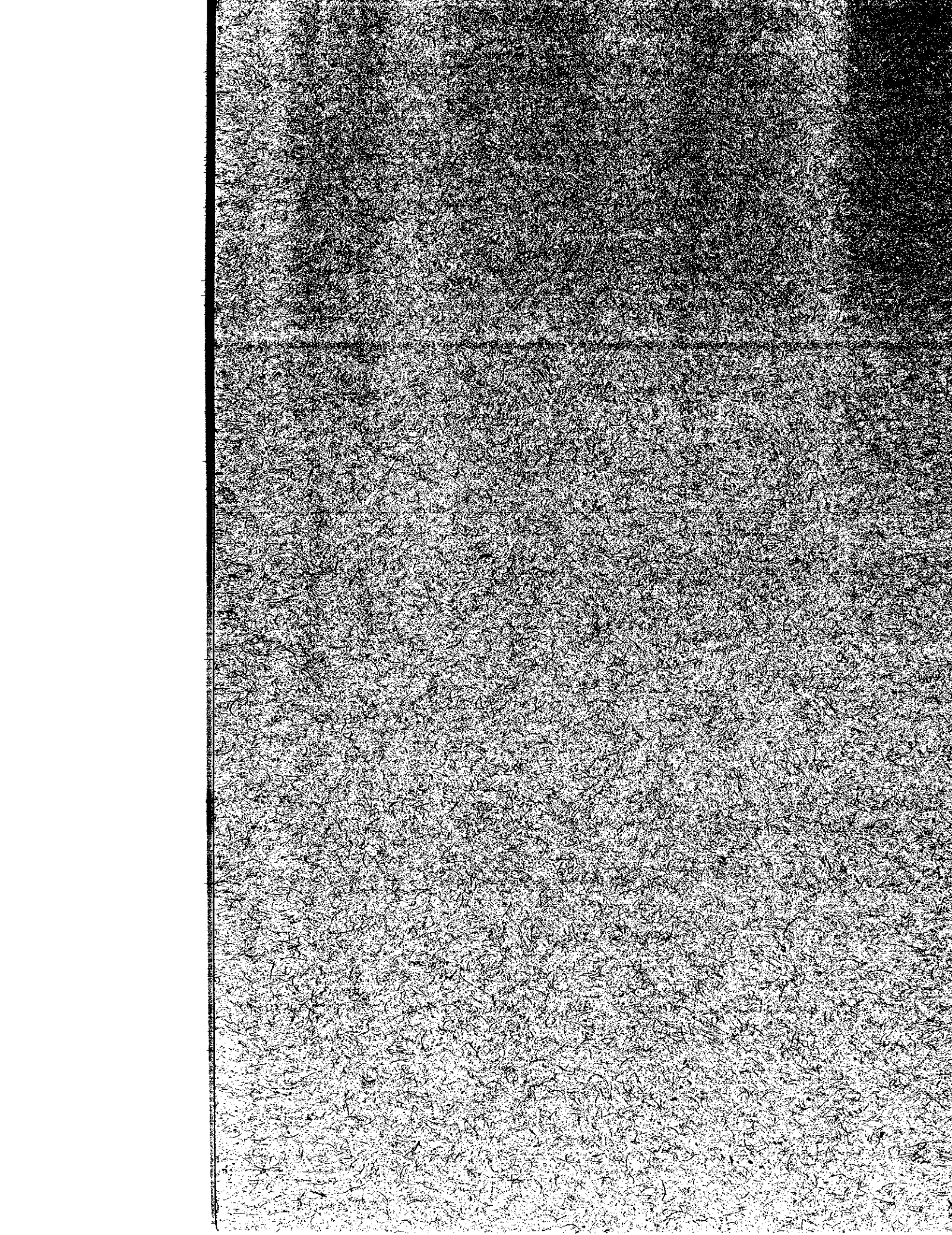


MANAGEMENT PLAN
FOR THE
BALD HEAD WOODS COMPONENT
OF THE
NORTH CAROLINA COASTAL RESERVE



Division of Coastal Management
Department of Environment and Natural Resources



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June 1999

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and Natural Resources
Division of Coastal Management
Coastal Reserve Program
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I. EXECUTIVE SUMMARY

The North Carolina Coastal Reserve includes over 12,000 acres of lands and waters associated with barrier islands along the 320 miles of the state's ocean shoreline. The Reserve (Figure 1) includes eight sites or "components": 1. Currituck Banks (Currituck County), 2. Kitty Hawk Woods (Dare County), 3. Buxton Woods (Dare County), 4. Rachel Carson (Carteret County), 5. Permuda Island (Onslow County), 6. Masonboro Island (New Hanover County), 7. Zeke's Island (Brunswick/New Hanover counties) and 8. Bald Head Woods (Brunswick County). Buckridge, a ninth site located in Tyrrell County, will be acquired in the near future. Four components (Currituck Banks, Rachel Carson, Masonboro Island and Zeke's Island) also represent the North Carolina National Estuarine Research Reserve (NCNERR), part of federal-state program that manages a nation-wide system of sites for estuarine research, education and compatible traditional uses. Though Kitty Hawk Woods, Buxton Woods, Permuda Island and Bald Head Woods are not components of the National Estuarine Research Reserve, they are managed for similar purposes (with protection emphasis focused more on the upland communities) by the state Division of Coastal Management.

The concept of governmental protection of coastal natural areas for research and education was created in Section 315 of the federal Coastal Zone Management Act of 1972. This section of the Act created the National Estuarine Research Reserve System, a program that includes sites in 23 other states and Puerto Rico. North Carolina began to participate in this program in 1982 and the four sites (mentioned above) were acquired during the ensuing years. Following creation of the NCNERR, the N.C. Division of Coastal Management felt that other state-owned coastal tracts not included in the Estuarine Reserve should be protected in a similar manner. Thus, the Coastal Reserve was formally established in 1989 to encompass the NCNERR and other coastal natural areas.

As coastal development continues to convert large portions of natural ecosystems to alternative land uses, the public needs to have access to areas that maintain our natural heritage and allow traditional uses. The Reserve sites also serve as natural outdoor laboratories for education to enhance awareness of coastal process and research to improve our knowledge and, hence, management of the coast. Additional components may be added to the Reserve as funding and protection needs are evaluated by the state.

The Bald Head Woods Coastal Reserve encompasses approximately 173 acres. This area was comprised of six tracts that were acquired in two phases -- 128.4 acres in 1993 and 44 acres in 1994. The combined \$ 5.3 million purchase price was funded by awards from the state Natural Heritage Trust Fund, U.S. Fish and Wildlife Service with land donations (tracts 2 and 4 -- 45.1 acres) from Bald Head Island, Ltd. All of the land was acquired by the state in fee simple title.

The Bald Head Woods site encompasses a portion of a mature maritime evergreen forest ecosystem -- ranked "globally imperiled" to "rare" by the North Carolina Natural Heritage Program (see Appendix A). Cabbage palmetto (*Sabal palmetto*) reaches its northern limit as a prominent component of forests found within the remnant ridge and swale topography of the island. Also, four (two plant/two animal) state-listed species are found within the Reserve

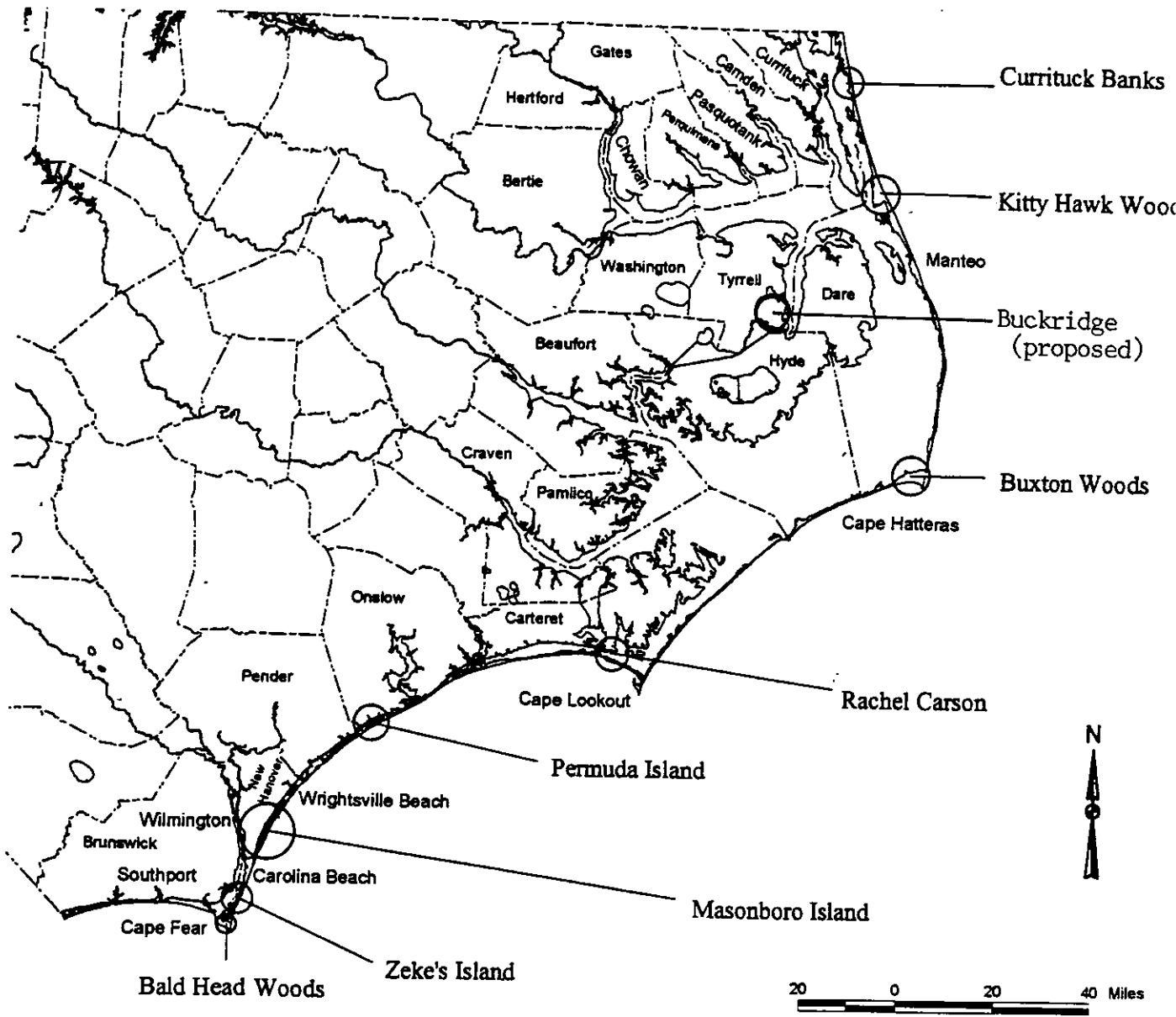


Figure 1. North Carolina Coastal Reserve Components

component.

The Coastal Reserve staff consists of the Program Coordinator and Research Specialist located at the UNCW Center for Marine Science Research in Wilmington, the Education Specialist at Beaufort and the Northern Sites Manager at Kitty Hawk. The Coordinator oversees administrative functions, the research/educational programs and interacts with public and private agencies/individuals concerning management of the site. The two specialists coordinate their respective activities with various organizations (e.g., governmental agencies, state/private universities, marine science programs, public schools) as well as any interested individuals. The Northern Sites Manager oversees Reserve functions at the Currituck Banks, Kitty Hawk Woods and Buxton Woods sites.

Bald Head Woods will be managed for use as a natural outdoor laboratory for research, education and traditional uses. Preservation of the natural resources shall be priority. A coordinated management approach will be used, involving the Reserve staff, a local advisory committee and a network of state, county and local agencies and individuals. In particular, the Bald Head Island Conservancy will be an important partner in the management process (see Appendix B). Component use requirements (Appendix C) are enforced to protect the natural integrity of the forest tract. Current and future management issues are also included.

This plan is in accordance with all relevant federal, state and local regulations. In particular, it is consistent with the Brunswick County Land Use Plan and the North Carolina Coastal Area Management Act (NCGS 113A-100 et seq.).

II. INTRODUCTION

A. Creation of the Coastal Reserve

The Coastal Reserve was created to manage certain state properties as coastal natural areas. Some of these sites are also designated as the North Carolina National Estuarine Research Reserve, a state-federal program to protect selected estuarine sites for research, education and compatible traditional uses. The federal Estuarine Reserve Program was created by Section 315 of the federal Coastal Zone Management Act of 1972. This section of the Act allows states to apply for matching federal funds to acquire and manage selected areas. North Carolina received federal grants to begin Estuarine Reserve land acquisition in 1982. Federal criteria, funding and subsequent evaluations allowed North Carolina to have a total of four components (Zeke's Island, Masonboro Island, Rachel Carson and Currituck Banks) in the Estuarine Reserve. However, federal Estuarine Reserve acquisition, operations, research, development and education funding is limited to these four sites.

Permuda Island was acquired and placed in the Coastal Reserve by the State in 1987 to stop development that might negatively impact the water quality of Stump Sound -- an important local fishery. Though the 50-acre island had little natural significance because of past farming, it did contain an archaeologically significant shell midden.

In 1988 the State began to purchase tracts in Buxton Woods to protect this maritime forest from development. This was the first effort to specifically protect maritime forest by inclusion in the Coastal Reserve. Subsequently, the Coastal Resources Commission studied the status of maritime forests guided, in part, a study by Lopazanski et al. (1988). From this review, it was determined that the maritime forest ecosystem should be given high priority relative to coastal preservation efforts. The State then pursued acquisitions at Bald Head Island and Kitty Hawk Woods when funding was available and the owners expressed interest in selling. Currently, Buxton Woods included includes approximately 825 acres while over 700 acres are protected at Kitty Hawk Woods. Buckridge, an 18,000-acre complex of swamp forest and low-salinity estuarine communities will be acquired as the ninth site during 1999.

B. Bald Head Woods Acquisition

The initiative to preserve Bald Head Woods came from its former owner, the developer of Bald Head Island. Mr. Kent Mitchell, president of Bald Head Island, Ltd., offered to sell a portion of the forest to the state. Mr. Mitchell previously served as a member of the Coastal Resources Commission (CRC) at a time when the Commission convened a working group to assess what management would be needed to protect coastal maritime forests (CRC, 1990).

In 1992 the state applied for and received a grant of \$ 3,975,000 from the U.S. Fish and Wildlife Service to acquire maritime forest on the island. Also, the state Natural Heritage Trust Fund awarded the DCM \$ 325,000 for the same purpose. Bald Head Island, Ltd. donated a total of 45.1 acres (\$ 1,000,000 value) of the area to be purchased. Following appraisals and negotiations, a total of 172.65 acres was acquired in two phases: 128.4 acres in 1993 and 44.25 acres in 1994. The North Carolina Chapter of The Nature Conservancy assisted in the negotiations between the State and Bald Head Island, Ltd.

C. Values of Preservation

One obvious question that needs to be addressed is why this site is being protected. One answer, discussed later, is the natural significance of the Bald Head Woods in terms of rare plant and animal species within a tract of mature maritime forest. However, there also needs to be a brief overview of the practical and societal benefits of acquisition and management of the property.

Bennett (1995) characterized wilderness areas in terms of ecological and psychological values. The most tangible reason for natural area protection is preservation of evolutionary processes and genetic diversity which, thus, gives us an opportunity to learn more about our world, especially relative to prediction of the consequences of human impacts on our environment. That is, an undisturbed maritime forest can serve as a scientific "control" for comparison to developed areas. Issues such as water quality,

barrier island hydrology, storm damage and exotic species invasion can be compared and contrasted between the Reserve and developed maritime forest areas. Thus, the site serves as an irreplaceable laboratory for education and management-oriented research.

The psychological benefit of the property will vary from individual to individual. Each person's concept of wilderness or natural conditions is founded upon previous life experiences and expectations. Relative to Bald Head Island, the 173-acre tract offers different levels of use from the corridor along Federal Road to remote interior woodlands. Finally, the visitor may also gain a greater understanding of just how the world is changing by visually contrasting the development elsewhere on the coast to this undisturbed tract of native maritime forest.

III. PURPOSE AND GOALS OF MANAGEMENT

A. Purpose and Scope of Plan

The State of North Carolina established the North Carolina Coastal Reserve to manage representative natural areas for long-term research, monitoring, education and compatible traditional uses. The ultimate goal of the Reserve is to provide useful information to coastal decision makers and the public.

The purpose of this management plan is to inform interested parties about the Bald Head Woods component and the activities that will be conducted there. Though it is long-term in scope, the plan will be reviewed annually by the Local Advisory Committee and revised by the state every five years.

The management goals of the North Carolina Coastal Reserve are:

1. *To preserve coastal ecosystems representative of the biogeographic regions and typologies in North Carolina and to make them available for continuous future study of processes, functions and influences which shape and sustain the coastal area;*
2. *To provide new information on coastal ecosystem processes to decision makers as a basis for the promotion of sound management of coastal resources;*
3. *To provide a focal point for educational activities that increase the public awareness and understanding of coastal ecosystems; effects of man on them; and their importance to the state and the nation; and*
4. *To accommodate traditional recreational activities and other uses of the Reserve as long as they do not disturb the Reserve*

environment and are compatible with the research and educational activities taking place there.

General policies for protection and use of the Reserve's resources are summarized as follows:

B. Research/Monitoring Activities (page 22)

The management plan establishes procedures by which research will be permitted on the Reserve site. Though a very wide range of research may take place, priorities are given for projects depending upon the amount of previous work done within a given component. Briefly, priority research topics include:

1. *Baseline measurements of archaeological, chemical, physical, biological and ecological characteristics;*
2. *Monitoring changes in these characteristics over various time frames; and*
3. *Research to help improve coastal decision making.*

This sequence of research priorities ("3" being the highest) is in the best interest of the Reserve--protecting it from adverse impacts and guaranteeing its long-term value and suitability for research, education and other compatible human activities. The ultimate goal of the research program is the third priority--to provide information to improve coastal decision making.

The management plan also provides procedures for permitting, monitoring/research activities and procedures for disseminating research results to educate scientists, resource managers and the general public. Research in the Reserve will enhance awareness and understanding of natural processes in the coastal region and of human effects on the associated ecosystems.

C. Educational Activities (page 26)

Publications, lectures, slide shows, field trips and other related programs will actively draw on and be coordinated with the activities of The Bald Head Island Conservancy; public schools; the North Carolina Aquariums; colleges and universities; and other educational organizations. Policies related to on-site interpretive programs for students and other groups have been developed. On-site educational programs will not disturb research activities. Off-site educational programs will be coordinated with various marine science programs, such as the University of North Carolina at Wilmington (UNCW), Sea Grant and the North Carolina Aquariums.

