

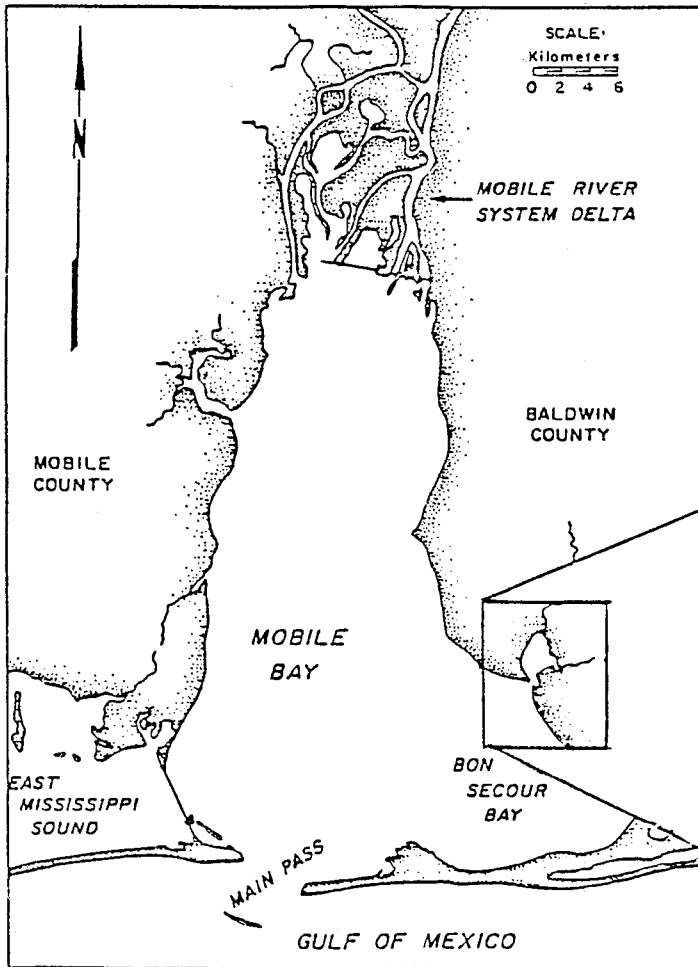
The Pelican Post

WEEKS BAY
NATIONAL ESTUARINE RESERVE NEWSLETTER

September 1986

Welcome to the first issue of the official newsletter of the Weeks Bay National Estuarine Reserve. Articles of interest to bay watchers, wetland watchers, and to others interested in the coast and in nature will be featured.

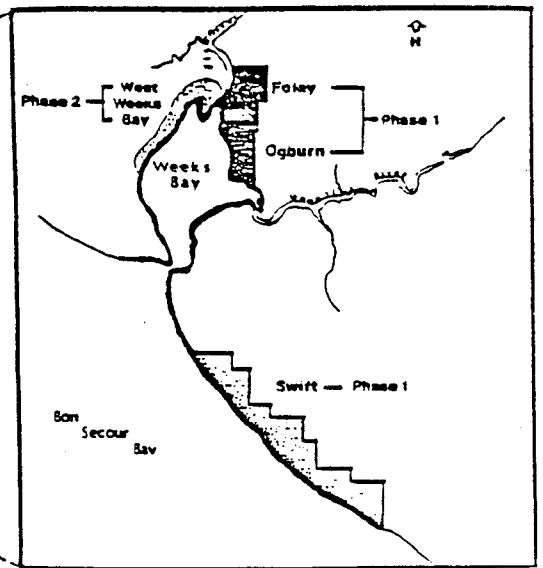
WEEKS BAY BECOMES NATIONAL ESTUARINE RESERVE



The 2,668 acres of land and water are the nation's 16th and newest National Estuarine Reserve. Each reserve represents a unique geographical and biological province and preserves these areas as natural laboratories and classrooms.

Establishment of a National Estuarine Reserve ensures that both scientific researchers and the general public can learn about coastal and estuarine ecology in a natural setting. These sites also protect vital habitats for wetland dependent life, including many endangered species.

Alabama residents are fortunate to have access to this unique natural laboratory and classroom. The preservation of this area for the future was the result of years of effort, energy, and dedication by a large number of groups and agencies. The Nature Conservancy (TNC) had been acquiring property and working closely with the state in developing a plan to have Weeks Bay designated as a National Estuarine Reserve.



Formal designation ceremonies for Weeks Bay National Estuarine Sanctuary were held February 25, 1986 at Beckwith Lodge. Amendments to Section 315 of the Coastal Zone Management Act included a name change for the National Estuarine Sanctuaries. Effective April 7, 1986 we are now the Weeks Bay National Estuarine Reserve.

