



# The Pelican Post

Weeks Bay Reserve Foundation  
Newsletter  
May 1995

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

## Birding Class to be Offered

A Birding Class will be offered at the Weeks Bay National Reserve on May 4-5, 1995. Instructor John Winn will teach how to identify some of Alabama's coastal and migratory birds, to recognize habitat types, and to attract birds to your backyard. This course will begin on Thursday, May 4th with a classroom session from 7:00 p.m. until 9:00 p.m. The field session is the following day from 9:00 a.m. until 3:00 p.m. The cost of the class is \$10.00. Please call the Interpretive Center (334-928-9792) to reserve a space as enrollment is limited. *"The woods would be very silent if no birds sang there except those who sang best."* Audubon

## Elderhostels Enjoy Weeks Bay Environmental Education Program

Learning about the functions and importance of wetlands, habitats, and estuaries at the Weeks Bay Reserve was the major educational portion of three Elderhostel programs at the Weeks Bay Reserve, which was hosted by the University of South Alabama. Participants lodged at the Beckwith Camp and Conference Center on the western shore of Weeks Bay twice in March and once in April. The participants from all over the United States were treated to the environmental wonders of coastal Alabama, and heard from the Weeks Bay staff about the importance of wetlands and the preservation of our coastal habitats. The finale included a scenic and instructive voyage on the Reserve's 32-foot pontoon boat up the Magnolia River and around Weeks Bay.

## Water Quality Monitoring and Research Workshop

Apalachicola National Estuarine Research Reserve in Florida hosted a Planning, Research, and Water Quality Monitoring Workshop on April 9-12, 1995. Bob McCormack attended the specialized training for the new YSI 6000 Multiparameter Datalogger, which most of the 22 national reserves recently purchased. Dataloggers will be deployed at strategic sites within the Weeks Bay watershed to monitor several parameters, including salinity, dissolved oxygen, and turbidity. The Reserve System's national goals and plans and objectives for future research and monitoring were discussed.

## New Project Coordinator

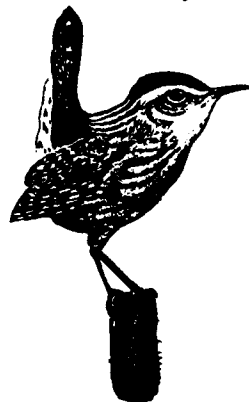
Tina Lynn of Mobile, AL has been hired as the Project Coordinator for the Weeks Bay Watershed Project. Ms. Lynn received her Bachelor of Arts Degree from Washington and Jefferson College in Pennsylvania and completed her M. S. Degree in Forestry from the University of Maine. Her thesis research was entitled: "Using Satellite Imagery to Examine Community Diversity on the Islands of Penobscot Bay, Maine". This experience in remote sensing and Geographical Information Systems (GIS) will be valuable in establishing the GIS soon to be housed at Weeks Bay Interpretive Center. Ms. Lynn will be working to raise public awareness of water quality in the Weeks Bay Watershed and to support water quality research at WBNERR.

Prior to coming to Weeks Bay, Ms. Lynn was employed as a consultant for Volkert Environmental Group, Inc. in Mobile. Her work in wetland delineation, stormwater permitting, and environmental impact studies frequently brought her to Baldwin County. Prior to pursuing her Master's Degree, Ms. Lynn was employed as an environmental educator with Nature's Classroom and Holden Arboretum in Mentor, Ohio.

## Gulf of Mexico Symposium

The Third Biennial Gulf of Mexico Symposium was held March 29 - April 1 in Corpus Christi, Texas. The symposium, focusing on environmental issues and the future of the Gulf and its five coastal states, was attended by approximately 3,000 educators, scientists, businessmen, politicians, environmental specialists, and high school students from the United States and Mexico. Session topics included teacher education, environmental awareness, marine debris, agriculture and the environment, toxics and pesticides, habitat degradation, environmental outreach programs, aquatic resources, wetland diversity, and public health.

The Weeks Bay Reserve was represented by Bob McCormack. *"There was a great amount of sharing information and experiences"*, said McCormack, *"and important discussions of what works or doesn't work, in such areas as the classroom, in the field, and in management issues."* Though no one benefited from the cold and windy weather, the Gulf of Mexico will no doubt benefit in the future from the dedication of all those who participated in Corpus Christi.



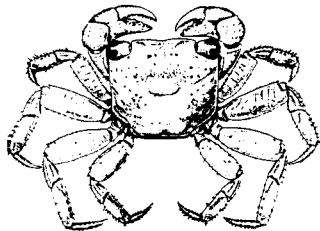
Marsh Wren  
*Cistothorus palustris*

## Wharf Crab

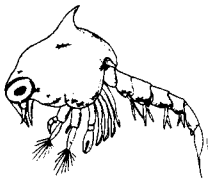
The wharf crab (*Sesarma cinereum*) is a small crab. The carapace (dorsal shell) is flattened, squarish, about three quarters of an inch wide, with eyes close to the corners. The color is gray, brown or olive, mottled with black. The species occurs along the Atlantic and Gulf coasts of North and Central America, from Maryland to about Vera Cruz, Mexico. Wharf crabs are common along the Alabama coast. They will forage in terrestrial areas more than 100 yards inland from the intertidal zone. In areas near the shore they are often seen on roads, on wharfs, around rock jetties, docks, and houses. They are also called friendly crabs because they sometimes are found inside houses and climb into boats.

