

## Visitor Information

- **Access:** Cross at the 40th Street beach access and walk west, down the beach strand, for approximately 0.4 mile. The Reserve may also be reached by boat from the Intracoastal Waterway using one of several creeks.
- **Parking:** Parking alongside the road is allowed. There are a few public parking spaces near the 40th Street crossover.
- **Guidance:** Beware of biting insects (flies, mosquitoes, ticks, chiggers) and poisonous plants (poison ivy). Sun protection is advised.
- **Facilities:** There are no public restrooms or facilities available at Bird Island Reserve.
- **Habitat:** Beach, dunes, grasslands, shrub thicket, salt marsh and tidal flats.
- **Wildlife:** Typical barrier island birds, mammals, reptiles, plus rare and non-native plants and animals.

## How to Find Us

The Bird Island Reserve is located in Brunswick County, south of Shallotte. From Hwy. 17 South, turn left onto N.C. 904; then turn right onto N.C. 179. It will become Sunset Beach Boulevard. Cross the Intracoastal Waterway onto Sunset Beach. At the "T" intersection with Main Street, turn right. Parking is permitted on the side of the road and near the 40th Street crossover. Walk west on the beach to get to the reserve boundary.



## Natural Features of Bird Island

The Bird Island Reserve has pristine sandy white beaches, high natural dunes, and over 1000 acres of beautiful salt marsh and tidal creeks.

### Creation of the Reserve

Bird Island was privately owned from 1771 through 2001. Efforts to develop the island were halted in 1996 when the N.C. Coastal Resources Commission denied the request to construct a bridge over Mad Inlet. In 2001 and 2002 the state of North Carolina purchased these lands with funds from the Clean Water Management Trust Fund, National Heritage Trust Fund and N.C. Department of Transportation. Many years of local citizens' effort, particularly the Bird Island Preservation Society, contributed to the inclusion of Bird Island in the Coastal Reserve program.

### Purpose of the Reserve

This natural area is one of 10 sites that make up the North Carolina Coastal Reserve & National Estuarine Research Reserve. Preservation of Bird Island Reserve allows this coastal ecosystem to be available as an outdoor laboratory where scientists, students and the public can learn about processes, functions and influences that shape and sustain the coastal area. Traditional recreational uses are allowed as long as they do not disturb the environment or organisms or interfere with research and educational activities.

## Rules & Tips For Visitors

- The Reserve is open to visitors year-round.
- Do not remove or disturb plants or wildlife and do not feed the wildlife.
- Camping, fires, fireworks, recreational/off-road vehicles, littering, and use of firearms are not permitted.
- To protect natural features, use extreme care in and around the dunes. Leave nothing behind except your footprints.
- Leash and clean up after your pets.
- Observe posted bird and turtle nesting areas. Adhere to posted guidance signs.
- Public decency laws apply.
- Additional information is available at the N.C. Coastal Reserve Wilmington Field Office.

### North Carolina Coastal Reserve & National Estuarine Research Reserve



Wilmington Field Office  
5600 Marvin K. Moss Lane  
Wilmington, NC 28409  
(910) 962-2998  
[www.nccoastalreserve.net](http://www.nccoastalreserve.net)

