species, such as the tallow (popcorn) tree, air potato vine, and cogon grass.

#### "The best time to plant a tree is 20 years ago. The second best time is now." – Chinese proverb

## For More Information

- Dauphin Island Sea Lab DISL
- Grand Bay National Estuarine Research Reserve - NERR
- South Alabama Land Trust SALT
- Dauphin Island Bird Sanctuary DIBS
- Town of Dauphin Island Ordinances
- Dauphin Island Foundation Two Pines Maritime Forest Project



## FUN FOREST FACTS





- **Goat trees** are ancient oaks that are part of island lore where goats escaped rising water and alligators by climbing the tree limbs.
- **Spanish moss** is not actually moss, but an air plant related pineapple.



**Resurrection fern**, it is told, can stay dormant for as many as 100 years, but with a little rain will come to life.



**Toothache tree leaves** can make your mouth and tongue tingle and go numb.



Yaupon shrub leaves contain the most caffeine of any native plant in North America and can be prepared as tea.



**Devil's Walking Stick tree roots** were used by Native Americans as a salve and as an emetic herb for purification ceremonies.



**Isabella's fig trees** are fabled to have been planted by Hernando De Soto's wife when she visited the island around 1540.