D. Other Uses (page 29)

Policies addressing traditional uses of the Reserve have been presented to maintain a balance between these activities and research/educational activities (Section VIII, F-G). Standards for recreational activities and vehicular access have been developed. The policies are designed to ensure minimal disruption to research projects and to the Reserve's biotic and abiotic features.

E. Enforcement and Surveillance (page 33)

Protection of the site will be achieved through various cooperative arrangements with state and local agencies and individuals, especially the Bald Head Island Conservancy. This maritime forest complex is a unique resource which must be preserved.

IV. SITE DESCRIPTION

A. Regional Perspective and Access

The Bald Head Woods Coastal Reserve is located within an incorporated village, the Village of Bald Head Island (see Figure 2). Though Bald Head Island is visited seasonally by thousands of tourists, the permanent population consists of approximately 200 residents. Most of the local business involves development of the island. Associated enterprises include restaurants, a convenience store, marina, golf course and a golf cart rental/gift shop.

Public access to Bald Head Island is primarily via private ferry from Indigo Plantation near Southport (ca. 4 miles northwest) or by private boat (docking at Bald Head marina). Once on the island, the Reserve is located approximately two miles east of the ferry terminal via Federal Road. Golf carts and bicycles are the primary modes of transportation. Cars and trucks are not allowed by the Village except for emergency or maintenance purposes.

B. Resource Inventory

1. Physiography and Geology

(Mayes, 1984; Leatherman et al., 1982; Parnell and Adams, 1970)

The Bald Head Woods Coastal Reserve is located on the Outer Coastal Plain and is part of a barrier island known as "Smith Island complex." The uplands of this complex include 1,882 acres of sand ridges or islands -- Bald Head, Middle and Bluff -- while 12,977 thousand acres are marshes and intertidal flats. Smith Island is bounded by New Inlet to the north, the Atlantic Ocean to the south and east, and the Cape Fear River to the west.

Geologically, Smith Island primarily consists of marine-deposited Holocene sands overlying

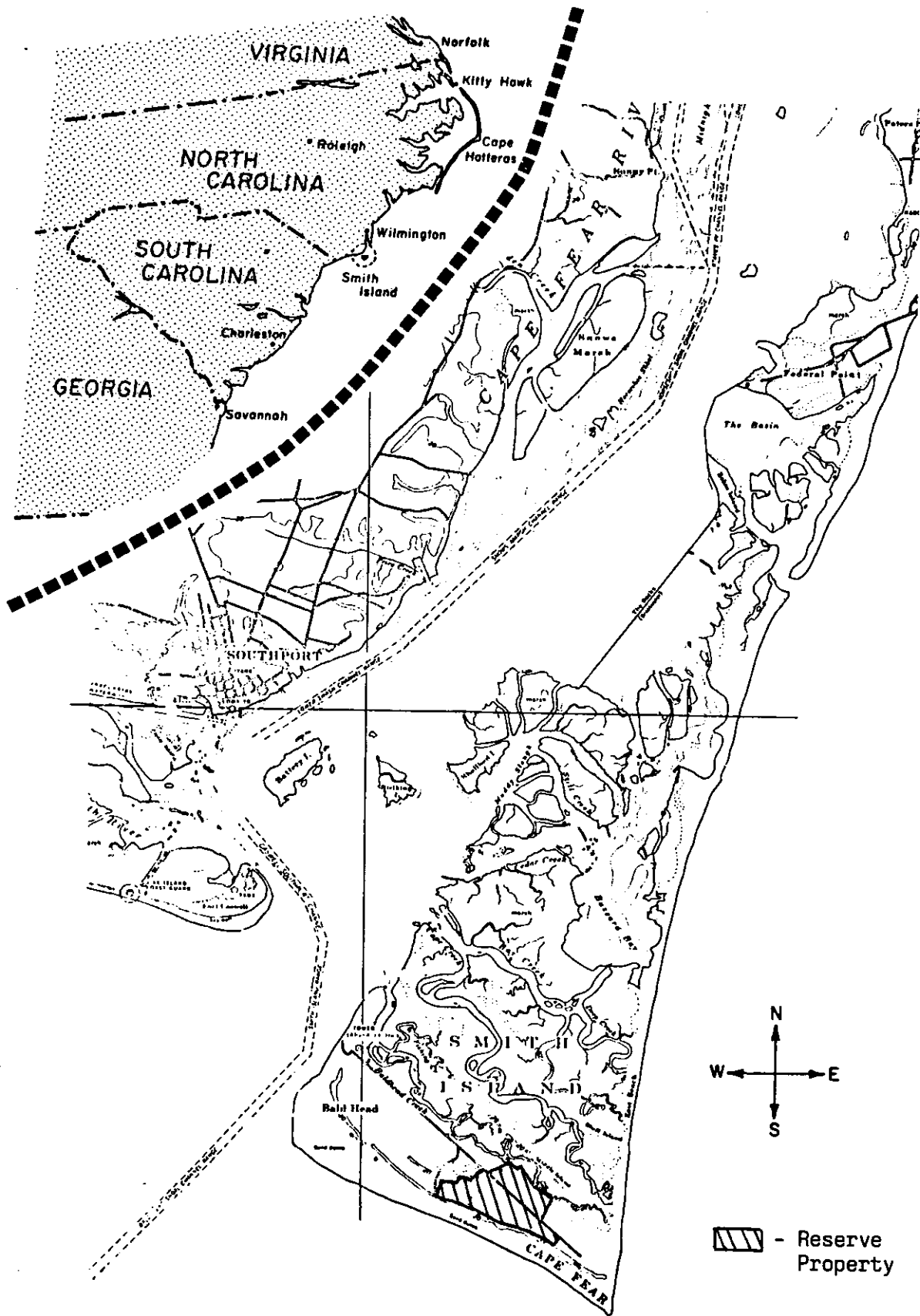


Figure 2. Bald Head Woods Reserve Location

limestone and clay strata. Island genesis probably involved multiple processes. The shape of the island, sand ridge morphology and progressive ages of the upland soils (decreasing in age from Bluff Island to Bald Head) would tend to suggest marine spit formation. However, deltaic deposition by the Cape Fear River may be responsible for development of the western end of the complex. In addition, the substrata may be remnants of a mainland feature that was "drowned" and isolated by subsequent sea-level rise following the last ice age.

2. Soils

The majority of the Reserve property is mapped by Barnhill (1986) as Corolla fine sand with a small area of Newhan fine sand along the northeast boundary. The Corolla series is found within nearly level flats throughout the maritime forest and consists of moderately well to somewhat poorly drained sands. The excessively drained Newhan series occurs as a line of dunes paralleling the marshes along Bald Head Creek. Field inventories also identified small wetland "pockets" within the maritime forest, particularly along the southwest edge of the property just behind the secondary dunes. These areas are underlain by a very poorly drained, sandy soil with a mucky-sand surface horizon which correlates most closely with the Torhunta series description.

3. Hydrology

(Moore et al., 1973; Mayes, 1984)

Like many other barrier islands, the freshwater resource of Smith Island is a combination of surficial and subsurface aquifer types. The fresh water at or near the soil surface is found in association with unconsolidated sediments above a confining layer of green clay that occurs at a depth of 18-27 feet. Below this aquiclude is found a mixture of saline and fresh ground waters within layers of clay and limestone. Island fresh water is recharged exclusively by precipitation. The lens of freshwater is perched above denser saline waters that seep in from the surrounding ocean.

4. Climate

(Rulison, 1970; Colosi and McCormick, 1978;
Gale, 1981; Mayes, 1984)

The local climate on Bald Head Island is somewhat milder and more vulnerable to immediate oceanic influences than the neighboring mainland. Since the nearest weather station to the natural area is in Southport (located four miles across the river), data from this source must be viewed accordingly when relating them to the site. The number of frost-free days in Southport averages 254 days a year, an average annual precipitation of approximately 50 inches with a mean annual temperature of 64°F.

Wind direction measured on Bald Head Island varies seasonally, with spring and summer winds primarily from the southwest. Fall winds are from the northeast while winter winds came from the north. Wind speed measured on the island averaged 8.8 mph annually, though it exceeded 46 mph in every month except May.

Hurricanes, tropical storms and extra tropical storms (i.e., "nor'easters") have occasionally hit Bald Head Island, though not as frequently as the more exposed Outer Banks areas such as Cape Hatteras. The most powerful storm to strike the area in the recent past was Hurricane Hazel (1954) that drove storm tides over most of the island. Other recent hurricanes/tropical storms that directly effected Smith Island included David (1979), Diana (1984), Bertha (1996), Fran (1996) and Bonnie (1998).

While hurricanes generally occur during the summer and fall months, extra tropical storms typically affect the island during the fall and winter. Beginning as continental low pressure systems that slowly move offshore, these storms often develop strong, sustained northeast winds that may blow for days, causing as much cumulative damage to coastal areas as the short-lived, but more infrequent, hurricanes.

5. Vegetation

The primary plant community found throughout the Reserve is maritime evergreen forest (Figure 3). The canopy is typically dominated by live oak (*Quercus virginiana*), many trunk diameters > 36 inches, with lesser coverage by laurel oak (*Q. hemispherica*), cabbage palmetto (*Sabal palmetto*) and loblolly pine (*Pinus taeda*) with scattered individuals of red cedar (*Juniperus virginiana*) and flowering magnolia (*Magnolia grandiflora*). Along the eastern edge of the forest, one may observe the effects of salt spray on the canopy, originally studied by Wells (1939) and Boyce (1954). Understory species include saplings of the previously mentioned species plus flowering dogwood (*Cornus florida*), wild olive (*Osmanthus americana*), Carolina laurel cherry (*Prunus caroliniana*), red bay (*Persea palustris*), American holly (*Ilex opaca*), wax myrtle (*Myrica cerifera*), beauty berry (*Callicarpa americana*) and tough bumellia (*Bumellia tenax*). Various vines are also present: cat-brier (*Smilax bona-nox*), summer grape (*Vitis aestivalis*), poison ivy (*Rhus radicans*) and peppervine (*Ampelopsis arborea*). Though herbaceous species are sparse under the dense overstory, patches of partridge berry (*Mitchella repens*), bedstraw (*Galium hispidulum*) and ebony spleenwort (*Asplenium platyneuron*) are scattered throughout the forest area.

Lopazanski et al. (1988) noted that the canopy of Bald Head Island is generally sparse because of tree blow downs from past storms. Such periodic openings of the canopy have permitted sufficient light to penetrate the lower strata resulting in the development of a dense, successional undergrowth of small trees and shrubs in certain areas.

Scattered areas of maritime shrub swamp/swamp forest are found within the forest. These communities occur within a continuum of seasonally-flooded, interdune swales and depressions. Dominants include small trees of red maple (*Acer rubrum*), black willow (*Salix nigra*), sweet gum (*Liquidambar styraciflua*), red bay, muscledwood (*Carpinus carolinana*), wax myrtle and cane (*Arundinaria gigantea*) with vines such as poison ivy and Carolina supplejack (*Berchemia scandens*). Though not noted in the Natural Heritage Program site description (Appendix A) for Bald Head Island, these communities have a global rank of "critically imperiled" according to that program.

Within the shrub swamp areas are interdune ponds, particularly in depressions near the

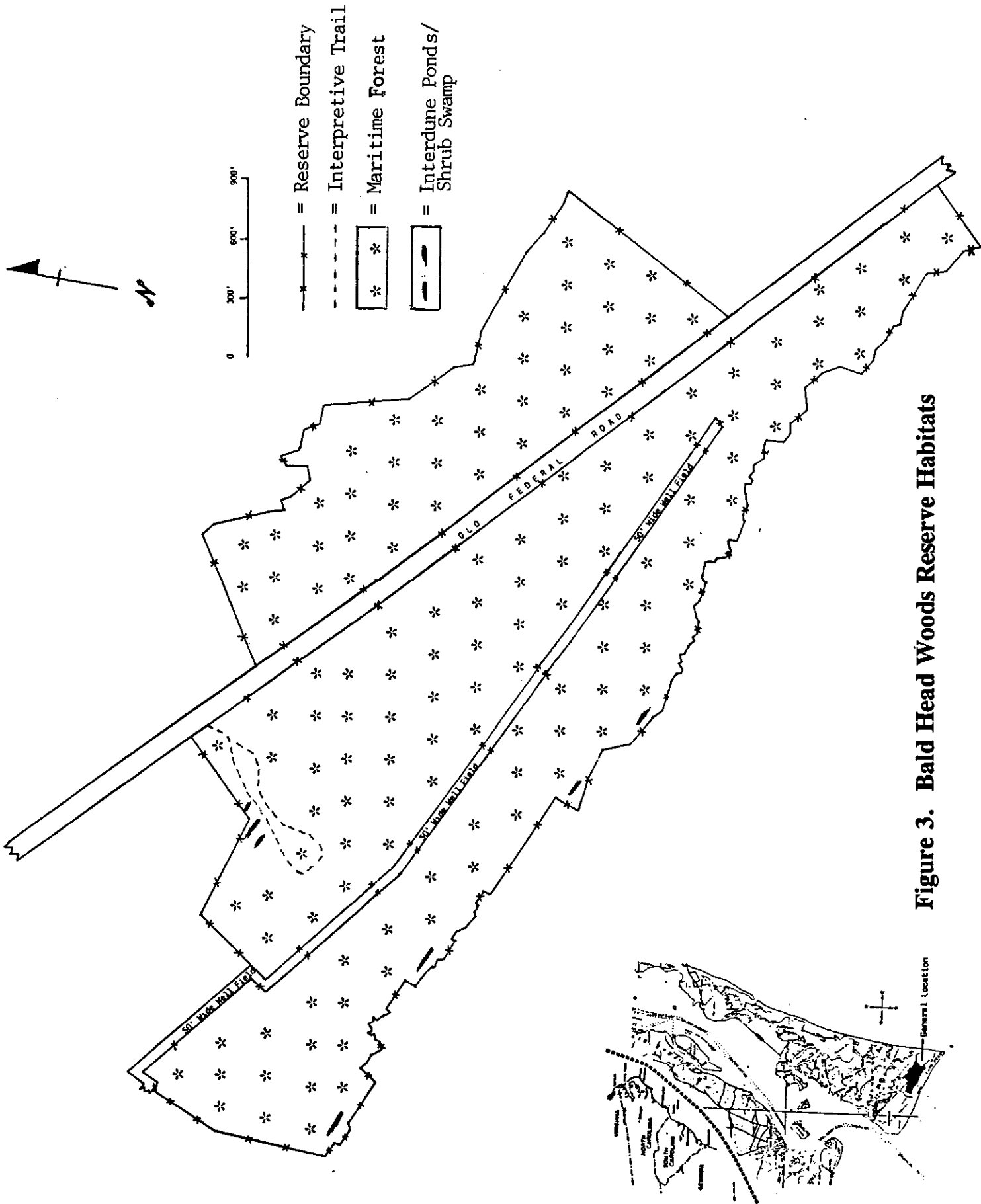


Figure 3. Bald Head Woods Reserve Habitats

forest/dunes transition along the south boundary and along the interpretive trail. Wetland herbs that dominant these swales areas include stinging nettles (Laportea canadensis), false nettle (Boehmeria cylindrica), centella (Centella asiatica), netted chainfern (Woodwardia areolata), pennywort (Hydrocotyle umbellata), broomsedge (Andropogon virginicus) and various sedges (Cyperus spp., Eleocharis spp.). Shrubs found on the peripheries of these communities are groundsel tree (Baccharis halimifolia) and wax myrtle.

6. Fauna

A comprehensive animal survey of the Reserve area has yet to be performed. However, previous studies (Lewis, 1946; Cooper and Satterthwaite, 1964; Parnell and Adams, 1970) represent the best available descriptions of local maritime forest fauna.

Common mammal species include white-tailed deer (Odocoileus virginianus), gray fox (Urocyon cinereoargenteus), raccoon (Procyon lotor), eastern cottontail (Sylvilagus floridanus) gray squirrel (Sciurus carolinensis), eastern mole (Scalopus aquaticus) and cotton mouse (Peromyscus gossypinus). River otters (Lutra canadensis) and mink (Mustela vison) also visit the maritime forest from adjacent salt marshes. The previously cited literature documents historical accounts of an eastern woodrat (Neotoma florida) population. However, this species has not been observed on the island since 1966.

Bird species in the forest are rather seasonal in composition. Common summer residents include Carolina wrens (Thryothorus ludovicianus), cardinals (Cardinalis cardinalis) and painted buntings (Passerina ciris) while some 20 species of warblers are present in the late summer (e.g., blackburnian (Dendroica fusca), golden-winged (Vermivora chrysoptera), magnolia (Dendroica magnolia), mourning (Oporornis philadelphia) and black-throated blue (Dendroica caerulescens). Approximately 60 species of birds not observed during the breeding season were found during August - December, some staying for only part of that time. At least 25 species of forest birds winter on the island.

Reptiles and amphibians representation is relatively small in the maritime forest area compared to mainland sites. Among five extant species of snakes, the black racer (Coluber constrictor) is most common. Lizards are infrequent, but represented by the six-lined racerunner (Cnemidophorus sexlineatus), five-lined skink (Eumeces inexpectatus) and glass lizard (Ophisaurus ventralis). Small pools within the forest area are home to several frog and toad species such as the southern toad (Bufo terrestris), squirrel tree frog (Hyla squirella), green tree frog (Hyla cinerea) and narrow-mouthed toad (Gastrophryne carolinensis). No salamanders have been reported.

Invertebrates have been virtually unstudied except for two butterfly records from the North Carolina Natural Heritage Program (see Appendix A). Giant swallowtails (Papilio cresphontes) have been recorded from the Reserve area while southern hairstreaks (Fixenia favonius favonius) were found elsewhere within the Bald Head forest. Land snails are found on trees within the forest, but no references to collections or identifications are found in the literature.

C. Site Significance

The Bald Head Woods Coastal Reserve is part of a nationally significant barrier island complex according to the North Carolina Natural Heritage Program (see Appendix A). Maritime evergreen forest on the property is ranked imperiled to rare globally and contains a northern extension of cabbage palmetto (Sabal palmetto) distribution. Though not listed in Appendix A, a small area of maritime swamp forest/shrub swamp has critically imperiled global ranking while the scattered interdune ponds have imperiled global ranking. Three state-listed species -- giant swallowtail (Papilio cresphontes), tough bumelia (Sideroxylon tenax) and four-angled sedge (Cyperus tetragonus) -- are found on the property.