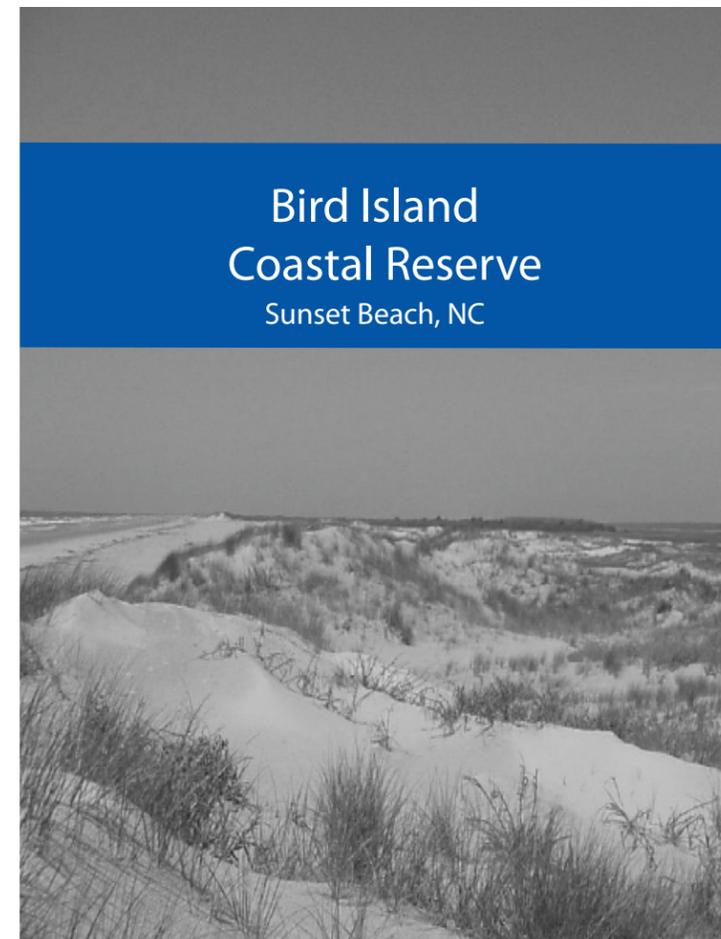
Bird Island is managed by the N.C. Division of Coastal Management to protect the island's ecosystems and organisms for research, education and compatible recreational uses. Support and assistance of the Bird Island Preservation Society and its volunteer stewards is gratefully acknowledged. This site is also a dedicated state nature preserve.

The North Carolina Coastal Reserve & National Estuarine Research Reserve is a part of the N.C. Division of Coastal Management, a division of the N.C. Department of Environment and Natural Resources.

1000 copies of this document were printed at a cost of \$1010.42 or \$1.01 per copy. Funding for this project was provided by NOAA grant NA08NOS41900436 Section 306.



## Bird Island Coastal Reserve Sunset Beach, NC



# Bird Island Reserve

## Upper Beach

- The area between high tide and the dunes is subject to harsh conditions like shifting sands, glaring sun, strong winds, salt spray and storm tides.
- Only a limited number of species are specifically adapted to survive here. Flowering plants include sea rocket, orach, dune spurge, and sea elder. Grasses such as sea oat and beach panic grass grow here.
- The upper beach is a critical nesting area for loggerhead sea turtles. Some shorebirds such as the American oystercatcher, terns, black skimmer and Wilson's plover build nests directly on the sand. The ghost crab makes deep tunnels under the sand to avoid predators and high temperatures.

## Sand Dunes

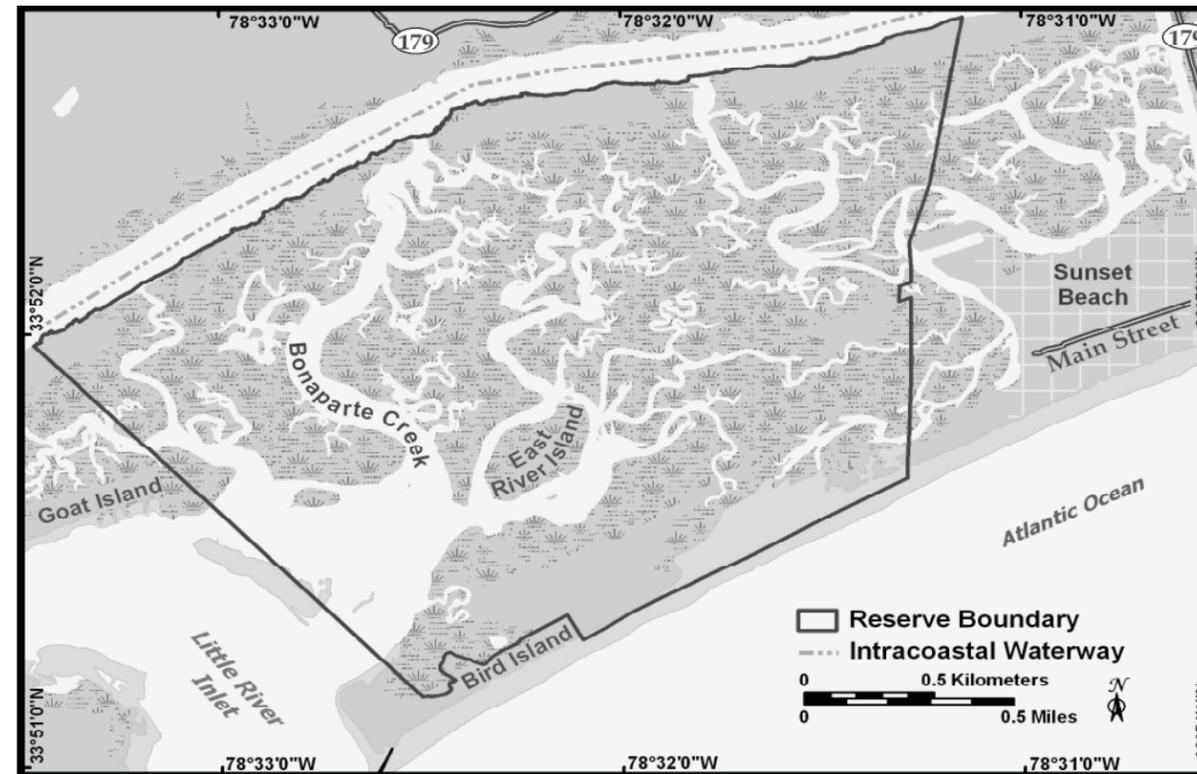
- Plants are found in greater numbers as distance and elevation above sea level increases.
- The dune system at Bird Island has prominent frontal and secondary dunes, some in excess of 20 feet high. Sea oats are the dominant vegetation. Their extensive underground stem and root networks stabilize the dunes by literally holding the sand together.
- Other dune plants such as croton, pennywort, and evening primrose are adapted to the windy conditions. They have flexible leaves and stems and grow close to the sand.