Each crab has its own shallow burrow or den, usually under plant debris or driftwood in the intertidal or supratidal zones. Wharf crabs are scavengers, feeding largely on decaying animal and plant matter. Predators include clapper rails, seaside sparrows, and raccoons.

Ovigerous females occur during the warmer months. A female may carry from 5,000 to 13,000 eggs at a time and may breed up to five times during her lifetime. There are four zoeal stages and one megalopal stage in the larval development.



Adult



Fourth Zoea



Megalops

Wharf Crab  
*Sesarma cinereum*

## Educational Update

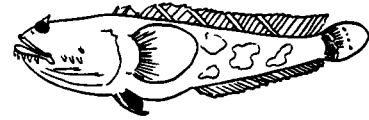
The coming of spring at Weeks Bay is always accompanied by increased numbers of school groups. In the new year and especially since March, groups from many schools have attended. Almost 2,000 students have visited the Reserve coming from a variety of schools such as Gulf Shores Middle, Foley Elementary, Spanish Fort Elementary, Fairhope Elementary, Foley Elementary, Foley High, Loxley Middle, Fairhope High, Bay Minette Intermediate, Perdido Middle, and Stapleton Schools. The month of May is booked with many more visitors scheduled for estuarine activities.

## Adopt an Aquarium

Aquariums are now set up at the Interpretive Center displaying many local estuarine and Gulf species. A touch tank allows visitors a closer look. Habitat settings such as river and brackish environments are represented with organisms such as the spotted gar or barnacle. These aquariums are visually impressive and seen by thousands of visitors during the year. Maintenance requires funding as salt water, filters, and support equipment must be purchased. An annual fee of \$100 will allow an individual or corporate sponsor to support a particular aquarium. A sponsor identification plate will be placed on the adopted aquarium. For more information call 928-9792.

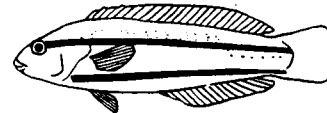
## Two New Families

The aquariums at the Interpretive Center have two new species representing families not previously housed at the center. The Gulf Toadfish (*Opsanus beta*) is representative of the family of toadfish, Batrachoididae, as it is a bottom dweller often digging or hiding in substrate or shells and rubble. This sedentary animal depends on its camouflage to feed on fish and shellfish. Its mottled coloration of various shades of brown to yellow allows it to blend in obscuring the oncoming threat to prey as the gaping jaws snap with lightning speed around minnows, shrimp, or even a fisherman's bait. Care should be given to the jaws of this fish and to the unpredictable nature of its chomping bite.



Gulf Toadfish  
*Opsanus beta*

The Family Labridae has a member swimming around in an 80-gallon "Gulf" aquarium. The Slippery Dick (*Halichoeres bivittatus*) is a cigar-shaped fish related to the parrotfish from which they differ by having individual teeth not fused into a beak. It is found in rocky areas of the northern Gulf and has a habit of burying itself for days at a time. Being nicknamed "digger" by Reserve staff, the bluish striped fish feeds aggressively later to be found under sand and shell with perhaps a pectoral fin exposed for notice of the next morsel to come. The males can become quite colorful and territorial at times. Like others in the family, hermaphroditism is strongly suspected in this species, although it has not received the attention of others in the family of wrasses.



Slippery Dick  
*Halichoeres bivittatus*

## Join Us!

**If you are a member, please tell a friend about the Weeks Bay Reserve Foundation. If you are not a member and would like to join, please send your tax-deductible donation to:**

*Weeks Bay National Reserve  
11300 U. S. Highway 98  
Fairhope, Alabama 36532*

Membership categories are as follows:

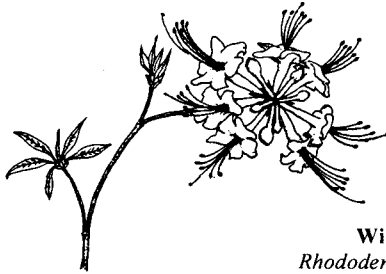
Student	\$5.00
Individual	\$25.00
Family	\$35.00
Commercial	\$100.00
Corporate	\$250.00

## Wild Azaleas

Wild azalea (*Rhododendron canescens*) is a large, deciduous understory shrub that occurs along the boardwalk nature trail. Flower clusters are compact, opening before and sometimes with the leaves. The elliptic leaves are one to two inches long, hairy above and below. In the early spring, the fragrant flowers add a sweet scent and a little pink to the woods already dressed in white by dogwoods. Flowers are one to two inches with long exerted stamens and pistil. The corolla is long, tubular, abrupt, flaring into five lobes and about one inch broad. The flowers open from March into April.