D. Archaeological Resources

According to the North Carolina Division of Archives and History, there are no known archaeological sites within the boundaries of the Reserve site. Hargrove (1985) surveyed the proposed Phase II development area on Bald Head Island (i.e., maritime forest area north of Federal Road) and found that none of the shovel test profiles produced any evidence of shell middens. The area to the south of Federal Road was deemed to have low potential for archeological resources by Tom Burke, Chief Archaeologist in 1985 (Lawrence, 1995). However, shell middens have been found on nearby Bluff Island (Wilde-Ramsing, 1984), a property managed by the North Carolina Division of Parks and Recreation.

E. History (Angley, 1994 compiled from: Cooper and Satterthwaite, 1964; Lee, 1965; Hill, 1984; and Stick, 1985)

Situated at the mouth of the Cape Fear River, Bald Head is one of three land masses with associated salt marshes and ocean beaches known collectively as Smith Island. Bald Head derives its name from the sandy promontory on its west end, long used by pilots to mark their positions as they guided vessels inward from the sea. The island group as a whole takes its name from Landgrave Thomas Smith, who received it by grant in the early eighteenth century.

Before the arrival of European settlers, the lower Cape Fear region was inhabited by the native Cape Fear Indians, who made occasional use of Bald Head Island for hunting, gathering and fishing. The scant archaeological evidence available would seem to indicate, however, that the Indian groups were small and that no permanent residency occurred. This limited use of the island came to an end in the early eighteenth century, when the few remaining native Americans appear to have migrated to the south and west.

The initial exploration of the Cape Fear area by Europeans occurred in 1524 during the voyage of Giovanni da Verranzano, a Florentine mariner sailing under French sponsorship. Only two years later the Spanish explorer Lucas Basquez de Ayllon is thought to have entered the mouth of the Cape Fear River and to have established a temporary base along its west

bank.

During 1660-1670 two voyages by the New Englander William Hilton and several abortive attempts were made to establish and to maintain a colony on the west side of the Cape Fear River below present-day Wilmington. Following these failures, the region reverted to its Indian inhabitants for more than half a century.

Permanent European settlement along the lower Cape Fear began during 1720-30 with the coming of Maurice Moore and others, Brunswick Town was established only 15 miles upriver from Bald Head Island. Between 1726 and 1731 some 115,000 acres of Cape Fear land were acquired by a closely associated group of about three dozen men, largely from South Carolina. Bald Head itself had been in the possession of Landgrave Thomas Smith since 1713. However, there is no evidence that Smith made any use of Bald Head whatsoever.

The advent of the American Revolution brought the first significant use of Bald Head since the departure of the Cape Fear Indians. In May of 1776 British ships under General Henry Clinton came ashore on the island to forage for supplies. Later, Bald Head provided encampments for one of seven British regiments that occupied the lower Cape Fear area and held its trade in paralysis.

By 1789 Bald Head was owned by General Benjamin Smith, great-grandson of its original owner. Smith had fought in the Revolution, represented Brunswick County in the General Assembly and in 1810-1811 would serve a governor of North Carolina. Although his primary residence was well upstream, near present-day Wilmington, Smith erected what was probably a summer home on the lower west side of Bald Head, with the fanciful name "Sea Castle." Virtually nothing is known regarding Sea Castle, but it appears prominently on an 1814 map drawn by one "R. Potter, Esq." Moreover, its abandoned remains could still be visited for years thereafter.

It was in 1789 that Benjamin Smith donated ten acres for construction of the original lighthouse on Bald Head Island. Located near Sea Castle and the southwest tip of the island, it was completed in 1794. This structure appears to have been undermined by shoreline erosion about 1813 and plans then began for the construction of "Old Baldy," roughly one-half mile to the north. Completed in 1817 or 1818, this lighthouse was to remain in use for well over a century.

Throughout the antebellum period, Bald Head was visited from time to time by pleasure seekers and excursionists drawn by the island's natural beauty. For the most part, these visitors came from Smithville (now Southport) and from the military installation located there, Fort Johnston. The antebellum period saw increasing non-residential use of Bald Head as well. Aside from lighthouse keepers and their families, the island was visited for occupational purposes by fishermen, river pilots, livestock keepers and lumbermen. By the time of the Civil War there were at least four permanent residences on the island. Two of these were in close proximity to the lighthouse, but two other structures were located well

to the east on Bald Head (or Lighthouse) Creek.

During the Civil War itself, the western portion of Bald Head became a part of the formidable Cape Fear defense system -- a series of fortifications along the lower reaches of the river designed to protect Wilmington and to keep open the "lifeline of the Confederacy." The Bald Head component of this system, Fort Holmes, was hurriedly thrown up in 1863 with the help of some 500 slave laborers. At times, upwards of 1,000 men were stationed at Fort Holmes. Remains of some of the earthworks can still be seen. Contemporary maps indicate that the area east of the fort's outworks was a maritime forest consisting primarily of live oak and red cedar trees.

In mid-January of 1865, following the fall of Fort Fisher, Fort Holmes and other installations on the lower Cape Fear were evacuated by their Confederate defenders. Apparently, extensive destruction occurred at Fort Holmes prior to its garrisons's departure.

During the late nineteenth and early twentieth centuries, Bald Head Island was home to a population variously estimated to have been between 40 and 150 people. Among these residents were river pilots seeking faster access to incoming vessels. Other residents included the lighthouse keeper and his family and personnel from the United States Lifesaving station.

The first lifesaving station on Bald Head Island was established on East Beach in 1882, approximately one mile above the tip of Cape Fear. The skills and endurance of the lifesavers there were sorely tried at the outset. No fewer than four vessels were totally lost in the vicinity during the station's first year of operation.

In 1898 the federal government acquired a twenty-acre site near the lifesaving station for construction of the Cape Fear Lighthouse, the third lighthouse structure to be built on Bald Head Island. To facilitate the movement of building materials, the government also constructed a four-mile tram railway, extending from the dock near Old Baldy eastward through the maritime forest to the construction site. This thoroughfare, known as Federal Road, is still in use today as the main route to the lower portion of the island. The new lighthouse, completed in 1903, was to remain in use for just over half a century. Old Baldy, fitted with a different signal, also remained in use as a supplemental aid to navigation.

By 1914 the lifesaving station near Cape Fear had become so threatened by erosion that a new station was built on South Beach, roughly mid-way between the existing location and the Cape Fear River. The new station was completed in 1915, with a cluster of ancillary buildings nearby to house the station personnel and their families. By 1930 some five private residences had been constructed in the area. The establishment of the new station coincided with the formation of the United States Coast Guard through a merger of the old Lifesaving and Revenue Cutter services. The area of maritime forest comprising the Reserve lies just north of the station site, with its western boundary lying along the road that connects the site with the Federal Road.

It was soon after completion of the South Beach Coast Guard station that development of Bald Head was first attempted on a large scale. The prime mover behind this early effort was Thomas Boyd of Hamlet, North Carolina. Acquiring title to the island in 1916, he changed its name to "Palmetto Island" and laid out sixty building lots on its west side. Subsequently, he constructed a spacious pavilion and a three-story hotel overlooking the Cape Fear River, although the latter structure remained largely unfinished. He also brought in large numbers of hogs and sheep as part of an agricultural enterprise on the island. However, Boyd's plans ultimately became unraveled with the Great Depression and in 1933 the island was seized by Brunswick County in lieu of some \$ 9,000 in unpaid taxes.

On two occasions during 1930-40, Bald Head and the entire Smith Island complex were sold at public auction at the Brunswick County courthouse. In 1937 the island complex, with the exception of government property, was purchased by Frank O. Sherrill of Charlotte, owner of a cafeteria chain. Despite initial indications that the new owner intended to transform Bald Head into a "second Bermuda," Sherrill's early activities on the island were largely confined to agricultural experiments with livestock, fruits and vegetables. Moreover, even these activities ended with the outbreak of World War II. Some twenty years later, however, Sherrill's plans for Bald Head would be both resuscitated and expanded.

In 1937 the United States Coast Guard decided to deactivate the Cape Fear Station on South Beach and to enlarge the responsibilities of the nearby station on Oak Island. Thus ended more than half a century of lifesaving activity on Bald Head, during which some forty vessels were lost in the Cape Fear area. The South Beach station was again activated during World War II in response to offshore depredations by German submarines. In a related development, the Coastal Guard erected a tall lookout tower nearby.

Later (1950-60), the main station building on South Beach would provide housing for sawmill hands engaged in the large-scale cutting of mature dogwood trees. This lumber was used in the manufacture of shuttles for use in textile mills. Presumably, some of this lumbering activity occurred in the area of maritime forest comprising the Reserve.

In 1958 the federal government completed a new lighthouse on Oak Island near the Coast Guard station. Old Baldy, though no longer lighted, was allowed to remain standing. With both the lighthouse and Coast Guard functions now transferred to Oak Island, the sole inhabitant of Bald Head was a caretaker hired by Mr. Sherrill.

Ironically, it was during this period of near abandonment and isolation that elaborate plans began to be formulated for the transformation of Bald Head into a major resort development. A study commissioned by Sherrill in 1963 estimated that the island could be made to accommodate as many as 60,000 people. During that same year Sherrill acquired title to the two lighthouse sites and to Federal Road, thereby consolidating ownership of the entire Smith Island complex (some 13,000 acres) for the first time since Benjamin Smith in the late eighteenth century.

Sherrill's next step was to request state assistance in providing a four-lane ocean

highway southward from Fort Fisher. In addition to accommodations for the anticipated 60,000 people, Bald Head was to have its own airport, drive-in movie theater, three golf courses, a large hotel and other related facilities.

The plans formulated by Sherrill and his associates would have severely altered the southern portion of Bald Head Island, particularly the dunes and maritime forest. Indeed, the protective ridge of dunes traversing the island from east to west was to be leveled for residential development. The areas both north and south of Federal Road were slated for building lots with those north of the road linked together by an extensive network of private boat canals. Finally, a lengthy pier was projected outward from the central portion of South Beach, with a road extending northward to Federal Road.

Although Sherrill lacked the \$30-40 million necessary to carry his plans into effect, the threat to Bald Head and to the Smith Island complex aroused powerful and board-based opposition from conservationists in both the public and private sectors. Eventually, their objections and the lack of adequate financing precluded development plans at that time. Sherrill then offered to convey the property to the state for \$ 5 million. However, despite Governor Bob Scott's support of its purchase, the necessary funds were never appropriated.

Though Sherrill's plans for development remained in the drawing boards, some alterations to Bald Head nevertheless occurred during his ownership. On at least two occasions military exercises were carried out on the island, including the practice of road building under combat conditions.

Finally abandoning his plans for development in 1970, Sherrill sold the entire Smith Island property to the Carolina Cape Fear Corporation for \$ 5.5 million. Development plans by the owners were on a relatively modest scale and were far more protective of local natural resources. Their first large-scale project on Bald Head itself was the construction of a golf course, which was completed on the west side of the island in 1973. By the end of that same year, some four hundred building lots had been sold. However, the plans ground to a halt some five years later with a national recession and in 1976 ownership was conveyed to yet another firm, Bald Head Island Corporation.

From that time until the present, Bald Head and the Smith Island complex have passed through the hands of several owners. Some 12,000 acres of the northern portion of the Smith Island complex (i.e., Bluff Island, East and Bay beaches) was donated to the state Division of Parks and Recreation in 1980. During 1980-90 construction activity accelerated somewhat with the completion of a marina and a ferry terminal, providing expanded recreational opportunities and easier access.

Development of Bald Head has taken place only within guidelines designed to preserve the island's remoteness and beauty. Completion of 173-acre Bald Head maritime forest sale to the State in 1994 by the current owner, Bald Head Island, Ltd., is indicative of this approach. Protection has been extended to the several historic structures that have survived fires, erosion, weather and neglect of the past. Chief among these structures is

Old Baldy itself, the oldest lighthouse on the North Carolina coast. Travel to and from Bald Head continues to be by water only. No cars are permitted on the island; only golf carts and a limited number of maintenance vehicles.

F. Local Activities That May Affect the Component.

Water-producing wells may be established according to existing conservation easements (see Appendix F for conditions). Well sites would only be used if needed to accommodate future development and if water cannot be piped from the mainland. Plans for further development of the island will increase visitor use of the site.

V. PLAN ADMINISTRATION

A. RESERVE STAFF

The Secretary of the Department of Environment and Natural Resources has assigned lead management responsibility for the North Carolina Coastal Reserve to the Division of Coastal Management (DCM). Since management and use of the Bald Head Woods Coastal Reserve will likely involve other state agencies, the DCM will carefully and cooperatively work with all affected agencies. The DCM staff serves as liaison between federal, state and local agencies and assists all participants in the program to carry out responsibilities through the following staff:

1. Reserve Coordinator

The Reserve Coordinator oversees administrative functions of the program and serves as a liaison between the state and NOAA. The office for this staff person is located within the UNCW/Center for Marine Science Research (CMSR) near Wrightsville Beach. A top priority of the Coordinator is to meet the general Coastal Reserve goals and objectives by implementation of site management plans.

2. Research Specialist

Located at the Myrtle Grove site of the CMSR, the Research Specialist is in charge of research and monitoring activities for the Coastal Reserve. The primary goal of this position is to facilitate these activities such that the results can be used to improve coastal management decision making. With proper funding and personnel, job duties include: compilation and maintenance of computer database of previous Reserve research, coordination of proposal review, development and coordination of Reserve research/monitoring activities and assistance with management of the southern components.

3. Education Specialist

This position coordinates the educational and interpretive functions for the program at the Beaufort office. The main goal is to increase public awareness and understanding of coastal issues by: 1. instructing school groups, the public and coastal decision makers about the importance of and interrelationships with coastal ecosystems and 2. translation and dissemination of the knowledge obtained through Reserve research and monitoring projects. The Education Specialist has the following job duties:

- * To provide verbal and written information (e.g., maps and pamphlets) about the Coastal Reserve to the public;
- * To conduct field trips to Reserve components;
- * To organize and perform public presentations (e.g., lectures, workshops);
- * To develop and implement educational outreach programs to local schools and universities.

4. Northern Sites Manager

This employee is located at Kitty Hawk to oversee stewardship of the Currituck Banks, Kitty Hawk Woods and Buxton Woods sites. Facilitation of research/monitoring and presentation of various educational activities is accomplished by coordination with the other Reserve staff. The Site Manager works closely with local governmental officials to implement management strategies and to enforce existing use policies. An important part of the job is to provide information about the program to site users and to develop working partnerships with local residents and groups (e.g., Outer Banks Bird Club).

B. Local Advisory Committee

An advisory committee will be created to assist the Division of Coastal Management with implementation and review of management at the Bald Head Woods component. The committee provides a unique familiarity with the Reserve's individual sites -- the resources present there and local concerns. Individuals representing state and local government, education, research, wildlife resources and other interests will be asked to participate by letter of invitation from the Secretary of the North Carolina Department of Environment and Natural Resources. Committee members will be appointed to serve until they choose to resign.

The committee will meet at least annually. Reserve staff will maintain contact with committee members and make available to them appropriate reports and data pertaining to research programs, educational programs and the management of Reserve resources. Additional meetings of the committee may be called when the Reserve Coordinator or

committee members feel that a management problem has arisen that merits discussion and action.

C. Research Proposal Review

Proposals received by the Reserve Research Specialist will be screened by the Reserve staff and selected technical experts. Each project will be evaluated on the basis of feasibility, scientific and technical merit, and whether or not it meets component objectives and policies as defined in the management plan. Only research that complies with the management plan and the established research priorities will be permitted. The Reserve staff may also submit research grant applications to funding agencies.

D. Plan Review and Modification

This management plan will be reviewed annually and revised every five years by the Division of Coastal Management staff in consultation with the Local Advisory Committee. The review will include an on-site evaluation of the condition of the site, an assessment of research/educational programs and an assessment of other uses within the component.

VI. EXISTING STATE AND LOCAL REGULATIONS/JURISDICTIONS

A. North Carolina Coastal Area Management Act (CAMA)

CAMA (G.S. 113A-100 et seq.) was passed in 1974 and established an agency (DCM) and governor-appointed commission Coastal Resources Commission (CRC) to regulate development and to certify local land use plans in 20 coastal counties of North Carolina. Any development (e.g., boardwalks, interpretive facilities) within a Reserve site will be carefully coordinated with planning and permit staff of the DCM to conform with CAMA. The activities described in this plan are consistent with the goals and objectives of the North Carolina Coastal Management Program.

B. North Carolina Coastal Reserve Regulations (see Appendix C)

These departmental rules (15A NCAC 70) were established in 1988 to define the purpose, responsibilities, functions, components and use requirements of the Coastal Reserve. The Reserve is comprised currently of eight sites: Currituck Banks, Kitty Hawk Woods, Buxton Woods, Rachel Carson, Permuda Island, Masonboro Island, Zeke's Island and Bald Head Woods. Reserve use requirements (T15: 070.0200) specify general management standards within the component boundaries.

C. North Carolina Coastal Reserve Act

The Coastal Reserve Act (G.S. 113A-129.1-3) was passed in 1989 to formally establish a state program that will preserve designated coastal natural areas for

research, education and other consistent public uses.

D. Nature Preserve Act

The act was passed in 1985 (Article 9A of NCGS chapter 113A) and, in conjunction with associated administrative rules (15 NCAC 12H .0300), gives the State authority to dedicate outstanding state natural areas (deemed so by the Secretary of DENR) as nature preserves. Articles of dedication specify acceptable and unacceptable uses, management purposes and custodial responsibilities (see Appendix E). Bald Head Woods was formally dedicated by the Council of State in 1994.

E. Cultural Resources

All archaeological historic property located on or recovered from state-controlled lands is state property. Applicable statutes and regulations include: the Archaeological Resources Protection Act (G.S., Article 2; NCAC &07: 04R 0.0700) and portions of the Archives and History Act dealing with responsibilities of the N.C. Historical Commission (G.S. 121-2 [a]; NCAC T07: 04R 0.0200) and protection of underwater archaeological sites (G.S. 121, Article 3; NCAC T07 04R 0.1000). Any proposed development or collection of artifacts within the Reserve will involve consultation with the Department of Cultural Resources/ Division of Archives and History.

F. Land Use and Zoning

The maritime forest of Bald Head Island has been designated as critical wildlife habitat in the Brunswick County Land Use Plan. Use standards are derived from the Conservation Class. The Village of Bald Head Island has zoned the Reserve property for residential development within a maritime forest protection overlay district.

VII. MANAGEMENT OBJECTIVES AND POLICIES

A. Research/Monitoring Objectives and Policies

The Bald Head Woods Coastal Reserve is available for research, but funding is limited. Whenever university faculty or other prospective researchers wish to use the area for research or monitoring, the goals of the Reserve shall be:

- * to preserve coastal ecosystems representative of the biogeographic regions and typologies in North Carolina and to make them available for continuous future study of processes, functions and influences which shape and sustain the ecosystems: and
- * to encourage and perform, when possible, research and monitoring activities that will provide information on coastal processes as a basis for the promotion of thoughtful management of coastal resources.