## Maritime Grasslands

- The depression behind the sand dunes is better protected from salty wind and waves. Here, grass and herb species include saltmeadow cordgrass, broomsedge, carex, prickly pear cactus, pepper grass, blanket flower, goldenrod, marsh fimbry, pennywort and beach morning glory.
- The grasslands vary from seasonally or permanently wet in lower areas to well-drained in areas of higher elevation

## Maritime Shrub Thicket

- Farther from the effects of the ocean, where salt spray and temperature variations are reduced, a mix of vine, shrub and tree species grows into a shrub thicket.
- White-tailed deer, non-native red fox, opossum, raccoon, marsh rabbit, and cotton mouse use the shrub thicket for protection and shelter.



## Salt Marsh

- Lunar tides flood the intertidal salt marshes twice each day. Supratidal marshes remain above water except during occasional spring tides and storm tides.
- Saltmarsh cordgrass, which dominates the intertidal marsh, is adapted to dramatic changes in salinity and temperature. This abundant, tall plant regulates salt concentrations in its cells by releasing excesses through pores on its blades.

## Tidal Mud Flats

- Expansive and seemingly barren flats are easy to see at low tide. Decaying marsh grass, or detritus, is deposited with each tide. These nutrients support a food web of crabs, fish, snails and mussels.
- Wading birds and shorebirds come to the exposed mud flats to feed during low tide. The sediments sometimes have a "rotten egg" smell due to the presence of hydrogen sulfide gas.

## Sea Beach Amaranth

- This rare plant does not tolerate disturbance such as development, beach nourishment and erosion. Only 55 populations are known to exist. As a result, the plant was listed as federally threatened in 1993.

## Diamondback Terrapin

- The diamondback terrapin is a state species of special concern. It is the only reptile specifically adapted to survive in fresh or salt waters. It prefers the brackish water of the salt marsh. The shell of this reclusive turtle has distinctive diamond-shaped scales.

## Loggerhead Sea Turtle

- Female turtles crawl out of the sea to nest during the summer. Hatchlings mature in the sea and the females may return after 20 years to nest in the same region. Only one in 10,000 of these threatened turtles will make it to adulthood

## Red Fox

- The population of the non-native red fox has increased in recent years. This clever predator uses a variety of food sources and adapts to live in close association with human development. The result is noticeable impacts to threatened and rare wildlife, including damaged sea turtle and shore bird nests.

## Birds

- Bird species composition is typical of barrier islands and includes brown pelican, Wilson's plover, black skimmer, ibis, gulls, herons, egrets. Piping plover, willet, eastern painted bunting, wood stork, and several types of tern are less common at the site.