Swamp azalea (*Rhododendron serrulatum*) is a large, deciduous understory shrub that occurs near the observation deck at the end of the first nature trail. It is distinguished from wild azalea by its habit of blooming in the summer after the leaves are formed and by its swamp habitat. The elliptic leaves are two inches long, glossy above and whitish below. Flower clusters open from June to July, are few-flowered, fragrant and the corolla is white.

In both species of azaleas the flower stalks are covered with sticky hairs. Perhaps this is a barrier that keeps ants and other crawling insects out of the flowers. Since they cannot move efficiently from flower to flower, it is not in the plant's interest to allow them to deplete the resources that attract more effective flying pollinators.



Wild Azalea  
*Rhododendron canescens*

## How Birds Fly

Birds are built to fly. Their thin, hollow bones and powerful breast muscles provide light weight and high power, two essential requirements for any flying machine. The design and refinements are remarkable. Teeth and heavy jawbones have been replaced by the gizzard, which does the work of teeth grinding food. The gizzard is located near the bird's center of gravity, where it places little demand on the flying apparatus. A bird's heart is large and strong to cope with the strain of flying, and the blood has a high concentration of energy-producing sugar. The respiratory system of a bird is even more specialized, and in proportion to body weight it is about four times more extensive than a human respiratory system. Besides lungs, birds have air sacs that extend throughout the body. In addition to improving the breathing system, the air sacs form an effective cooling mechanism. But most of all, it is the distinctive feathers of a bird that allow it to soar, glide, race and hover. So when you visit the Weeks Bay Interpretive Center and observe the American White Pelican, Osprey and Great Blue Heron suspended from the ceiling, remember that birds are uniquely designed for flight!



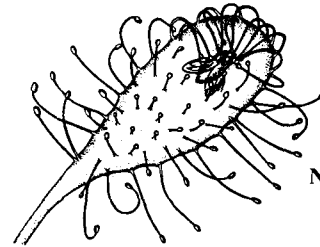
Osprey  
*Pandion haliaetus*

## Acid Bogs and Carnivorous Plants

Anyone who sees a freshwater bog is impressed by the seemingly rich, black ooze of the wet soil in which the plants grow. However, chemical analysis of the soil reveals that this initial impression is partly erroneous. The brown water is very acid, and acid water along with frequent rains leaches out many minerals. Also, in warm climates there is a very high rate of bacterial activity which uses up the sparse supply of minerals that are needed by larger plants. The black ooze is little more than fine white sand with a great deal of chemically sterile carbon. The essential element nitrogen is in short supply. In mineral-poor habitats there must have been considerable adaptation by plants in order for them to grow and reproduce.

Carnivorous plants have developed the capacity to trap and digest small animals. From the trapped animals, which are largely insects, the plants absorb what they need. The simplest traps are those of sticky plants. The glistening hairs on sundew leaves are tipped with adhesive droplets, to which wandering insects are effectively glued. When an insect is caught, nearby hairs bend in to meet it. The leaves secrete protein digesting enzymes, and nutrients are absorbed into the plant. The shining leaves of butterworts can roll slowly up, enclosing insects captured by sticky hairs. The pitcher plants have leaves modified into cups that catch rain, and they are provided with downward pointing hairs that make it easy for an insect to go down but hard to climb up. Down in the leaf cups, insects are drowned and are digested. Leaves of pitcher plants usually have a number of dead insects floating in the contained water.

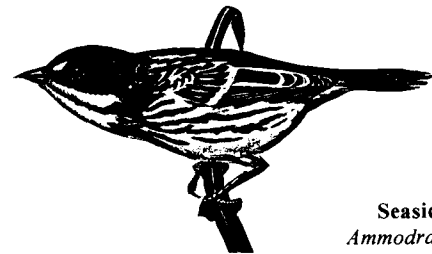
The most impressive fact is the multiplicity of ways in which plants have solved a single problem. The human species, for all its intelligence, has done no better in providing itself with protein.



Narrow-leaved Sundew  
*Drosera intermedia*

## A Lasting Legacy

You can make a lasting contribution toward preserving natural lands around Weeks Bay by naming the Weeks Bay Reserve Foundation in your will. We recommend you consult your legal advisor before including the following language: "I give \_\_\_\_\_ to the Weeks Bay Reserve Foundation, a non-profit organization, organized and existing under the laws of the State of Alabama, and with the business address of 1300 U. S. Highway 98, Fairhope, AL 36532.



Seaside Sparrow  
*Ammodramus maritimus*

## Consider a Conservation Gift

You can receive an income tax deduction and obtain the satisfaction of making a significant gift to The Weeks Bay Reserve Foundation. You can be assured that your financial contribution will be used to enhance the goals and objectives of the Weeks Bay National Estuarine Research Reserve. For information, contact: Planned Giving Program, Weeks Bay Reserve Foundation, 11300 U. S. Highway 98, Fairhope, AL 36532.

Funds for publication of this newsletter are provided by members of the Weeks Bay Reserve Foundation.

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**Atlantic Moonfish**  
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