To meet these goals, the management plan contains the following research and monitoring objectives:

- * evaluate research/monitoring proposals according to a permitting and technical review process;
- * disseminate results to coastal decision makers and the public; and
- * encourage use of Bald Head Woods by researchers.

The following policies have been developed from the Coastal Reserve statutes and regulations (Appendices C and D) and will be implemented by the Reserve staff to ensure proper protection and management of the component:

Policy: *The long-term integrity of the Bald Head Woods component as an undisturbed research site will be maintained. This requirement is of primary importance and will be the basis of all decision making establishing the use of the Reserve.*

The goal to protect the Reserve in its present state is extremely important. To support long-term research, the site must retain its integrity as a valid representative of natural North Carolina coastal ecosystems. Any improvements to facilitate access, research or education will be allowed only if, following review by the Local Advisory Committee, Reserve staff and other interested parties, construction and operation will cause negligible impacts to the component.

Policy: *Research and monitoring will be encouraged when it addresses a needed research priority. The order of general research priorities ("c" being the highest) are as follows:*

(a) Baseline measurements of maritime forest archaeological, chemical, physical, biological and ecological characteristics;

(b) Monitoring changes in basic parameters over various time frames; and

• Research to improve coastal management decision making.

All types of research are encouraged at the North Carolina Coastal Reserve -- it has been preserved to foster scientific study. However, for the long-term good of the Reserve and coastal resource management in general, research applicable to resource management will be favored over other research if conflicts arise in the allocation of study sites.

Policy: *Research involving manipulation of the Reserve environment will be permitted on a limited basis for specified periods, provided that upon completion of research tasks, the study site can be restored to its original condition.*

Manipulative studies are defined as activities that involve creating physical, biological, geological or chemical changes in the environment and observing their effects. Such studies have the capacity to alter natural processes of the Reserve and undermine its ability to serve as a subject for baseline studies or as a control for comparative studies. Manipulative research will be allowed if it benefits the management of the Reserve and coastal resources. Proposals for manipulative research will be strictly evaluated on a case-by-case basis as to the types, extent and reversibility of environmental changes; the duration of the project; its impact on the long-term stability of the Reserve environment; and its potential for improving coastal resource management strategies.

Policy: *No research involving collection of out-of-season species or studies of protected species will be approved until all necessary research permits are obtained.*

For wildlife and inland fish species, including endangered or threatened species, a researcher must obtain a scientific collection permit from the Director of the Wildlife Resources Commission, Non-Game Program. The U.S. Fish and Wildlife Service requires a scientific collecting permit for taking, transporting or possessing migratory birds, their parts, nests or eggs for scientific research or educational purposes. Researchers are also expected to consult with the Plant Protection Program (N.C. Dept. of Agriculture) and the N.C. Natural Heritage Program (N.C. Dept. of E&NR) concerning rare plant species and communities.

Policy: *A research permit must be issued by the Reserve Research Specialist before initiation of any proposed research.*

A written proposal must be submitted to and approved by the Research Specialist in consultation with selected technical and scientific experts. Routine wildlife management activities, such as bird banding, fish sampling and water quality sampling conducted by state and federal agencies will be coordinated through the Research Specialist, but will not require a proposal. However, the agency must notify the Research Specialist either by telephone or in writing prior to initiation of field work. A copy of final results from any such study shall be submitted to the Reserve Coordinator.

Proposals received by the Research Specialist will be screened by the Reserve staff and, if necessary, peer-reviewed by selected technical experts. Proposals will be evaluated on the basis of feasibility; scientific and technical merit; whether or not they meet

component objectives and policies as defined in the management plan; and relevance to component research priorities. Proposed research will be reviewed with an eye toward its affects on other ongoing or proposed research projects being conducted within the Reserve.

Field work may not begin until the principal investigator receives a signed research permit from the Research Specialist. Major changes in the original research objectives, materials or methods must be submitted in writing to the Research Specialist who may consult the peer reviewers. Variations from the original research proposal will only be allowed following written notification from the Research Specialist.

Policy: *Research activities must comply with the Reserve objectives and policies and with the approved research proposal.*

Research that deviates from the objectives and policies of the Management Plan or the original proposal will not be allowed to continue.

Policy: *The principal investigator for each project is responsible for maintaining and removing any human-made objects (field equipment, trash, etc.) that they bring into the Reserve.*

Just as researchers bear sole responsibility for maintaining their field equipment, they also bear sole responsibility for removing it when ending the project.

Policy: *The principal investigator for each project is responsible for the timely submission of reports, project progress reports and other information to the Research Specialist for the program files.*

Copies of the project reports (e.g., progress reports, final reports) or other publications will be kept with the Reserve Program files and made available to interested parties with the understanding that proper credit shall be given to the original researcher(s).

Policy: *The Division of Coastal Management will actively encourage the dissemination of scientific information from the Reserve to the public.*

In addition to the avenues available to the scientific community for presenting new information (e.g., journals), media coverage, public presentations and newsletters will be used by the staff to disseminate information on the Reserve's research accomplishments

and educational programs. Local officials and other interested residents of the town will be a primary target of this information. Materials will be also be distributed to county officials in Bolivia.

B. Educational Objectives and Policies

The educational goals of the North Carolina Coastal Reserve are:

- to manage Reserve components for educational and interpretive activities to enhance awareness of coastal processes; and
- to provide various opportunities and avenues for the public and decision makers to be better informed about coastal ecosystems and processes, particularly results derived from Reserve research and monitoring.

To accomplish these goals, the management plan contains the following educational objectives:

- establish procedures for developing and supporting on- and off-site educational programs;
- coordinate educational activities among participating groups and agencies; and
- translate scientific information generated from the Reserve research program and other research efforts into non-technical terms for transfer to the public and selected groups.

The establishment of the North Carolina Coastal Reserve focuses special attention on the need for long-term protection, wise use and proper management of coastal areas. Through effective interpretive programs, the Reserve environment is made more meaningful to the public. Learning more about coastal ecosystems from Reserve research will improve public understanding of how the system functions and will expand the resource base from which to develop interpretive programs. The program will also assist and support local conservation and land trust efforts.

Publications, lectures, slide shows, organized activities and other educational programs will actively draw on and be coordinated with the activities of the public schools, the North Carolina Aquariums, the Sea Grant Program, colleges and universities, museums and other educational organizations.

Policy: *Off-site educational programs will be provided in conjunction with the DCM, UNCW, North Carolina Aquariums, public schools, community colleges and other educational institutions in order to make the*

public aware of the Reserve and its importance at state and national levels.

The Reserve staff will coordinate activities with existing off-site programs (e.g., UNCW, N.C. Aquariums and Sea Grant) and will help develop instructional materials, slide shows and permanent displays. Cooperative educational programs will be developed to incorporate the information generated by Reserve research into existing school programs. Specialized workshops will be provided for people such as youth group leaders and science teachers to relay this information and other topics related to the Reserve's resources. Information on Coastal Area Management Act regulations and land use planning will also be presented through DCM speakers and literature.

The Division of Coastal Management may sponsor specific meetings and workshops that are announced statewide. The events will be directed at the interested public, especially coastal decision makers, and will utilize staff, scientists and volunteer experts. The DCM will also respond to, and encourage, speaking engagements by its Reserve staff. Audiences may include service organizations, youth groups, schools and conservation clubs. The staff will also participate in activities such as serving on various boards, advisory groups and public programs.

Policy: *On-site programs at Bald Head Woods will be arranged for supervised groups.*

Field trips lead by the Reserve Educational Specialist, other Reserve staff or a qualified volunteer (e.g., from the Bald Head Island Conservancy) will be performed on request. However, the interpretive trail will be developed to allow self-guided tours. Research site tours for college students and other groups are encouraged. If possible, it would be desirable to have one or more of the researchers present during the tour in order to provide the participants with an explanation of research purpose, methods, and data collection. The Research Specialist or Reserve Coordinator will coordinate such activities with participating research institutions.

Policy: *On-site activities shall stay within the areas of the site designated for public access and shall not in any way interfere with research projects or other sensitive areas.*

The interpretive nature trail has been routed to show visitors the natural features of the site while not conflicting with research projects or special habitats.

Policy: *Literature, visual aids, and related materials will be developed, distributed and routinely updated in order to convey to the general public and specialized groups the goals, objectives and accomplishments of*

the North Carolina Coastal Reserve.

Maps, brochures, and related information will be developed to guide visitors through the Reserve. A checklist of plant and animal species will be developed on the basis of research and observations. Pertinent rules and regulations will be published so that visitors will be familiar with the Reserve's management policies. Signs indicating that the area is a state-owned Coastal Reserve and a dedicated State Nature Preserve will be placed at access points.

Policy: *The Education Specialist and Reserve Coordinator will oversee the educational program and will coordinate activities between participating institutions.*

The Education Specialist and Reserve Coordinator will address the special needs of the program on a case-by-case basis. These needs may include: securing media coverage, acquiring or obtaining equipment, providing staff support and funding and scheduling events and meetings. Lines of communication will be established through informal conversations, annual meetings and newsletters.

C. Objectives and Policies for Other Activities

Research and educational programs at the North Carolina Coastal Reserve will take place within the context of traditional uses of the Bald Head Woods component. The management plan recognizes the value of public use and strives to maintain a harmonious balance between compatible activities and research and education.

The Coastal Reserve can accommodate only passive recreational activities. However, in order for them to occur in concert with the primary research and educational uses of the Reserve, a series of clear management policies tailored to each Reserve component are needed. Only through reasonable and consistent management can compatible traditional activities continue within the Reserve and contribute to its value as a place for learning and enjoyment.

The compatible use goal of the North Carolina Coastal Reserve is:

- * To accommodate traditional recreational activities and other uses of the Reserve as long as: 1. they do not disturb the natural integrity of the site and safety of other users of the Reserve environment and 2. are compatible with research and educational activities taking place there.

The Management Plan employs the following objectives to refine this goal and to set a context for managing special concerns of the Reserve:

- * protect the natural and historical features of the area; and
- * establish guidelines for various activities within the Reserve.

1. **General Use**

Policy: *Littering and dumping of trash is prohibited within the Bald Head Island Reserve component.*

Littering and dumping are in violation of: state laws (G.S.14-399 & 14-399.1), the Reserve regulations (Appendix C) and dedication of the site as a State Nature Preserve (Appendix D).

Policy: *Target shooting is prohibited within the boundaries of the Reserve.*

Like hunting, this activity is prohibited by the Village of Bald Head Island.

Policy: *No user shall disturb research projects or research equipment in place at a Reserve component.*

Research is a priority use and must receive protection. Disrupting research would adversely impact the long-term management of the Reserve and other coastal resources that would benefit from the results. Also, damaged or stolen equipment could cost considerable amounts of money.

Policy: *Users of the Reserve shall not disturb or remove any live animals vegetation, or artifacts from the site unless it is part of an approved research or educational project. Fallen timber or other vegetative materials may be removed from established roads, paths or along boundaries if the wood or brush blocks access or poses a safety/fire hazard. However, litter and wood will not be removed from the interior of the property. All users must remove their own trash.*

Removing and destroying vegetation can lead to serious long-term damage to the habitats found in the Reserve by promoting erosion and sedimentation as well as alteration of established plant and animal communities. Disturbing nesting birds and other animals can interfere with their natural habits, possibly causing them to leave the site and diminish the Reserve's diversity of species. Any interpretive trails

established within the Reserve will be compatible with this policy of respecting the integrity of the site. Artifacts must not be removed unless approved in writing by the Reserve Coordinator.

Policy: *Camping is only allowed by permit on areas designated in the Reserve for research activities requiring an overnight stay. Fires are not allowed within the component.*

Restricting camping protects the Reserve's delicate habitats from disturbance and destruction. Only wilderness camping (i.e., pack in/pack out) for researchers will be allowed by written permission from the Reserve Coordinator. Wildfire within the woods can do considerable damage to the plants and animals of this ecosystem.

Policy: *Personal property not authorized by the Reserve Program shall not be placed within the boundaries of the Reserve for more than two consecutive days.*

Storing of unauthorized property will not be allowed. Violators will be asked to remove any such materials or a fine may be imposed under G.S. 14-399-399.1. If the owner is not able to be found, the materials will be removed.

Policy: *No activity shall be allowed which might pollute any stream or body of water in the Reserve. Acts of pollution shall include: 1. deposition of solid materials not indigenous to the local ecosystems and 2. discharge of liquids other than uncontaminated water.*

Protection of surface waters (e.g., isolated ponds/wetlands within the maritime forest) in the woods is essential for research and educational use at the Bald Head Woods site. When appropriate, the Reserve program shall review and comment on plans for development and other activities in the component vicinity.

Policy: *No other acts or uses which are detrimental to the maintenance of the property in its natural condition shall be allowed including, but not limited to, disturbance of the soil, mining, commercial or industrial uses, timber harvesting, ditching, draining or deposition of waste materials.*

Like the other Coastal Reserve components, the Bald Head Woods site was acquired to protect its natural integrity. Such special areas require strong safeguards to ensure their perpetual stewardship.

2. Vehicular Access

Policy: *Vehicles may only travel on Federal Road within the Reserve.*

Unrestricted vehicular access through the component would result in damage to portions of the natural communities by erosion and compaction. Visitors are encouraged to follow existing walking trails routed through the area. The entrance to the interpretive trail has a post to prevent entry by golf carts and other vehicles.

3. Hunting

Policy: *Hunting is prohibited within the Reserve.*

This activity is not allowed by the Village of Bald Head Island.

4. Groundwater Removal

Policy: *The natural watertable of the Reserve will be maintained. Water producing wells will be allowed on the two inholdings as long as withdrawals do not cause any significant impact to the maritime forest.*

The conditions of water withdrawal (if needed) within the Bald Head Island component are spelled out in two conservation easements from Bald Head Island, Ltd. to the State of North Carolina (April 9, 1993) given in Appendix F. These easements pertain to two tracts within the Reserve that were retained by the corporation for potential water production. One of the inholdings is depicted in Figure 3. The other is a portion of the Federal Road right-of-way. A comprehensive monitoring program (for ground water and vegetation) shall be developed if water-producing wells are planned for the easement. Monitoring wells must be installed prior to the construction of the water-producing wells.

D. Surveillance, Enforcement, and Maintenance

Maintenance and protection of the resources of the North Carolina Coastal Reserve is essential to its long-term survival and its value for education and scientific research. Policies stated in previous sections of the management plan and the Reserve regulations (see Appendix A) control manipulation of habitats by researchers and control other disruptions (habitat disturbance, littering, species removal, etc.) by all users of the Reserve. This section of the plan presents policies for the overall maintenance of the Reserve, for reporting violations of the management plan's policies and for the enforcement of these policies.

Policy: *The Reserve staff shall visit the site periodically to identify and to investigate possible violations of Reserve policies. The Reserve will rely heavily, but not solely, on researchers, educators and other users of the site to report any violations and to cooperate in any investigations.*

Current time and budget limitations keep the Division of Coastal Management and state/local enforcement agencies from maintaining a continuous presence at Bald Head Woods. Therefore, all users of the Reserve must exercise responsibility for obeying the management policies stated in this plan, for reporting any violations of the management policies and for cooperating with the Reserve staff and state and local enforcement personnel.

Policy: *The Division of Coastal Management, local law enforcement agencies and the Wildlife Resources Commission can cooperate in enforcing Reserve policies as well as all state and local laws applying to the Reserve.*

Cooperation of state and local agencies has been and will continue to be a prime ingredient in the management of the Reserve sites. Assistance from law enforcement agencies (e.g., local police or county sheriff) will be on a request basis from the Reserve staff.

Policy: *At the present time, the North Carolina Coastal Reserve shall rely on volunteer efforts to maintain the quality of the Reserve. The Reserve staff will coordinate periodic litter collections using local volunteers. All users of the Reserve shall respect the litter control and habitat protection policies of the state regulations (Appendix C).*

The Bald Head Island Conservancy will function as the primary volunteer group assisting the State with Management of the component.

VIII. MANAGEMENT ISSUES AND ACTIONS

A. Introduction

This section will discuss current and anticipated issues facing the Reserve related to sections VI and VII. The Reserve staff and Local Advisory Committee will update this information as necessary.

B. Baseline Data

To manage any natural area, there must be a comprehensive understanding of the resources present. Information from future research or monitoring will be used to support or, if necessary, modify management policies. Identification and mapping of physical, biological and archeological resource shall be a priority.

1. Geographic Information System (GIS)

The Reserve Research Specialist has initiated a project to have all boundaries of Reserve components and associated data layers on a GIS. However, the current amount of data on Bald Head Woods is minimal. For example, Reserve boundaries and the interpretive trail will have to be determined by the use of a global positioning system and then entered into the system. Once computerized, these data can then used to generate various maps depending upon the other layers of information available.

2. Resource Inventory and Mapping

Though some general information concerning Bald Head Island has been obtained from previously cited sources (e.g., Brunswick County soil survey, Natural Heritage Program records) there is a need for comprehensive, site-specific information on most basic resources such as archeology, vegetation and fauna. Available scientists, students and volunteers will be needed to help fill these gaps.

C. Partnerships

Since the DCM has limited resources, both financial and manpower, to fulfill the goals and objectives of this management plan, the Coastal Reserve Program will have to pursue and strengthen relationships with a broad base of individuals and organizations. Specific groups will include:

- * **Bald Head Island Conservancy:** A proposed memorandum of understanding is given in Appendix B. Several members of this organization have assisted the Reserve with the development and maintenance of the interpretive trail. The Conservancy will be a valuable source of volunteers for various activities related to the site. Their naturalist can also use the Reserve for field trips
- * **Bald Head Island, Ltd. (including Bald Head Island Management):** The corporation, headed by Mr. Kent Mitchell, was a crucial factor in the creation of the Reserve by their willingness to sell and by donations of land. Continued cooperation and assistance with management issues will be important.
- * **The Village of Bald Head Island:** The Village is an incorporated municipality that will be an important partner concerning the local community and related

management issues.

- * Other Governmental Agencies: Consultation with the Division of Parks and Recreation and State Property Office have been necessary for establishment of the interpretive trail. Other county, state or federal agencies may be of assistance. Additional memoranda of understanding may be necessary.

This is not intended to be a comprehensive list of groups. The key is to be creative in forming these partnerships.

D. Public Access

While previously stated policies exist to allow public use and access, decisions concerning access must be made carefully to protect the natural integrity of Reserve.

1. Designated Access Points and Trails

Currently, the main access corridor into the Reserve is via the interpretive trail (Figure 3). A parking deck at the entrance to trail from Federal Road can accommodate three golf carts. This small loop can be walked easily in approximately 30 minutes. Three benches are provided along the route for resting.