Many other groups participated in the process leading to designation including: Alabama Department of Conservation and Natural Resources (ADCNR), Faulkner State Junior College, Tonsmeire Construction Corp., Marine Environmental Sciences Consortium, Mississippi-Alabama Sea Grant Consortium, Baldwin County Board of Education,

Baldwin County Commission, Alabama Department of Environmental Management (ADEM), University of South Alabama, Town of Gulf Shores, White Knight Seafood, and the Alabama Department of Economic and Community Affairs (ADECA).

These groups all participated as members of an interim committee and were actively involved in all the many tasks that had to be completed before a formal designation could be made. Land had to be obtained, an environmental impact statement developed, a management plan approved, research/education requirements determined, and public hearings had to be held before designation could occur.

As shown on the map, land acquisition will consist of two phases. The first phase involved the acquisition of two tracts of land on the northeast portion of Weeks Bay and one tract on Bon Secour Bay by TNC. Prior to the initiation of the state's effort, TNC acquired purchase options on the Ogburn (157 acres), Foley (178 acres), and Swift (615 acres) Tracts near or adjacent to Weeks Bay. TNC in turn offered to sell this property to the state at cost.

Since Alabama claims title to all tidal land up to the mean high tide line, all of Weeks Bay's subaqueous bottoms and intertidal fringe were already under state jurisdiction and, consequently, included within reserve boundaries. Also included within the reserve was a public boat ramp and small parking area located on the south end of the bay which is maintained by ADCNR. This added an additional 1718 acres. As a result, the initial boundary was fixed as an area comprising 2,668 acres of land and water in and around Weeks Bay.

In 1985, the state secured a \$510,000 grant from the U. S. Department of Commerce's National Oceanic and Atmospheric Administration (NOAA), which had to be matched by the state in an equal amount. However, since these funds were not available at the state level, TNC donated the Swift Tract to the state (value \$600,000) and sold the Ogburn and Foley Tracts (value \$500,000) to the state concluding the first acquisition phase.

The second phase will involve the transfer of a 359-acre tract on the west side of Weeks Bay. It is owned by TNC and will be sold to the state at cost. It is anticipated that additional tracts will be added to the reserve in the future.

ADCNR will manage the Reserve with Marine Resources Director Hugh Swingle serving as Reserve Manager. Walter Tatum of the Marine Resources Division and Bill Tucker of the Game and Fish Division have been, and will continue to be, key figures in the management of the Reserve. Sherman Shores of ADECA will serve as Project Coordinator.

Future plans for the Reserve call for the construction of an estuarine science educational/research center managed by Faulkner State Junior College. Plans include laboratories, classrooms, a seminar room, offices, and a small dormitory. The following organizations will use the facility and play key roles in education and research at Weeks Bay: Faulkner State Junior College, Baldwin County Board of Education, University of South Alabama, Alabama Sea Grant Extension, and ADCNR.



WHAT ARE ESTUARIES?

Estuaries occur when rivers or streams meet the sea and the freshwater and saltwater mix. Alabama's estuaries were formed when river valleys which were carved by coastal rivers, flooded as the sea level rose. These resulting shallow water areas are semi-enclosed and have free connections with the open sea.

Estuaries tend to be more productive than either the sea or freshwater. Ideal conditions for plant growth exist because of the nutrients carried in by river flow and the fact that sunlight can penetrate the water. Many types of plants can be found in estuaries including trees, cord grasses, sedges and rushes, and aquatic plants in submerged grassbeds. Other microscopic forms include mud algae found along the banks of tidal creeks and floating algae known as plankton. These plants die, decay, and break down into tiny particles of material called detritus which is used as food by many animals living in the estuaries.

Estuaries are used as nursery grounds and spawning areas by many fish and animal species. The estuaries also provide protection and abundant food for many juvenile fish. Ninety percent (by weight) of the fish and shellfish including shrimp, crabs, and oysters caught by commercial fishermen use estuaries such as Weeks Bay for spawning, nursery, or feeding grounds.

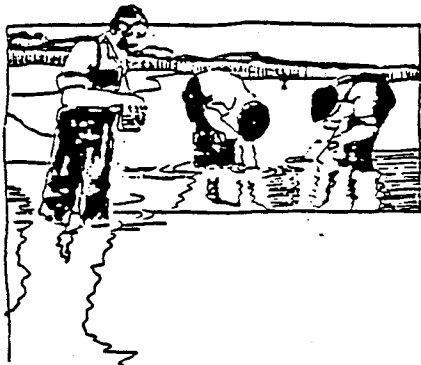
Almost a third of U.S. marine sport fishing (19.5 million fishing trips in 1979) was in waters of the Gulf of Mexico. Some of the major catch favorites included the spotted seatrout, red drum, and flounder which are all estuarine dependent during some phase of their life.