2. Information

Two signs, a sandblasted wooden sign and metal information sign, will be posted at the entrance to the interpretive trail. The wooden sign will inform visitors as to the name of the site and its managing agency while the metal sign will describe the site, how/why it was acquired and allowable uses.

The Coastal Reserve Program will develop a general brochure describing the Coastal Reserve program and another to serve as a self-guided tour when used in conjunction with the interpretive trail. The Bald Head Island Conservancy nature center, Village hall and the Bald Head Island, Ltd. corporate office shall be the distribution points for these materials on the Island while copies will also be available from the Reserve offices and from all of the Division of Coastal Management offices.

3. Boundaries

The Reserve boundaries have been surveyed in the past, but still need to be determined by Global Positioning Systems. Small (3" x 3") boundary signs similar to those posted at Buxton and Kitty Hawk woods will be posted to clearly mark the limits of the Reserve.

4. Long Term Initiatives

Expansion of the interpretive trail is a possibility, depending upon how much impact is observed along the existing trail. To create a more extensive walking trail, routing of new looping corridors following interior dune ridges, where possible, will be proposed and reviewed by Reserve staff, the Bald Head Island Conservancy, the Village of Bald Head Island and Bald Head Island Management.

E. Maintenance

Maintenance of the Reserve should be a minor issue. Periodic maintenance and monitoring of trail use will be performed by Reserve staff and by volunteers from the Bald Head Island Conservancy. Vegetative growth along the trail corridor will have to be trimmed for adequate passage and fallen debris (e.g., branches and tree trunks) will have to be moved off the trail. Any litter will have to be picked up. Modification of the trail may be necessary if negative impacts (e.g., damage to vegetation, foot traffic damage to dune slopes) are observed.

F. Fire Management

Though fire has not been a major issue of concern in the past, recent hurricanes have caused an increase in the volume of dried wood and leaves in the maritime forest. The Reserve program will work with the Village fire department if any actions are needed to either prevent or extinguish fires on the property.

G. Funding

The Coastal Reserve program receives state appropriations to manage the program. Approximately \$ 40,000 is allocated as operational funding for all of the Reserve sites. Additional money is available for trails and public access from the DCM public access program. Funding (\$ 20,000) for development of the interpretive trail was obtained from this source. Funds for future extensions of the trail may be obtained from this source.

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APPENDIX A

Bald Head Island Site Basic Record
(excerpted from: N.C. Natural Heritage Program, 1993)

Excerpts from the Bald Head Site Basic Record (NCNHP 1993)
 (pertaining to the Bald Head Island macrosite unless specified
 otherwise)

I. Site Description/Design

A. Site Description: The island has a diversity of high quality of maritime communities, including dune grass, salt marsh and the majority of the maritime forest in the complex. The forests of Bald Head complex are unique in North Carolina in having cabbage palmetto (Sabal palmetto) and other southern species as components. The open dunes support the newly discovered Bald Head blue curls (Trichostema sp.). Large numbers of loggerhead sea turtles (Caretta caretta) nest on the island's beaches.

II. Site Significance

A. Priority: A - Nationally Significant

Comments: One of the best clusters of southern barrier island communities and species, including excellent populations of the newly described Trichostema sp. 1, large nesting population of Caretta caretta and old growth maritime evergreen forest.

B. Biodiversity Significance: B2 - Very High Significance

Comments: Excellent occurrences of high-ranked species and communities including 3 G2 species and a G2/G3 community.

C. Protection Urgency: P2 - Threat/Opportunity within 5 years

III. Rare Species and Communities

A. Occurrences within the Bald Head Woods Reserve Component:

<u>Community/Species</u>	<u>Global Rank¹</u>	<u>State Rank²</u>	<u>F/S Status³</u>
Maritime Evergreen Forest.....	G2,G3.....	S1	
*Florida Woodrat (<u>Neotoma floridana</u>).....	G5T5.....	S1.....	-/T
Giant Swallowtail (<u>Papilio cresphontes</u>).....	G4T4.....	S3?.....	-/-
Tough Bumelia (<u>Sideroxylon tenax</u>).....	G5.....	S1.....	-/C
Four-Angled Flatsedge (<u>Cyperus tetragonus</u>).....	G4?.....	S2.....	-/SR

* - may no longer be present

B. Occurrence within the Bald Head Island macrosite:

<u>Community/Species</u>	<u>Global Rank</u>	<u>State Rank</u>	<u>F/S Status</u>
Dune Grass.....	G3,G4.....	S3	
Maritime Evergreen Forest.....	G2,G3.....	S1	
Peregrine Falcon			
(<u>Falco peregrinus</u>).....	G4.....	S1B,S2.....	E/E
Common Ground Dove			
(<u>Columbia passerina</u>).....	G5.....	SHB,SZ.....	-/-
*Florida Woodrat			
(<u>Neotoma floridana</u>).....	G5T5.....	S1.....	-/T
Loggerhead Turtle			
(<u>Caretta caretta</u>).....	G3.....	S1B,SZ.....	T/T
Green Turtle (<u>Chelonia mydas</u>)....	G3.....	S1B,SZ.....	T/T
American Alligator			
(<u>Alligator mississippiensis</u>)....	G5.....	S3.....	T/T
Giant Swallowtail			
(<u>Papilio cresphontes</u>).....	G5.....	S2?.....	-/-
Southern Hairstreak			
(<u>Fixenia favonius favonius</u>)....	G5.....	S2?.....	-/-
Liverwort			
(<u>Cheilolejeunea rigidula</u>).....	G5.....	S3.....	-/W1
Sunrise Lichen			
(<u>Teloschistes flavicans</u>).....	G3G4.....	S1.....	-/-
Seabeach Amaranth			
(<u>Amaranthus pumilus</u>).....	G2.....	S2.....	T/T
Beach Morning Glory			
(<u>Ipomea imperati</u>).....	G5.....	S1.....	-/-
Dune Bluecurls			
(<u>Trichostema sp. 1</u>).....	G2.....	S2.....	C2/C
Tough Bumelia			
(<u>Sideroxylon tenax</u>).....	G3?.....	S1.....	-/C
Four-angled Flatsedge			
(<u>Cyperus tetragonus</u>).....	G4?.....	S2.....	-/SR

1-Global Rank

G1 = Critically imperiled globally because of extreme rarity (5 or fewer occurrences or very few remaining individuals) or because of some factor(s) making it especially vulnerable to extinction.

G2 = Imperiled globally because of rarity (6 to 20 occurrence Or few remaining individuals) or because of some factor(s) making it very vulnerable to extinction throughout its range.

G3 = Either very rare and local throughout its range or found locally (even abundantly at some of its locations) in a restricted range (e.g., physiographic region) or because of other factors making it vulnerable to extinction throughout its range; in terms of occurrences, in the range of 21 to 100.

G4 = Apparently secure globally, though it may be quite rare in parts of its range, especially at the periphery.

G5 = Demonstrably secure globally, though it may be quite rare in parts of its range, especially at the periphery.

T_. = The rank of a subspecies or variety. As an example, G4T1 would apply to a subspecies of a species with an overall rank of G4, but the subspecies warrants a rank of G1.

2 - State Rank:

S1 = Critically imperiled in North Carolina because of extreme rarity (5 or fewer occurrences or very few individuals) or because of some factor(s) making it especially vulnerable to extirpation from North Carolina.

S2 = Imperiled in North Carolina because of rarity (6 to 20 occurrences or few remaining individuals) or because of some factor(s) making it very vulnerable to extirpation from North Carolina.

S3 = Rare or uncommon in North Carolina (on the order of 21 to 100 occurrences).

S4 = Apparently secure in North Carolina with many occurrences.

S5 = Demonstrably secure in North Carolina and essentially ineradicable under present conditions.

3 - Federal and State Status:

A. Federal (as designated by the U.S. Fish and Wildlife Service)

E = Endangered. A taxon that is threatened with extinction throughout all or a significant portion of its range.

C2 = Candidate 2. A taxon for which there is some evidence of vulnerability, but for which there are not enough data to support listing as endangered or threatened at this time.

B. North Carolina

1. Animals (according to the N.C. Wildlife Resources Commission: 15A NCAC 10I .0003-.0005)

E = Endangered.

2. Plants (according to the N.C. Natural Heritage Program and the N.C. Plant Conservation Program)

T = Threatened. Any resident (native to North Carolina) species of plant which is likely to become an endangered species within the foreseeable future throughout all or a significant part of its range, or one that is designated as threatened by the Federal Fish and Wildlife Service (Plant Protection and Conservation Act).

C = Candidate. Any species for which there is not evidence of declining numbers or threats to the species in North Carolina, but which, because of small numbers of populations, rare habitats, or distribution, may become threatened in the future; or a species suspected of being endangered or threatened, but for which sufficient information is not currently available to support such a status classification.

3C = Category 3. A previous Candidate no longer under consideration because: (1) there is persuasive evidence of extinction, (2) it is not considered a distinct taxon, or (3) it is more abundant than previously believed and/or not subject to any identifiable threat.

SR = Significantly Rare. Any other species which has not determined as an Endangered, Threatened, Special Concern or Candidate species, but which has been determined to need monitoring.

W1 = Watch Category 1. Includes species with inadequate information about their distribution and rarity in North Carolina. These are generally species which have not been previously listed as rare in North Carolina, but which appear to be so, based on herbarium records and field experience of Natural Heritage Program staff, contractees, and cooperating scientists. Further information is needed to determine the true status of these species in North Carolina.



APPENDIX B

**Memorandum of Understanding:
The State of North Carolina and
The Bald Head Island Conservancy, Inc.**

MEMORANDUM OF UNDERSTANDING

This memorandum serves as an expression of intent between the North Carolina Department of Environment and Natural Resources/Division of Coastal Management and the Bald Head Island Conservancy, Inc.

WITNESSETH

WHEREAS, The State of North Carolina has acquired approximately 173 acres of Bald Head Island maritime forest (Exhibit A), hereinafter known as "Bald Head Woods," that has been designated as a component of the North Carolina Coastal Reserve (the Reserve) and dedicated as a North Carolina State Nature Preserve, and

WHEREAS, the purpose of the Reserve program is to manage the component for research, education and compatible recreational uses, and

WHEREAS, the Bald Head Island Conservancy, Inc. (The Conservancy), a private non-profit organization, is involved with stewardship and educational activities concerning Bald Head Island, and

WHEREAS, a coordinated effort to manage Bald Head Woods will be to the mutual benefit of both parties.

NOW THEREFORE, in consideration of the mutual benefits to be derived, the signatories agree to the following:

1. The Reserve program protects designated coastal lands and waters for use as natural field laboratories and living classrooms in which to gather data and to educate the public concerning North Carolina coastal ecosystems.
2. The management plan for Bald Head Woods provides a framework for implementing research, education and stewardship at the site. The management plan has been developed by the Reserve staff and reviewed by all interested parties. The plan shall be reviewed and updated each year by the Bald Head Woods Local Advisory Committee.
3. The Reserve Coordinator shall have primary management responsibility for the property. As part of this responsibility, the Coordinator shall solicit assistance, as needed, from other parties including the Local Advisory Committee, public agencies and volunteers.
4. The Conservancy shall be represented on the Local Advisory Committee. Members of the Conservancy may assist with monitoring/protection of natural resources, implementation of educational programs, planning improvements (e.g., signs,

trails) and other aspects of site management.

5. This memorandum shall continue in effect in perpetuity unless either party wishes to amend or terminate the agreement.

Signed,

**NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES**

Date _____

Wayne McDevitt, Secretary

Date _____

**Donna Moffitt, Director, Division of
Coastal Management**

BALD HEAD ISLAND CONSERVANCY, INC.

Date _____

Dr. Thad Wester, President

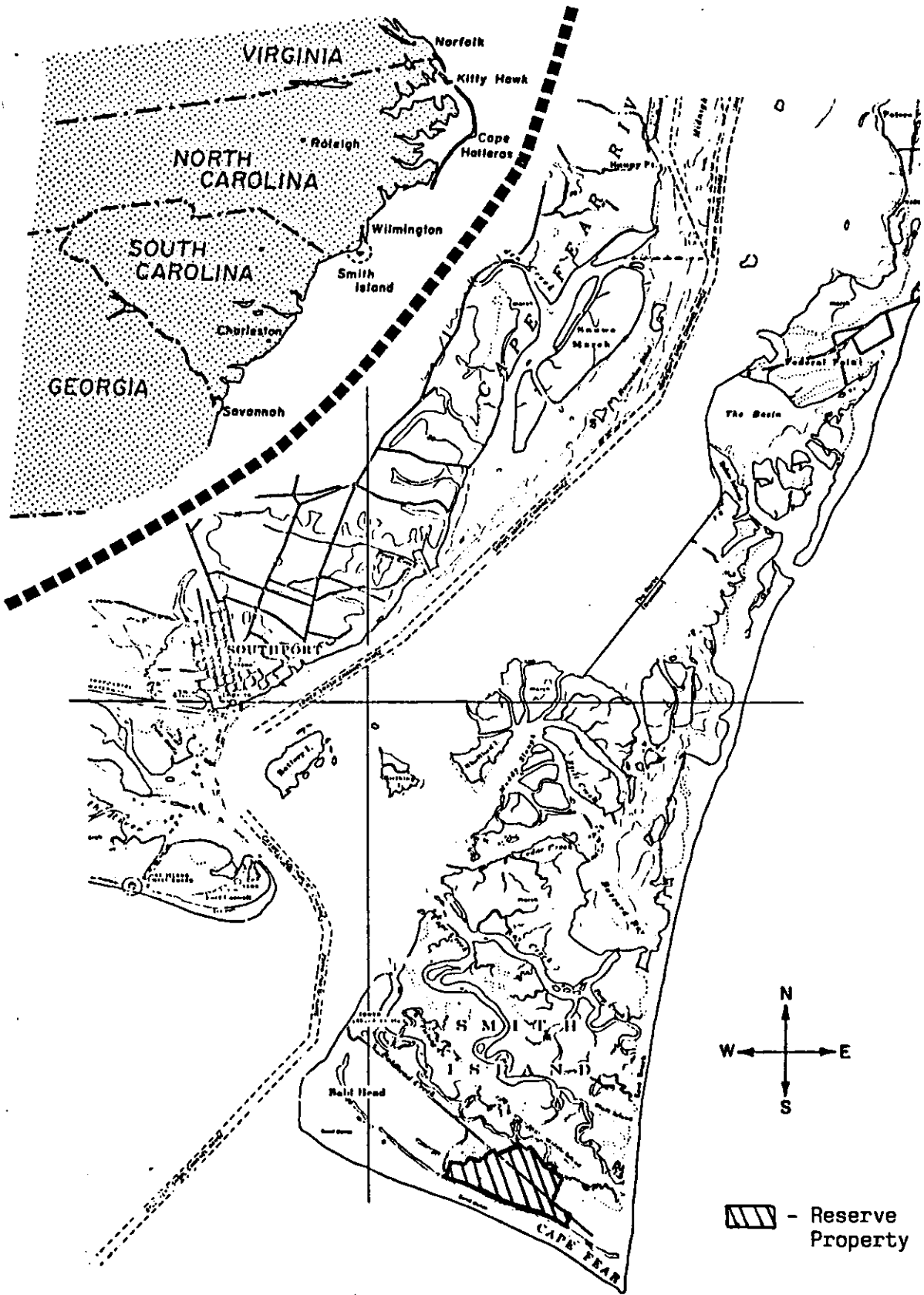


Exhibit A - Bald Head Woods Reserve Location

APPENDIX C

Coastal Reserve Regulations

SUBCHAPTER 70 - NORTH CAROLINA COASTAL RESERVE

SECTION .0100 - GENERAL PROVISIONS

.0101 STATEMENT OF PURPOSE

The principal purposes of the North Carolina Coastal Reserve and supporting programs are to:

- (1) preserve coastal ecosystems representative of the various biogeographic regions and typologies in North Carolina and to make them available for continuous future study of the processes, functions, and influences which shape and sustain the coastal ecosystems;
- (2) provide new information on coastal ecosystem processes to decisionmakers as a basis for the promotion of sound management of coastal resources;
- (3) provide a focal point for educational activities that increase the public awareness and understanding of coastal ecosystems, effects of man on them, and the importance of the coastal systems to the state and the Nation;
- (4) accommodate traditional recreational activities, commercial fishing, and other uses of the Reserve as long as they do not disturb the Reserve environment and are compatible with the research and educational activities taking place there.

*History Note: Statutory Authority G.S. 113-3; 113-8; 143B-10;
Eff. July 1, 1986;
Amended Eff. April 1, 1988.*

.0102 DEFINITIONS AS USED IN THIS SUBCHAPTER

Definitions as used in this Subchapter are:

- (1) "Coastal Reserve" means those coastal land and water areas set aside to be maintained in their natural state for research, education and compatible recreation and enjoyment of natural and scenic beauty.
- (2) "Estuary" means that part of a river or stream or body of water having unimpaired connection with the open sea, where sea water is measurably diluted with fresh water derived from land drainage.
- (3) "Research Reserve" means a group of areas or components, each of which may include all or the key land and water portion of an estuary and adjacent transitional areas and uplands, constituting to the extent feasible a natural unit, set aside as a natural field laboratory to provide long-term opportunities for research, education, and interpretation of the ecological relationships within the area. The Coastal Reserve includes the Estuarine Research Reserve.
- (4) "Reserve" means any area designated pursuant to this Subchapter.

*History Note: Statutory Authority G.S. 113-3; 113-8; 143B-10;
Eff. July 1, 1986;
Amended Eff. April 1, 1988.*

.0103 RESPONSIBILITIES: DUTIES OF THE COASTAL RESERVE PROGRAM

The Coastal Reserve Program of the Division of Coastal Management shall be responsible for managing and protecting the North Carolina Coastal Reserve; for promoting and coordinating research and educational programs at the components while allowing for compatible traditional uses; for maintaining a management plan for the Reserve; for maintaining cooperative agreements with scientific, educational, and resource management agencies and private citizens that will assist in the management of the Reserve; and for providing new information on coastal processes to coastal management decisionmakers.

*History Note: Statutory Authority G.S. 113-3; 113-8; 143B-10;
Eff. July 1, 1986;
Amended Eff. April 1, 1988.*

.0104 STATE AND LOCAL COASTAL RESERVE ADVISORY COMMITTEES

Advisory committees shall be established for each individual Reserve component. The committees shall advise the Reserve coordinator. Members of the committees shall include researchers, educators,

managers, and citizens that use or are affected by the Reserve. The committees shall be appointed by the Secretary of the Department of Natural Resources and Community Development.

*History Note: Statutory Authority G.S. 113-3; 113-8; 143B-10;
Eff. July 1, 1986;
Amended Eff. April 1, 1988.*

.0105 RESERVE COMPONENTS

The North Carolina Coastal Reserve includes the following components:

- (1) Zeke's Island
- (2) Rachel Carson
- (3) Currituck Banks
- (4) Masonboro Island
- (5) Permuda Island
- (6) Buxton Woods

The North Carolina National Estuarine Research Reserve includes components (1)-(4).

Detailed boundary maps for each component are maintained and available for inspection at the Division of Coastal Management, 512 North Salisbury Street, Raleigh, North Carolina.

*History Note: Statutory Authority G.S. 113-3; 113-8; 143B-10;
Eff. July 1, 1986;
Amended Eff. April 1, 1988.*

**SECTION .0200 - MANAGEMENT: USE AND PROTECTION OF THE
NORTH CAROLINA COASTAL RESERVE****.0201 MANAGEMENT PLAN**

The Division of Coastal Management shall prepare a management plan for the Reserve. The management plan shall contain specific policies for research, education, and traditional uses at each component. The Secretary of the Department of Natural Resources and Community Development shall approve the management plan and its revisions. The Division of Coastal Management shall monitor and manage the components and report to the secretary violations of the approved plan and any other situations that may be harmful to the natural resources of the Reserve.

*History Note: Statutory Authority G.S. 113-3; 113-8; 143-341; 143-342; 143B-10;
Eff. July 1, 1986;
Amended Eff. April 1, 1988.*

.0202 RESERVE USE REQUIREMENTS

The following use requirements shall apply to all of the components of the Reserve:

- (1) The essential natural character of the Reserve shall be maintained.
- (2) Traditional recreational uses within each component shall be allowed to continue as long as the activities do not disrupt the natural integrity of the Reserve or any research or educational projects. Incompatible traditional uses shall include:
 - (a) fishing, hunting, or trapping activities not allowed by state regulations;
 - (b) target shooting;
 - (c) hydraulic clam dredging within Reserve boundaries;
 - (d) use of vehicles off designated corridors at components where vehicles are allowed for upland transportation according to the management plan; and
 - (e) production of noise disruptive to local wildlife and the aesthetic enjoyment of the Reserve as a natural area.
- (3) No user shall disturb a research project or research equipment in place at the Reserve.
- (4) Camping or any form of habitation, whether on the uplands, wetlands, or waters within Reserve boundaries, shall not be allowed without the written permission of the Division of Coastal Management.
- (5) Personal property not authorized by the management agency may not be placed within the boundaries of the Reserve for more than two consecutive days.
- (6) Users of the Reserve shall not disturb or remove any live animals, except those allowed by state hunting and fishing regulations as they apply to the Reserve, or vegetation within the Reserve unless such action is part of a research or educational project approved by the management agency.
- (7) Persons wishing to engage in scientific research or collection of natural materials within the Reserve shall first secure written permission from the management agency.
- (8) No activity shall be allowed which might pollute any stream or body of water in the Reserve. Acts of pollution shall include:
 - (a) Deposition of solid materials not indigenous to the local coastal ecosystem; and
 - (b) Discharge of liquids other than uncontaminated estuarine water.
- (9) No other acts or uses which are detrimental to the maintenance of the property in its natural condition shall be allowed including, but not limited to, disturbances of the soil, mining, commercial or industrial uses, timber harvesting, ditching and draining, deposition of waste materials.

*History Note: Statutory Authority G.S. 143B-10;
Eff. July 1, 1986;
Amended Eff. April 1, 1988.*

APPENDIX D

Coastal Reserve Statutes

CASE NOTES

~~Trial Court without Jurisdiction. — The trial court was without jurisdiction in a declaratory judgment action to pass upon the question of whether subsection (d)(1) of this section authorized warrantless searches in violation of the Fourth Amendment where the plaintiffs~~

~~did not allege that they had been subject to actual searches or that they had been fined for refusing access to investigators. Adams v. North Carolina Dep't of Natural & Economic Resources, 295 N.C. 693, 249 S.E.2d 402 (1978).~~

~~§ 113A-127. Coordination with the federal government.~~

~~All State agencies shall keep informed of federal and interstate agency plans, activities, and procedures within their area of expertise that affect the coastal area. Where federal or interstate agency plans, activities or procedures conflict with State policies, all reasonable steps shall be taken by the State to preserve the integrity of its policies. (1973, c. 1284, s. 1; 1975, c. 452, s. 5; 1981, c. 932, s. 2.1.)~~

~~§ 113A-128. Protection of landowners rights.~~

~~Nothing in this Article authorizes any governmental agency to adopt a rule or issue any order that constitutes a taking of property in violation of the Constitution of this State or of the United States. (1973, c. 1284, s. 1; 1975, c. 452, s. 5; 1981, c. 932, s. 2.1; 1987, c. 827, s. 144.)~~

~~§ 113A-129. Reserved for future codification purposes.~~

Part 5. Coastal Reserves.

§ 113A-129.1. Legislative findings and purposes.

(a) Findings. — It is hereby determined and declared as a matter of legislative finding that the coastal area of North Carolina contains a number of important undeveloped natural areas. These areas are vital to continued fishery and wildlife protection, water quality maintenance and improvement, preservation of unique and important coastal natural areas, aesthetic enjoyment, and public trust rights such as hunting, fishing, navigation, and recreation. Such land and water areas are necessary for the preservation of estuarine areas of the State, constitute important research facilities, and provide public access to waters of the State.

(b) Purposes. — Important public purposes will be served by the preservation of certain of these areas in an undeveloped state. Such areas would thereafter be available for research, education, and other consistent public uses. These areas would also continue to contribute perpetually to the natural productivity and biological, economic, and aesthetic values of North Carolina's coastal area. (1989, c. 344, s. 1.)

Editor's Note. — Session Laws 1989, upon ratification. The act was ratified c. 344, s. 3, makes this Part effective June 19, 1989.

§ 113A-129.2. Coastal Reserve Program.

(a) There is hereby created a North Carolina Coastal Reserve System for the purpose of acquiring, improving, and maintaining undeveloped coastal land and water areas in a natural state.

(b) This system shall be established and administered by the Department of Environment, Health, and Natural Resources. In so doing the Department shall consult with and seek the ongoing advice of the Coastal Resources Commission. The Department may by rule define the areas to be included in this system and set standards for its use.

(c) This system shall be established within the coastal area as defined by G.S. 113A-103(2).

(d) All acquisitions or dispositions of property for lands within this system shall be in accordance with the provisions of Chapter 146 of the General Statutes.

(e) All lands and waters within the system shall be used primarily for research and education. Other public uses, such as hunting, fishing, navigation, and recreation, shall be allowed to the extent consistent with these primary uses. Improvements and alterations to the lands shall be limited to those consistent with these uses. (1989, c. 344, s. 1; c. 727, s. 218(58).)

Effect of Amendments. — The 1989 amendment, effective July 1, 1989, substituted "Environment, Health, and Natural Resources" for "Natural Resources" in subsection (b).
The 1989 amendment, effective July 1, 1989, substituted "Natural Resources and Community Development" for "Natural Resources and Community Development" in subsection (b).

§ 113A-129.3. Coordination.

(a) To the extent feasible, this system shall be carried out in coordination with the National Estuarine Reserve Research System established by 16 U.S.C. § 1461.

(b) To the extent feasible, lands and waters within this system shall be dedicated as components of the "State Nature and Historic Preserve" as provided in Article XIV, Section 5, of the Constitution and as nature reserves pursuant to G.S. 113A-164.1 to G.S. 113A-164.11. (1989, c. 344, s. 1; c. 770, s. 47.)

Effect of Amendments. — The 1989 amendment, effective August 12, 1989, substituted "G.S. 113A-164.11" for "G.S. 164.11" in subsection (b).

§§ 113A-130 to 113A-134: Reserved for future codification purposes.

APPENDIX E

Nature Preserve Dedication



North Carolina Department of Administration

James B. Hunt, Jr., Governor

Katie G. Dorsett, Secretary

November 9, 1994

Jonathan B. Howes, Secretary
Department of Environment, Health,
and Natural Resources
Post Office Box 27687
Raleigh, North Carolina 27611-7687

Re: Allocation of Property to the Department of Environment, Health, and Natural
Resources — Dedication of the Bald Head Island Coastal Reserve

Dear Secretary Howes:

Pursuant to Article 9A, Chapter 113A of the North Carolina General Statutes, and pursuant to the authority vested in me by the Administrative Procedures Code approved by the Governor and Council of State on January 28, 1976, all the State-owned lands within the area hereinafter designated are hereby allocated to the Department of Environment, Health, and Natural Resources:

The State-owned barrier island properties of Brunswick County, hereinafter collectively known as the Bald Head Island Coastal Reserve and currently consisting of 173 acres more or less (including any lands acquired as future additions to the reserve), more specifically described in Exhibit A.

THIS ALLOCATION IS MADE SUBJECT TO THE FOLLOWING TERMS AND CONDITIONS:

1. As used in the Letter of Allocation, the terms "natural area" and "nature preserve" shall have the same meaning as contained in North Carolina General Statutes 113A - 164.3(3) (4), respectively.
2. Pursuant to North Carolina General Statutes 113A - 164.8, all State-owned lands lying within the above-designated area are hereby dedicated as a nature preserve to be known as the Bald Head Island Coastal Reserve (hereinafter the "reserve" and "preserve") for the purposes provided in the Nature Preserves Act, as amended, and other applicable law, and said State-owned lands shall be held, maintained and used exclusively for said purpose.

116 West Jones Street • Raleigh, North Carolina 27603-8003 • Telephone 919-733-7232
State Courier 51-01-00

An Equal Opportunity / Affirmative Action Employer



3. Primary Custodian. The Primary Custodian of the preserve will be the North Carolina Department of Environment, Health, and Natural Resources, Division of Coastal Management, which will be responsible for managing the nature preserve in accordance with this letter of allocation (dedication) and the regulations set forth in 15A NCAC 12H .0301 - .0403.
4. Primary Classification. The primary classification and purpose of the preserve shall be to preserve the maritime forest community for research, education and other such compatible uses as are allowed by law and the terms of this allocation.
5. Rules for Management.

- A. Character of Visitor Activity. The principle visitor activities in the preserve shall be research, education, walking and observing. These activities shall be regulated to prevent disturbance of the preserve beyond that which it can tolerate without significant environmental degradation. Use of vehicles is allowed only along designated corridors. Camping will be allowed only with the written permission of the Department of Environment, Health, and Natural Resources.

Activities and uses which are unrelated to those mentioned above are prohibited except as provided for herein or unless necessary to carry out the purposes of the preserve. Prohibited activities include, but are not limited to, construction not related to the preserve, commercial activities and development, dumping or changes in topography except by existing conservation easements, the gathering of plant products except as provided for in approved research projects, and the removal, disturbance, molestation, or defacement of minerals, archaeological features and natural features.

No exotic flora or fauna shall be introduced into the preserve. Hunting dogs, pets on leashes and riding horses (on designated corridors only) will be allowed, but owners must keep the animals under control to protect the natural integrity of the preserve and other visitors.

There will be no fires, except as specifically permitted by the Department of Environment, Health, and Natural Resources and there shall be no littering.

- B. Hunting. Hunting shall be permitted on the preserve subject to regulation and management by the Wildlife Resources Commission, such regulation and

management to be consistent with protection of the natural diversity and primitive character of the preserve.

- C. Orientation and Guidance of Visitors. The Custodian may maintain parking and access areas including service roads for patrol, fire control, right-of-way maintenance and other management activities. Exhibits, programs and printed materials may be provided by the custodian in service areas. Guide service and labeled nature trails may be provided by the Custodian within the preserve.

- D. Water Level Control. The purpose of any water level control shall be to maintain the natural water regime of the preserve. Water levels which previously have been altered by man may be changed by the Custodian for the restoration of natural conditions.

- E. Water Wells. Bald Head Island Limited shall retain two areas within the preserve as potential sites for water wells:
 - 1. A strip of land 50 feet wide and approximately 3,590 feet long (4.15 acres); and,
 - 2. a portion of the right-of-way for Federal Road.

The exact locations of and use limitations on these tracts are stipulated in two conservation easements recorded on April 9, 1993, by the Brunswick County Register of Deeds in Book 924, Pages 1053 - 1075. Those specified conditions shall also be part of this dedication agreement.

- F. Disturbance of Natural Features. The cutting or removal of trees, dead or alive, or the disturbance of other natural features is prohibited, except that which is consistent with the Rules of Management of this dedication, or is required under the terms of certain right-of-way easements/permits between the State and public utility companies and other governmental agencies, or is necessary for public safety.

- G. Visitor Protection. Guardrails, fences, steps and bridges may be provided by the Custodian when essential to the safety of a reasonably alert and cautious visitor. The Custodian shall have the right to erect such structures as may be necessary to protect the preserve from unwanted or excessive visitor traffic.

- H. Control of Vegetational Succession. Control of vegetational succession may be undertaken if necessary to maintain or restore a particular ecosystem or the preservation of threatened, rare, endangered or unusual species.
 - I. Research and Collecting Permits. Any person wishing to engage in scientific research requiring collecting or otherwise affecting anything within the preserve shall first secure written permission from the Department of Environment, Health and Natural Resources.
 - J. Fences. Fences and barriers may be installed as necessary to further the purposes of the preserve.
 - K. Trails. The Custodian shall locate, build and maintain trails which shall be adequate to provide for permitted use of the preserve, but otherwise such activities shall be kept to a minimum.
 - L. Other Structures and Improvements. The Custodian shall have the right to erect structures or facilities within the preserve, insofar as the same are consistent with the purposes of the preserve as stated in this dedication.
 - M. Management Plan. The North Carolina Department of Environment, Health, and Natural Resources, as Primary Custodian for the preserve, shall be required to prepare and submit for approval to the Secretary of Environment, Health and Natural Resources a management plan for the preserve. This plan shall be subject to all the provisions of dedication and shall additionally be consistent with the management principles set forth in the North Carolina Administrative Code 15 NCAC 12H .0403, 15 NCAC 70 .0202 and other such regulations as may be established from time to time by the Secretary of Environment, Health, and Natural Resources. In any case where contradictions may arise between this instrument of dedication and other management regulations, the terms of this dedication shall take precedence.
6. Amendment and Modification. The terms and conditions of this dedication may be amended or modified upon approval of the Governor and Council of State. The lands dedicated to the Bald Head Island Coastal Reserve pursuant to this instrument may be removed from dedication upon the approval of the Governor and Council of State.
7. Permanent Plaque. The Custodian shall erect and maintain a permanent plaque, or other appropriate marker, at a prominent location within the preserve. The plaque shall bear the following statement: "This area is dedicated as a State Nature Preserve".

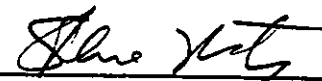
Secretary Jonathan B. Howes
Bald Head Island Coastal Reserve Memo
Page 5
November 9, 1994

The Governor and Council of State have approved the dedication of the State-owned land hereinabove described as the Bald Head Island Coastal Reserve to be held in trust by the Custodian for the purposes expressed in the Nature Preserves Act at a meeting held in the City of Raleigh, North Carolina on the 6th day of December, 1994.

This allocation is made at no cost or consideration of the Department of Environment, Health, and Natural Resources.


Best regards.

Sincerely,


for Katie G. Dorsett, Secretary
Department of Administration

KGD/PKM

CONSENTED AND AGREED TO:


Jonathan B. Howes, Secretary
Department of Environment, Health,
and Natural Resources

Date: 1/4/95

cc: Philip K. McKnelly, Director
Division of Parks and Recreation

- Roger Schecter, Director
Division of Coastal Resources

APPENDIX F

**Conservation Easements:
from Bald Head Island, Ltd. to the State of North Carolina**

30.00

924 1053

FILED FOR REGISTRATION
924 Wellfield
1053

REC CONSERVATION EASEMENT

This CONSERVATION EASEMENT made this 9th day of APRIL 12, 1993, 4:30

RECITALS:

ROBERT J. ROBINSON
REGISTER OF DEEDS
BRUNSWICK COUNTY, N.C.

- A. Bald Head Island, Ltd., a Texas limited partnership with an address of P.O. Box 3069, Bald Head Island, NC 28461 (the "Grantor") is the owner in fee simple of certain real property (the "Protected Property") that has ecological, scientific, educational and aesthetic value in its present state as a natural area that has not been subject to development or exploitation. The Protected Property is located in Brunswick County, North Carolina and is more particularly described in Exhibit A attached. The STATE OF NORTH CAROLINA (the "Grantee") is a sovereign state, qualified to receive qualified conservation contributions, and whose powers include, inter alia, preservation of natural areas for scientific, charitable, educational and aesthetic purposes. The address of the Grantee is: c/o N.C. Department of Administration, State Property Office, 116 West Jones Street, Raleigh, North Carolina 27611.
- B. The Protected Property is a significant natural area that qualifies as a "...relatively natural habitat of fish, wildlife, or plants, or similar ecosystem," as that phrase is used in P.L. 96-541, 26 USC 170(h)(4)(A)(ii), as amended, and in regulations promulgated thereunder; specifically the Protected Property is part of a larger maritime forest community. Preservation of the Protected Property furthers state and local governmental conservation policy and will yield a significant public benefit.
- C. The specific conservation values of the Property will be documented in an Easement Documentation Report, to be prepared by Grantee and signed and acknowledged by the Grantor, that establishes the baseline condition of the Protected Property at the time of this grant and includes reports, maps, photographs, and other documentation.
- D. The Grantor and Grantee have the common purpose of conserving the above-described conservation values of the Protected Property in perpetuity. The State of North Carolina has authorized the creation of Conservation Easements pursuant to North Carolina Statutes Section 121-34 et seq., and the parties wish to avail themselves of the provisions of that law.

NOW, THEREFORE, the Grantor, for and in consideration of the facts recited above and of the mutual covenants, terms, conditions and restrictions

000000

contained herein and as an absolute and unconditional gift, hereby gives, grants, bargains, sells and conveys unto the Grantee a Conservation Easement in perpetuity over the Protected Property of the nature and character as follows:

1. Purpose. The purpose of this Conservation Easement is to ensure that the Protected Property will be retained forever predominantly in its forested condition; to protect plant communities on the Protected Property; and to prevent any use of the Protected Property that will significantly impair or interfere with the conservation values or interests described above. The Grantor intends that this Conservation Easement will restrict the use of the Protected Property to only such activities as are consistent with the purpose of this Conservation Easement.