Estuaries also play an important role in human activities including residential and commercial development. As more people are attracted to the water's edge, swamps, marshes, and mud flats often give way to condominiums, marinas, beach houses, and warehouses. The Gulf coast's growing population has increased the demand for land and wetlands in or adjacent to estuaries.



The marsh areas bordering the estuary absorb and filter out many pollutants entering the water. They absorb both outgoing wastes that would pollute the bays and capture incoming pollutants as well. However, salt marshes can process and filter only limited amounts of water. Pollution can overload a wetland's filtering capability and reduce water quality, killing plants, contaminating fish and shellfish, and limiting wildlife abundance. Careful planning is required if estuaries are to meet the many demands placed upon them.



STUDIES BEGIN AT WEEKS BAY

Research at Weeks Bay National Estuarine Reserve has already begun. The National Oceanic and Atmospheric Administration (NOAA) has awarded approximately \$40,000 to Marine Environmental Sciences Consortium (MESC) researchers for studies.

Dr. Ken Marion, of the University of Alabama in Birmingham, and John Dindo (MESC), \$9,682 to study the use of indicator species as a means of assessing the environmental condition of the Reserve.

Dr. Tom Hopkins, (MESC), \$9,926 to study the hydrology of baseline nutrient levels (carbon, nitrogen, phosphorus) and primary production.

Dr. Will Schroeder, (MESC), \$9,995 to determine the hydrographic, water level elevation, the circulation, and the bottom sediment characteristics of Weeks Bay.

Dr. Judy Stout, (MESC), \$9,389 to determine the delineation of emergent habitats of the estuary.



ADVISORY COMMITTEE APPOINTED

The Weeks Bay National Estuarine Reserve Advisory Committee was recently appointed by Governor George C. Wallace to provide assistance and guidance to the Reserve manager. Committee members are:

- Dr. John Borom, The Nature Conservancy
- Dr. Gary L. Branch, Faulkner State Junior College
- Mr. Ned Butler, Alabama Department of Economic and Community Affairs
- Ms. Nora J. Grayson, private citizen
- The Honorable Perry Hand, State Senator, Dist. 32
- Mr. Robert Hodge, Fowl River Protective Assoc.
- Dr. James I. Jones, Mississippi/Alabama Sea Grant Consortium
- Ms. Myrt Jones, Mobile Bay Audubon Society
- Ms. Jewel Lawson, educator and private citizen
- Mr. George R. Merlini, Baldwin County Board of Education
- Dr. Phillip E. Norris, University of South Alabama, Baldwin County Branch Campus
- The Honorable Walter Penry, Jr., State Representative, District 94
- Dr. William Schroeder, Marine Environmental Sciences Consortium
- Ms. Hattie Smith, South Baldwin Chamber of Commerce
- Ms. Alice Snowden, private citizen
- Mr. Walter Tatum, Marine Resources Division, Alabama Department of Conservation and Natural Resources
- Mr. William H. Tucker, Game and Fish Division, Alabama Department of Conservation and Natural Resources
- Ms. Mae Jane Weeden, private citizen
- Mr. John Williford, Alabama Department of Environmental Management

Funds for the publication of this newsletter provided by the Alabama Department of Conservation and Natural Resources, Charles D. Kelley, Commissioner.

Published by the Alabama Sea Grant Extension Program in cooperation with Faulkner State Junior College.

Editors

John Borom and Bill Hosking

Suggestions and comments from readers on future topics of interest are welcomed by the editors. If you know of others who would be interested in receiving this newsletter, please have them send requests to be included on the mailing list to the return address shown on the panel below.

MASGP-86-025-1

This work is a result of research sponsored by NOAA Office of Sea Grant, Dept. of Commerce, under Grant No. NA85AA-D-SG005. Issued in furtherance of Cooperative Extension work in agriculture and home economics, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. The Alabama Cooperative Extension Service, Auburn University, Ann E. Thompson, Director, offers educational programs and materials to all people without regard to race, color, national origin, sex, age, or handicap and is an equal opportunity employer.

Weeks Bay National Estuarine Reserve
Alabama Department of Conservation
and Natural Resources
P. O. Drawer 458
Gulf Shores, Alabama 36542

| |
|-------------------|
| Bulk Rate |
| Non-Profit |
| U.S. Postage Paid |
| Permit No. 66 |
| Bay Minette, AL |