2. Grantor's Reserved Rights. The Grantor hereby reserves the following rights:

2.1 Wellfield. The right to install water wells on the Protected Property, to use such wells to provide water to residential and commercial users on Bald Head Island as part of the existing water system, and the right to repair, replace and maintain such wells. The Grantor's right to install, use, replace and maintain those wells shall be subject to the following conditions:

(i) the wells shall be used only if necessary, and only for the purpose of providing water for residential and commercial users on Bald Head Island;

(ii) all wells located in the Protected Property shall be the last to be brought "on line" as needed by the Grantor vis a vis other wells existing or planned on other parts of Bald Head Island as shown on OVERALL SITE PLAN, entitled Water Well Existing/Proposed, Phase One, Bald Head Island, NC, prepared by BHI Planning Dept., drawn by R.D.F. and bearing date of 2 Dec. 92 and generally the first to be retired from service if the need for well water decreases; provided, however, that in no event shall the Grantor develop wells in the Protected Property prior to December 31, 2002;

(iii) The Grantor agrees to fully cooperate with the Village of Bald Head in its efforts to obtain county water from the mainland if county water can be obtained at cost less than or equal to that of constructing

the terms of this Conservation Easement and written notice is provided to the Grantee in accordance with paragraph 17.5 below.

3. Prohibited Uses. Any activity on or use of the Protected Property inconsistent with the purpose of this Conservation Easement is prohibited. Without limiting the generality of the foregoing, the following activities and uses are expressly prohibited, except as necessary or appropriate in furtherance of the rights reserved by the Grantor in paragraph 2.1:

- 3.1 No Construction. There shall be no constructing or placing of any building, tennis or other recreational court, landing strip, mobile home, swimming pool, fence or sign (other than those required by the Grantee for appropriate management), asphalt or concrete pavement, billboard or other advertising display, antenna, utility pole, tower, conduit, line, sodium vapor light or any other temporary or permanent structure or facility on or above the Protected Property.
- 3.2 No Excavation. There shall be no ditching, draining, diking, filling, excavating, dredging, mining or drilling, removal of topsoil, sand, gravel, rock, minerals or other materials, nor any building of roads or change in the topography or surface hydrology of the Protected Property in any manner.
- 3.3 No Cutting. There shall be no removal, harvesting, destruction or cutting of trees, shrubs or plants, planting of trees, shrubs or plants, use of fertilizers, plowing, introduction of non-native animals, grazing of domestic animals, or disturbance or change in the natural habitat in any manner.
- 3.4 No Biocides. There shall be no use of pesticides or biocides, including but not limited to insecticides, fungicides, rodenticides, and herbicides.
- 3.5 No Dumping. There shall be no storage or dumping of ashes, trash, garbage, or other unsightly or offensive material, hazardous substance, or toxic waste, nor any placement of underground storage tanks in, on, or under the Protected Property; there shall be no changing of the topography through the placing of soil or other substance or material such as land fill or dredging spoils, nor shall activities be conducted on the Protected Property or on adjacent

the wells. If Bald Head Island is connected with county water supplies from the mainland, wells will not be constructed in the Protected Property and the Grantee shall have the right, but not the obligation, to purchase the fee for its then current fair market value within 6 months of notification by the Grantor;

(iv) if the wells are retired from service, the Grantor will cap each well, allow the Protected Property to return to natural conditions and the Grantee shall have the right, but not the obligation, to purchase the fee at its then current market value within 6 months of notification by the Grantor;

(v) all wells located in the Protected Property shall be located, constructed and operated in a manner that will protect the biological integrity of the forest;

(vi) within the Protected Property wells, access roads and other necessary facilities shall be located so as to minimize damage to plants or plant communities, with particular attention to the protection of large canopy trees. The location of such facilities shall be reviewed by the Grantee to determine that the location is the least damaging reasonable alternative;

(vii) all access roads in the Protected Property will be surfaced with permeable material such as shell, crushed rock or gravel, and vehicular access will be restricted to authorized persons by means of cable, chain, gate or similar device;

(viii) The Grantee, and its agents, shall have the right to enter the Protected Property from time to time for the purpose of installing water table monitoring wells and collecting data on a periodic basis; and

(ix) If the withdrawal of water from the Protected Property causes significant adverse impact to the natural area, or if the Grantee can reasonably demonstrate that significant adverse impacts will occur in the future if the use is continued, the Grantor shall take such corrective measures to mitigate future impacts to the resource as the Grantee may reasonably require, based upon then available biological and hydrologic information.

2.2 Transfer. The right to sell, give, mortgage, lease, or otherwise convey the Protected Property, provided such conveyance is subject to

property, if owned by the Grantor, that could cause erosion or siltation on the Protected Property.

- 3.6 No Pollution. There shall be no pollution, alteration, depletion or extraction of surface water, natural water courses, lakes, ponds, marshes, or any other surface water bodies, nor any pollution of subsurface water, nor shall activities be conducted on the Protected Property or on adjacent property, if owned by Grantor, that would be detrimental to water purity or that could alter the natural surface water flow in or over the Protected Property.
- 3.7 No Vehicles. There shall be no horseback riding, and no operation of mountain or other bicycles, dune buggies, motorcycles, all-terrain or off-road vehicles, hang gliders, aircraft, jet skis, motorized boats or any other types of mechanized vehicles.
- 3.8 No Subdivision. The Protected Property may not be divided, partitioned, or subdivided, nor conveyed except in its current configuration as an entity.
4. Grantee's Rights. To accomplish the purpose of this Conservation Easement, the following rights are conveyed to the Grantee by this Conservation Easement:
- 4.1 Right to Protect. The right to preserve and protect the conservation values of the Protected Property.
- 4.2 Right of Entry. The right to enter the Protected Property at all reasonable times and with prior notice and, if necessary, across other lands retained by the Grantor, for the purposes of: (a) inspecting the Protected Property to determine if the Grantor is complying with the covenants and purposes of this Conservation Easement; (b) enforcing the terms of this Conservation Easement; (c) taking any and all actions with respect to the Protected Property as may be necessary or appropriate, with or without order of court, to remedy or abate violations hereof; (d) making scientific and educational observations and studies and taking samples in such a manner as will not disturb the quiet enjoyment of the Protected Property by the Grantor; and (e) monitoring and management as described below.

- 4.3 Monitoring and Management. The right, but not the obligation, to monitor the condition of the rare plant and animal populations, plant communities, and natural habitats on the Protected Property, and to manage them, to the extent deemed appropriate by the Grantee, to ensure their continued presence and viability on the Protected Property. Such activities shall be in accordance with management practices of the Grantee, which may include but not be limited to, mowing, fencing, trapping, or prescribed burning.
- 4.4 Enforcement. The right to prevent any activity on or use of the Protected Property that is inconsistent with the purpose of this Conservation Easement and to require the restoration of such areas or features of the Protected Property that may be damaged by any inconsistent activity or use, pursuant to paragraph 11.
- 4.5 Discretionary Consent. The Grantee's consent for activities otherwise prohibited under paragraph 3 above, or for any activities requiring Grantee's consent under paragraph 2 above, may be given under the following conditions and circumstances. If, owing to unforeseen or changed circumstances, any of the activities listed in paragraph 3 are deemed desirable by both the Grantor and the Grantee, the Grantee may, in its sole discretion, give permission for such activities, subject to the limitations herein. Such requests for permission, and permission for activities requiring the Grantee's consent under paragraph 2, shall be in writing and shall describe the proposed activity in sufficient detail to allow the Grantee to judge the consistency of the proposed activity with the purpose of this Conservation Easement. The Grantee may give its permission only if it determines, in its sole discretion, that such activities (1) do not violate the purpose of this Conservation Easement and (2) either enhance or do not impair any significant conservation interests associated with the Protected Property. Notwithstanding the foregoing, the Grantee and Grantor have no right or power to agree to any activities that would result in the termination of this Conservation Easement or to allow any residential, commercial or industrial structures or any commercial or industrial activities not provided for above.

5. Surrounding Lands. The Grantee owns real property surrounding the Protected Property. The Grantee covenants with the Grantor and its successors and assigns that it shall forever refrain from any pollution-creating development on its lands located within 100 feet of any Wellfield of Grantor.

6. Access. Nothing contained in this Conservation Easement shall give or grant to the public a right to enter upon or to use the Protected Property or any portion thereof if no such right existed in the public immediately prior to the execution of this Conservation Easement.

7. Costs and Liabilities. The Grantor retains all responsibilities and shall bear all costs and liabilities of any kind related to the ownership, operation, upkeep and maintenance of the Protected Property, including the maintenance of adequate comprehensive general liability insurance coverage. The Grantor shall keep the Grantee's interest in the Protected Property free of any liens arising out of any work performed for, materials furnished to or obligations incurred by the Grantor.

To the extent, authorized by law, each party agrees to release, hold harmless, defend and indemnify the other from any and all liabilities including, but not limited to, injury, losses, damages, judgments, costs, expenses and fees that the indemnified party may suffer or incur as a result of or arising out of the activities of the indemnifying party on the Protected Property.

8. Taxes. The Grantor agrees to pay any real estate taxes or other assessments levied on the Protected Property. If the Grantor becomes delinquent in payment of taxes or assessments, so that a lien is created against the Protected Property, the Grantee, at its option, shall, after written notice to the Grantor, have the right to purchase and acquire the Grantor's interest in the Protected Property by paying funds to discharge the lien or delinquent taxes or assessments, or to take such other actions as may be necessary to protect the Grantee's interest in the Protected Property and to assure the continued enforceability of this Conservation Easement.

9. Title. The Grantor covenants and represents that the Grantor is the sole owner and is seized of the Protected Property in fee simple and has good right to grant and convey this Conservation Easement; that the Protected Property is free and clear of any and all encumbrances, including but not limited to, any mortgages not subordinated to this Conservation Easement, and

that the Grantee shall have the use of and enjoy all of the benefits derived from and arising out of this Conservation Easement.

10. Hazardous Waste. The Grantor covenants, represents and warrants to the Grantee that no hazardous substance or toxic waste exists nor has been generated, treated, stored, used, disposed of, or deposited in or on the Protected Property, and that there are not now any underground storage tanks located on the Protected Property.

11. Grantee's Remedies. If the Grantee becomes aware of a violation of the terms of this Conservation Easement, the Grantee shall give notice to the Grantor, at the Grantor's last known post office address, of such violation via certified mail, return receipt requested, and request corrective action sufficient to abate such violation and restore the Protected Property to its previous condition at the time of this grant. Grantor agrees that the Easement Documentation Report to be prepared by Grantee shall be deemed to provide objective information concerning the Protected Property's condition at the time of this grant. Failure by the Grantor to abate the violation and take such other corrective action as may be requested by the Grantee within thirty (30) days after receipt of such notice shall entitle the Grantee to bring an action at law or equity in a court of competent jurisdiction to enforce the terms of this Conservation Easement; to require the restoration of the property to its previous condition; to enjoin the non-compliance by ex parte temporary or permanent injunction in a court of competent jurisdiction; and/or to recover any damages arising from the noncompliance. Such damages, when recovered, may be applied by the Grantee, in its sole discretion, to corrective action on the Protected Property. If the court determines that the Grantor has failed to comply with this Conservation Easement, the Grantor shall reimburse the Grantee for any reasonable costs of enforcement, including costs of restoration, court costs and reasonable attorneys fees, in addition to any other payments ordered by such court.

11.1 Emergency Enforcement. If the Grantee, in its sole discretion, determines that circumstances require immediate action to prevent or mitigate significant damage to the conservation values of the Property, the Grantee may pursue its remedies under this paragraph without prior notice to the Grantor or without waiting for the period for cure to expire.

11.2 Failure to Act or Delay. The Grantee does not waive or forfeit the right to take action as may be necessary to insure compliance with this Conservation Easement by any prior failure to act and the Grantor hereby waives any defenses of waiver, estoppel or laches with respect to any failure to act or delay by the Grantee, its successors or assigns, in acting to enforce any restriction or exercise any rights under this Conservation Easement.

11.3 Violations Due to Causes Beyond Grantor's Control. Nothing herein shall be construed to entitle the Grantee to institute any enforcement proceedings against the Grantor for any changes to the Protected Property due to causes beyond the Grantor's control, such as changes caused by fire, flood, storm, earthquake or the unauthorized wrongful acts of third persons. In the event of violations of this Conservation Easement caused by the unauthorized wrongful acts of third persons, the Grantor agrees, upon request by the Grantee, to assign its right of action to the Grantee, to join in any suit, or to appoint the Grantee its attorney-in-fact for the purposes of pursuing enforcement action, all at the election of the Grantee.

12. Parties Subject to Easement. The covenants agreed to and the terms, conditions, and restrictions imposed by this grant shall not only be binding upon the Grantor but also its lessees, agents, personal representatives, successors and assigns, and all other successors to Grantor in interest and shall continue as a servitude running in perpetuity with the Protected Property.

13. Subsequent Transfers. The Grantor agrees that the terms, conditions, restrictions and purposes of this grant or reference thereto will be inserted by the Grantor in any subsequent deed or other legal instrument by which the Grantor divests either the fee simple title or possessory interest in the Protected Property; and the Grantor further agrees to notify the Grantee of any pending transfer at least thirty (30) days in advance.

14. Assignment. The parties hereto recognize and agree that the benefits of this easement are in gross and assignable, and the Grantee hereby covenants and agrees that if it transfers or assigns the easement it holds under this indenture, the organization receiving the interest will be a qualified

organization as that term is defined in Section 170(h)(3) of the Internal Revenue Code of 1986 (or any successor section) and the regulations promulgated thereunder, that is organized and operated primarily for one of the conservation purposes specified in Section 170(h)(4)(A) of the Internal Revenue Code, and the Grantee further covenants and agrees that the terms of the transfer or assignment will be such that the transferee or assignee will be required to continue to carry out in perpetuity the conservation purposes that the contribution was originally intended to advance.

15. Extinguishment. The Grantor hereby agrees that, at the time of the conveyance of this Conservation Easement to the Grantee, this Conservation Easement gives rise to a real property right, immediately vested in the Grantee, with a fair market value of the Conservation Easement as of the date of the conveyance that is at least equal to the proportionate value that this Conservation Easement at the time of the conveyance bears to the fair market value of the property as a whole at that time.

That proportionate value of the Grantee's property rights shall remain constant. When a change in conditions takes place which makes impossible or impractical any continued protection of the Protected Property for conservation purposes, and the restrictions contained herein are extinguished by judicial proceeding, the Grantee, upon a subsequent sale, exchange or involuntary conversion of the Protected Property, shall be entitled to a portion of the proceeds at least equal to that proportionate value of the Conservation Easement. The Grantee shall use its share of the proceeds in a manner consistent with the conservation purposes set forth herein or for the protection of a "relatively natural habitat of fish, wildlife, or plants or similar ecosystem," as that phrase is used in and defined under P.L. 96-541, 26 USC 170(h)(4)(A)(ii), as amended and in regulations promulgated thereunder.

16. Eminent Domain. Whenever all or part of the Protected Property is taken in exercise of eminent domain by public, corporate, or other authority so as to abrogate the restrictions imposed by this Conservation Easement, the Grantor and the Grantee shall join in appropriate actions at the time of the taking to recover the full value of the taking and all incidental or direct damages resulting from it, and the proceeds shall be divided in accordance with the proportionate value of the Grantee's and Grantor's interests, and Grantee's proceeds shall be used as specified above. All expenses incurred by

the Grantor and the Grantee in such action shall be paid out of the recovered proceeds.

17. Miscellaneous Provisions.

- 17.1 Severability. If any provision of this Conservation Easement or the application thereof to any person or circumstance is found to be invalid, the remainder of the provisions of this Conservation Easement and the application of such provisions to persons or circumstances other than those as to which it is found to be invalid shall not be affected thereby.
- 17.2 Successors and Assigns. The term "Grantor" shall include the Grantor and the Grantor's heirs, executors, administrators, successors and assigns and shall also mean the masculine, feminine, corporate, singular or plural form of the word as needed in the context of its use. The term "Grantee" shall include The Nature Conservancy and its successors and assigns.
- 17.3 Re-recording. The Grantee is authorized to record or file any notices or instruments appropriate to assuring the perpetual enforceability of this Conservation Easement; for such purpose, the Grantor appoints the Grantee its attorney-in-fact to execute, acknowledge and deliver any necessary instrument on its behalf. Without limiting the foregoing, the Grantor agrees to execute any such instruments upon request.
- 17.4 Captions. The captions herein have been inserted solely for convenience of reference and are not a part of this Conservation Easement and shall have no effect upon construction or interpretation.
- 17.5 Notices. Any notices required in this Conservation Easement shall be sent by registered or certified mail to the following address or such address as may be hereafter specified by notice in writing: Grantor: Bald Head Island, Ltd., P.O. Box 3069, Bald Head Island, NC 28461. Grantee: N.C. Department of Administration, State Property Office, 116 West Jones Street, Raleigh, NC 27611.

TO HAVE AND TO HOLD the said Conservation Easement unto the said Grantee forever.

IN WITNESS WHEREOF, the Grantor has executed and sealed this document the day and year first above written.

GRANTOR:

BALD HEAD ISLAND LTD., a Texas (SEAL) Limited Partnership

By: [Signature] (SEAL) Its: general partner

By: [Signature] (SEAL) Its: general partner

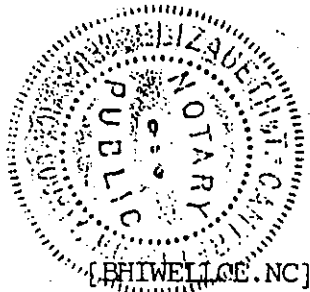
Witness:

[Signatures]

STATE OF North Carolina)
COUNTY OF Brunswick) SS:

On this 9th day of April, 1993, before me personally appeared Mark D. Mitchell + M. Kent Mitchell, to me personally known, who, being by me duly sworn did say that they are general partners of the limited partnership named in the foregoing instrument; that the seal affixed to said instrument is the seal of said limited partnership and acknowledged said instrument to be the free act and deed of said limited partnership.

[Signature]
Notary Public
My Commission Expires: December 11, 1996



STATE OF NORTH CAROLINA
COUNTY OF BRUNSWICK

The Foregoing (or annexed) Certificate(s) of Elizabeth T. Cantrell

Notary(ies) Public (is)(are) Certified to be Correct.
This Instrument was filed for Registration on the Day and Hour in the Book and Page shown on the First Page hereof.

[Signature]
ROBERT J. ROBINSON, Register of Deeds

EXHIBIT "A"
TO THAT CONSERVATION EASEMENT DATED APRIL 12, 1993
ENTITLED "WELLFIELD"

For a tie line to the BEGINNING POINT, begin at a point with North Carolina Grid Coordinates N=40,155.0893 and E=2,309,265.2042 (NAD 1927); runs thence north 75° 44' 51" west 544.68 feet to a point; thence south 31° 11' 21" west 452.05 feet to the point and place of BEGINNING; from the beginning point thus established runs thence south 53° 44' 59" east 844.24 feet; thence south 66° 15' 00" east 1,015.09 feet; thence south 66° 15' 00" east 275.56 feet; thence south 66° 15' 00" east 1,479.52 feet to a point; thence south 42° 27' 34" west 52.79 feet to a point; thence north 66° 15' 00" west 1,463.58 feet to a point; thence north 66° 15' 00" west 275.56 feet to a point; thence north 66° 15' 00" west 1,019.58 feet to a point; thence north 53° 44' 59" west 845.28 feet to a point; thence north 31° 11' 21" east 50.20 feet to the point and place of BEGINNING, and being a wellfield 50 feet wide, containing total acreage of 4.15 acres, and shown as that 50-foot wide wellfield lying between Tract 1 North, Tract 2 North and Donation Tract 2 North, and Tract 1 South, Tract 2 South and Donation Tract 2 South, as shown on that map entitled "Survey for the North Carolina Nature Conservancy" prepared by Tide Water Engineering & Surveying, P.A., dated November and December 1992, and recorded in Map Cabinet X, Instrument 230 of the Brunswick County Registry.

24.08
12 9 24 1966

INDEXED FOR REGISTRATION Federal Road
REF. 924 Utility Strip
4:30

CONSERVATION-EASEMENT
9 APR 12 PM 4:30

This CONSERVATION EASEMENT made this 9th day of April, 1993,

R E C I T A L
REGISTER OF DEEDS

A. Bald Head Island, Ltd., a Texas limited partnership, with an address of Bald Head Island, Ltd., P.O. Box 3069, Bald Head Island, North Carolina 28461 (the "Grantor") is the owner in fee simple of certain real property, (the "Protected Property") that has ecological value in its present state as a relatively natural area that has not been subject to development or exploitation. The Protected Property is located in Brunswick County, North Carolina and is more particularly described in Exhibit A attached. The STATE OF NORTH CAROLINA (the "Grantee") is a sovereign state, qualified to receive qualified conservation contributions, and whose powers include, inter alia, preservation of natural areas for scientific, charitable, educational and aesthetic purposes. The address of the Grantee is: c/o N.C. Department of Administration, State Property Office, 116 West Jones Street, Raleigh, North Carolina 27611.

B. Preservation of the Protected Property furthers state and local governmental conservation policy and will yield a significant public benefit.

C. The specific conservation values of the Property will be documented in an Easement Documentation Report, to be prepared by Grantee and signed and acknowledged by the Grantor, that establishes the baseline condition of the Protected Property at the time of this grant and includes reports, maps, photographs, and other documentation.

D. The Grantor and Grantee have the common purpose of conserving the conservation values of the Protected Property in perpetuity. The State of North Carolina has authorized the creation of Conservation Easements pursuant to North Carolina Statutes Section 121-34 et seq., and the parties wish to avail themselves of the provisions of that law.

NOW, THEREFORE, the Grantor, for and in consideration of the facts recited above and of the mutual covenants, terms, conditions and restrictions contained herein and as an absolute and unconditional gift, hereby gives, grants, bargains, sells and conveys unto the Grantee a Conservation Easement in perpetuity over the Protected Property of the nature and character as follows:

1. Purpose. The purpose of this Conservation Easement is to ensure that water wells located on the Protected Property will be installed, maintained and

operated in such a way as to protect and preserve the maritime forest ecosystem existing on the Grantee's land adjacent or near to the Protected Property.

2. Grantor's Reserved Rights. The Grantor hereby reserves the right to use the Protected Property for vehicular and pedestrian access, utility easements, wellfields and any other uses that Grantor deems appropriate and that are permitted by law; provided that all water wells located on the Protected Property shall be subject to the following restrictions:

- (i) the wells shall be used only if necessary, and only for the purpose of providing water for residential and commercial users on Bald Head Island;
- (ii) The Grantor agrees to fully cooperate with the Village of Bald Head in its efforts to obtain county water from the mainland if county water can be obtained at cost less than or equal to that of constructing the wells. If Bald Head Island is connected with county water supplies from the mainland, wells will not be constructed in the Protected Property;
- (iii) if the wells are retired from service, the Grantor will cap each well;
- (iv) all wells located in the Protected Property shall be located, constructed and operated in a manner that will protect the biological integrity of the maritime forest located on th Grantee's land;
- (v) The Grantee, and its agents, shall have the right to enter the Protected Property from time to time for the purpose of installing water table monitoring wells and collecting data on a periodic basis; and
- (vi) If the withdrawal of water from the Protected Property causes significant adverse impact to the maritime forest located on the Grantee's land, or if the Grantee can reasonably demonstrate that significant adverse impacts will occur in the future if the use is continued, the Grantor shall take such corrective measures to mitigate future impacts to the resource as the Grantee may reasonably require, based upon then available biological and hydrologic information.

3. Prohibited Uses. The following activities and uses are expressly prohibited:

- 3.1 No Dumping. There shall be no storage or dumping of ashes, trash, garbage, or other unsightly or offensive material, hazardous substance, or toxic waste, nor any placement of underground storage tanks in, on, or under the Protected Property;
- 3.2 No Pollution. There shall be no pollution, alteration, depletion or extraction of surface water, natural water courses, lakes, ponds,

marshes, or any other surface water bodies, nor any pollution of subsurface water, nor shall activities be conducted on the Protected Property or on adjacent property, if owned by Grantor, that would be detrimental to water purity.

4. Grantee's Rights. To accomplish the purpose of this Conservation Easement, the following rights are conveyed to the Grantee by this Conservation Easement:

- 4.1 Right to Protect. The right to preserve and protect the conservation values of the Protected Property.
- 4.2 Right of Entry. The right to enter the Protected Property at all reasonable times and with prior notice and, if necessary, across other lands retained by the Grantor, for the purposes of: (a) inspecting the Protected Property to determine if the Grantor is complying with the covenants and purposes of this Conservation Easement; (b) enforcing the terms of this Conservation Easement; (c) taking any and all actions with respect to the Protected Property as may be necessary or appropriate, with or without order of court, to remedy or abate violations hereof; (d) making scientific and educational observations and studies and taking samples in such a manner as will not disturb the quiet enjoyment of the Protected Property by the Grantor; and (e) monitoring and management as described below.
- 4.3 Enforcement. The right to prevent any activity on or use of the Protected Property that is inconsistent with the purpose of this Conservation Easement and to require the restoration of such areas or features of the Protected Property that may be damaged by any inconsistent activity or use, pursuant to paragraph 11.
- 4.4 Discretionary Consent. The Grantee's consent for activities otherwise prohibited under paragraph 3 above, or for any activities requiring Grantee's consent under paragraph 2 above, may be given under the following conditions and circumstances. If, owing to unforeseen or changed circumstances, any of the activities listed in paragraph 3 are deemed desirable by both the Grantor and the Grantee, the Grantee may, in its sole discretion, give permission for such activities, subject to the limitations herein. Such requests for permission, and permission for activities requiring the Grantee's

consent under paragraph 2, shall be in writing and shall describe the proposed activity in sufficient detail to allow the Grantee to judge the consistency of the proposed activity with the purpose of this Conservation Easement. The Grantee may give its permission only if it determines, in its sole discretion, that such activities (1) do not violate the purpose of this Conservation Easement and (2) either enhance or do not impair any significant conservation interests associated with the Protected Property. Notwithstanding the foregoing, the Grantee and Grantor have no right or power to agree to any activities that would result in the termination of this Conservation Easement or to allow any residential, commercial or industrial structures or any commercial or industrial activities not provided for above.

5. Surrounding Lands. The Grantee owns real property surrounding the Protected Property. The Grantee covenants with the Grantor and its successors and assigns that it shall forever refrain from any pollution-creating development on its lands located within 100 feet of any wellfield of Grantor.

6. Access. Nothing contained in this Conservation Easement shall give or grant to the public a right to enter upon or to use the Protected Property or any portion thereof if no such right existed in the public immediately prior to the execution of this Conservation Easement.

7. Costs and Liabilities. The Grantor retains all responsibilities and shall bear all costs and liabilities of any kind related to the ownership, operation, upkeep and maintenance of the Protected Property, including the maintenance of adequate comprehensive general liability insurance coverage. The Grantor shall keep the Grantee's interest in the Protected Property free of any liens arising out of any work performed for, materials furnished to or obligations incurred by the Grantor.

To the extent authorized by law, each party agrees to release, hold harmless, defend and indemnify the other from any and all liabilities including, but not limited to, injury, losses, damages, judgments, costs, expenses and fees that the indemnified party may suffer or incur as a result of or arising out of the activities of the indemnifying party on the Protected Property.

8. Taxes. The Grantor agrees to pay any real estate taxes or other assessments levied on the Protected Property. If the Grantor becomes delinquent in payment of taxes or assessments, so that a lien is created against the Protected Property, the Grantee, at its option, shall, after written

notice to the Grantor, have the right to purchase and acquire the Grantor's interest in the Protected Property by paying funds to discharge the lien or delinquent taxes or assessments, or to take such other actions as may be necessary to protect the Grantee's interest in the Protected Property and to assure the continued enforceability of this Conservation Easement.

9. Title. The Grantor covenants and represents that the Grantor is the sole owner and is seized of the Protected Property in fee simple and has good right to grant and convey this Conservation Easement; that the Protected Property is free and clear of any and all encumbrances, including but not limited to, any mortgages not subordinated to this Conservation Easement, and that the Grantee shall have the use of and enjoy all of the benefits derived from and arising out of this Conservation Easement.

10. Hazardous Waste. The Grantor covenants, represents and warrants to the Grantee that no hazardous substance or toxic waste exists nor has been generated, treated, stored, used, disposed of, or deposited in or on the Protected Property, and that there are not now any underground storage tanks located on the Protected Property.

11. Grantee's Remedies. If the Grantee becomes aware of a violation of the terms of this Conservation Easement, the Grantee shall give notice to the Grantor, at the Grantor's last known post office address, of such violation via certified mail, return receipt requested, and request corrective action sufficient to abate such violation and restore the Protected Property to its previous condition at the time of this grant. Grantor agrees that the Easement Documentation Report to be prepared by Grantee shall be deemed to provide objective information concerning the Protected Property's condition at the time of this grant. Failure by the Grantor to abate the violation and take such other corrective action as may be requested by the Grantee within thirty (30) days after receipt of such notice shall entitle the Grantee to bring an action at law or equity in a court of competent jurisdiction to enforce the terms of this Conservation Easement; to require the restoration of the property to its previous condition; to enjoin the non-compliance by ex parte temporary or permanent injunction in a court of competent jurisdiction; and/or to recover any damages arising from the noncompliance. Such damages, when recovered, may be applied by the Grantee, in its sole discretion, to corrective action on the Protected Property. If the court determines that the Grantor has failed to comply with this Conservation Easement, the Grantor shall reimburse the Grantee for any reasonable

costs of enforcement, including costs of restoration, court costs and reasonable attorneys fees, in addition to any other payments ordered by such court.

11.1 Emergency Enforcement. If the Grantee, in its sole discretion, determines that circumstances require immediate action to prevent or mitigate significant damage to the conservation values of the Property, the Grantee may pursue its remedies under this paragraph without prior notice to the Grantor or without waiting for the period for cure to expire.

11.2 Failure to Act or Delay. The Grantee does not waive or forfeit the right to take action as may be necessary to insure compliance with this Conservation Easement by any prior failure to act and the Grantor hereby waives any defenses of waiver, estoppel or laches with respect to any failure to act or delay by the Grantee, its successors or assigns, in acting to enforce any restriction or exercise any rights under this Conservation Easement.

11.3 Violations Due to Causes Beyond Grantor's Control. Nothing herein shall be construed to entitle the Grantee to institute any enforcement proceedings against the Grantor for any changes to the Protected Property due to causes beyond the Grantor's control, such as changes caused by fire, flood, storm, earthquake or the unauthorized wrongful acts of third persons. In the event of violations of this Conservation Easement caused by the unauthorized wrongful acts of third persons, the Grantor agrees, upon request by the Grantee, to assign its right of action to the Grantee, to join in any suit, or to appoint the Grantee its attorney-in-fact for the purposes of pursuing enforcement action, all at the election of the Grantee.

12. Parties Subject to Easement. The covenants agreed to and the terms, conditions, and restrictions imposed by this grant shall not only be binding upon the Grantor but also its lessees, agents, personal representatives, successors and assigns, and all other successors to Grantor in interest and shall continue as a servitude running in perpetuity with the Protected Property.

13. Subsequent Transfers. The Grantor agrees that the terms, conditions, restrictions and purposes of this grant or reference thereto will be inserted by the Grantor in any subsequent deed or other legal instrument by which the Grantor divests either the fee simple title or possessory interest in the Protected

Property; and the Grantor further agrees to notify the Grantee of any pending transfer at least thirty (30) days in advance.

14. Assignment. The parties hereto recognize and agree that the benefits of this easement are in gross and assignable, and the Grantee hereby covenants and agrees that if it transfers or assigns the easement it holds under this indenture, the organization receiving the interest will be a qualified organization as that term is defined in Section 170(h) (3) of the Internal Revenue Code of 1986 (or any successor section) and the regulations promulgated thereunder, that is organized and operated primarily for one of the conservation purposes specified in Section 170(h) (4) (A) of the Internal Revenue Code, and the Grantee further covenants and agrees that the terms of the transfer or assignment will be such that the transferee or assignee will be required to continue to carry out in perpetuity the conservation purposes that the contribution was originally intended to advance.

15. Extinguishment. The Grantor hereby agrees that, at the time of the conveyance of this Conservation Easement to the Grantee, this Conservation Easement gives rise to a real property right, immediately vested in the Grantee, with a fair market value of the Conservation Easement as of the date of the conveyance that is at least equal to the proportionate value that this Conservation Easement at the time of the conveyance bears to the fair market value of the property as a whole at that time.

That proportionate value of the Grantee's property rights shall remain constant. When a change in conditions takes place which makes impossible or impractical any continued protection of the Protected Property for conservation purposes, and the restrictions contained herein are extinguished by judicial proceeding, the Grantee, upon a subsequent sale, exchange or involuntary conversion of the Protected Property, shall be entitled to a portion of the proceeds at least equal to that proportionate value of the Conservation Easement. The Grantee shall use its share of the proceeds in a manner consistent with the conservation purposes set forth herein or for the protection of a "relatively natural habitat of fish, wildlife, or plants or similar ecosystem," as that phrase is used in and defined under P.L. 96-541, 26 USC 170(h) (4) (A) (ii), as amended and in regulations promulgated thereunder.

16. Eminent Domain. Whenever all or part of the Protected Property is taken in exercise of eminent domain by public, corporate, or other authority so as to abrogate the restrictions imposed by this Conservation Easement, the Grantor and the Grantee shall join in appropriate actions at the time of the taking to

recover the full value of the taking and all incidental or direct damages resulting from it, and the proceeds shall be divided in accordance with the proportionate value of the Grantee's and Grantor's interests, and Grantee's proceeds shall be used as specified above. All expenses incurred by the Grantor and the Grantee in such action shall be paid out of the recovered proceeds.

17. Miscellaneous Provisions.

- 17.1 Severability. If any provision of this Conservation Easement or the application thereof to any person or circumstance is found to be invalid, the remainder of the provisions of this Conservation Easement and the application of such provisions to persons or circumstances other than those as to which it is found to be invalid shall not be affected thereby.
- 17.2 Successors and Assigns. The term "Grantor" shall include the Grantor and the Grantor's heirs, executors, administrators, successors and assigns and shall also mean the masculine, feminine, corporate, singular or plural form of the word as needed in the context of its use. The term "Grantee" shall include The Nature Conservancy and its successors and assigns.
- 17.3 Re-recording. The Grantee is authorized to record or file any notices or instruments appropriate to assuring the perpetual enforceability of this Conservation Easement; for such purpose, the Grantor appoints the Grantee its attorney-in-fact to execute, acknowledge and deliver any necessary instrument on its behalf. Without limiting the foregoing, the Grantor agrees to execute any such instruments upon request.
- 17.4 Captions. The captions herein have been inserted solely for convenience of reference and are not a part of this Conservation Easement and shall have no effect upon construction or interpretation.
- 17.5 Notices. Any notices required in this Conservation Easement shall be sent by registered or certified mail to the following address or such address as may be hereafter specified by notice in writing: Grantor: Bald Head Island, Ltd., P.O. Box 3069, Bald Head Island, NC 28461. Grantee: N.C. Department of Administration, State Property Office, 116 West Jones Street, Raleigh, NC 27611.

TO HAVE AND TO HOLD the said Conservation Easement unto the said Grantee forever.

IN WITNESS WHEREOF, the Grantor has executed and sealed this document the day and year first above written.

Witness:

Mack D. Mitchell
M. Kent Mitchell
Jandra L. Warky

GRANTOR:

BALD HEAD ISLAND LTD., a Texas (SEAL)
Limited Partnership

By: *M. Kent Mitchell* (SEAL)
Its: *General Partner*

By: *M. D. Mitchell* (SEAL)
Its: *General Partner*

STATE OF North Carolina)
COUNTY OF Brunswick) SS:

On this 9th day of April, 1993, before me personally appeared Mack D. Mitchell & M. Kent Mitchell to me personally known, who, being by me duly sworn did say that they are general partners of the limited partnership named in the foregoing instrument; that the seal affixed to said instrument is the seal of said limited partnership and acknowledged said instrument to be the free act and deed of said limited partnership.



Elizabeth T. Cantrell
Notary Public
My Commission Expires: December 11, 1996

STATE OF NORTH CAROLINA
COUNTY OF BRUNSWICK

The Foregoing (or annexed) Certificate(s) of Elizabeth T. Cantrell

Notary(ies) Public (is)(are) Certified to be Correct.
This Instrument was filed for Registration on the Day and Hour in the Book and Page shown on the First Page hereof.

Robert J. Robinson
ROBERT J. ROBINSON, Register of Deeds

EXHIBIT "A"
TO THAT CONSERVATION EASEMENT DATED APRIL 12, 1993
ENTITLED "FEDERAL ROAD UTILITY STRIP"

BEGINNING at a point having North Carolina Grid Coordinates N=38,558.7257 and E=2,311,958.6427 (NAD 1927); from the beginning point runs thence north 48° 17' 50" west 1,908.85 feet; thence south 41° 42' 10" west to the northern right-of-way line of Old Federal Road, having a 60-foot right-of-way and shown on that map recorded in Map Cabinet X, Instrument 198-200 in the office of the Register of Deeds for Brunswick County; thence south 48° 17' 50" east with the northern right-of-way line of said Federal Road 1,908.85 feet; thence in a direct line to the point and place of BEGINNING, said real estate being shown as 40-foot wide ingress, egress and regress easement lying immediately south of that 32.9899-acre tract designated as "Tract 3" on that map entitled "Survey for the North Carolina Nature Conservancy" prepared by Tide Water Engineering & Surveying, P.A., dated November and December 1992, and recorded in Map Cabinet X, Instrument 230 of the Brunswick County Registry.

