



THE PELICAN POST

A Quarterly Publication of the
Weeks Bay Reserve Foundation
VOLUME 20, ISSUE 56
WINTER 2005-2006



*"I go to nature to be soothed and healed, and
to have my senses put in tune once more."*

John Burroughs

From the Executive Director



Winter 2005-2006

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The Weeks Bay Reserve Foundation is a non-profit organization whose members provide assistance and support to the Weeks Bay National Estuarine Research Reserve's goals and programs.

Memberships

Students \$10 /year
Individual \$30/year
Family \$50 /year
Business \$250/year

Weeks Bay Reserve
Foundation
Post Office Box 731
Fairhope, Al 36533
251-990-5004
www.weeksbay.org

The Foundation served as a sponsor for Alabama Coastal BirdFest 2005 and has been working diligently in the area of land conservation. In the near future we will close on the transfer of the Bayou Sara tract to the State of Alabama's Forever Wild Land Trust Program. This will fund other projects in the Weeks Bay watershed. Dr. Thomas Roush donated the 684 acre tract to the Foundation to help protect coastal Alabama's natural resources. The State of Alabama's acquisition of the Bayou Sara tract will allow present and future generations to enjoy the ecological benefits of the Mobile/Tensaw Delta. It is accessible by land and boat.

The Foundation has been involved in all of the Weeks Bay Reserve's land transactions by either providing technical or financial assistance. The success in land protection would not have been achieved without the continued support of the membership. The Foundation has protected over 1,000 acres since 1990. We have been able to provide Foundation land as match for Reserve land acquisitions.

There are numerous conservation tools an individual can utilize to assist in the protection of our natural resources. Conservation easements, land donations, bargain sale, and life estates are examples of some of the available landowner conservation tools. These tools provide tax deductible incentives allowed by the Internal Revenue Service (IRS) regulations. Please contact the Weeks Bay Reserve Foundation for more information about landowner conservation tools.

Enjoy reading the new color format of *The Pelican Post*.

Working for conservation,

Walter C. Ernest IV.



Gaynor McCown

Environmental Education Fellowship

The Planet and its inhabitants have lost a good friend. Gaynor McCown dedicated her life to the educational system (see page 5). In honor of Gaynor's commitment to education, the Weeks Bay Reserve Foundation has established the Gaynor McCown Environmental Education Fellowship. This Fellowship will provide a qualified individual who will assist K-12 school groups and perform other essential tasks related to environmental education. The Reserve hosts 3,500 K-12 students each year.

The Foundation Board feels that this fellowship is consistent with the outstanding spirit and ideals of our friend, Gaynor McCown.

Governor Riley Visits Weeks Bay Reserve

Governor **Bob Riley** recently visited Weeks Bay Reserve on a trip to the Alabama Gulf Coast. He spent quite a bit of time talking to the staff, seeing nutrient samples run in the lab, viewing the educational exhibits in the Interpretive Center, and walking on the expansive boardwalks through the wetlands and overlooking Weeks Bay. The Governor commented extensively on what a showcase the Reserve was for the State and complimented the work of the staff on conservation of coastal habitats.

Barnett Lawley, Commissioner of the Department of Conservation and Natural



Governor Bob Riley (far right) takes time out from his visit to the Reserve for a quick photograph and is joined by (l to r) Jim Griggs, Director State Lands Division, Barnett Lawley, Commissioner Department of Conservation and Natural Resources, and L.G. Adams, Reserve Manager

Resources, and **Jim Griggs**, Director of the State Lands Division, accompanied Governor Riley on his visit to the Reserve. Both Barnett Lawley and Jim Griggs are very familiar with the Reserve and its programs. These two gentlemen were proud to bring the Governor to the Reserve for a visit and led the tour of the Reserve as they walked through the facility and enjoyed the interpreted boardwalks. It is nice to have our Governor for the State of Alabama so interested in conservation and to have him visit the Reserve to get an overview of the programs and facilities at the Weeks Bay Reserve.



Weeks Bay Reserve Celebrates Twenty Years

Weeks Bay National Estuarine Research Reserve was **designated as the 16th reserve on February 19, 1986**. Since that designation, the Reserve has grown and developed into a site based center of excellence in environmental education, estuarine research, and coastal conservation. As we enter the new year, **Weeks Bay Reserve Celebrates Twenty Years**. Be on the lookout for celebratory functions as the anniversary rolls around. At this time, one might reflect on all the good work that has been done in supporting this project of regional significance. All those contributing, the Foundation and its members, State and Federal employees, Advisory Committee Members, and so many others should be

proud of all the effort and support making the Reserve what it is today. The diverse programs and dedicated staff of the Reserve provide the local community and greater two county area a resource of information as well as a place to visit and learn more about **Estuaries...Where Rivers Meet the Sea**.



VOLUNTEER SPOTLIGHT

Diane Ireland

Although new to the reception desk, **Diane Ireland** has had a long relationship with Weeks Bay Reserve. In fact, Diane has been a volunteer longer than anyone currently on the staff has worked at the Reserve. She goes back to the old days before the Interpretive Center was built, back to the time when **Thomas McAlpin** was first hired as manager. One of the first tasks assigned to Diane was the distribution of the "No Wake" signs with the Manatee logo, which can still be seen in waterways around Weeks Bay. Diane has also been a big supporter of our native plant sale since its inception 12 years ago. Diane has

recently completed the Master Gardener training. She believes in the many advantages of native plants, and uses them extensively in her own landscape at home. Diane says, "environmental stewardship, like charity, should begin at home."

Born in coastal North Carolina, Diane lived in Georgia and other parts of Alabama, before settling in Magnolia Springs 21 years ago. Her parents live in Huntsville. She has one sister, and is the very proud mother of two sons, **Beau**, age 14, and **Scooter**, age 18. While living in Baldwin County she has been active in numerous organizations and causes, many of which have focused on children. Diane has a special love for children and relates well to them. Stewardship of our natural resources has also been very important to her. So much so, that when Diane's husband Scott was tragically killed recently, she established an account and asked that donations be sent to Weeks Bay Reserve in Scott's memory. This was a very generous gesture to make during such a painful time, and the staff and volunteers were all deeply touched. Scott's parents have also been actively involved in environmental causes, and they have made a generous memorial donation to the Foundation. Some of the proceeds from these endowments will be used for DNA source tracking of bacteria in the watershed, and the design and construction of a greenhouse to grow plants to be used in restoration projects. This greenhouse will also be used in conjunction with our native plant sale. Diane plans to devote a great deal of time to this new volunteer activity. She says, I am a very practical, common-sense person, and I want to see that resources are directed to projects, and not to a lot of overhead." She goes on to say, "That is one thing I appreciate about Weeks Bay Reserve. It is amazing how much the Reserve has accomplished with such a small amount of money."

We are honored to have Diane as one of our treasured volunteers at Weeks Bay Reserve. We look forward to seeing her at the front desk in the Interpretive Center, and at the plant sale and other volunteer projects.

New and Renewing Members

Ann Bedsole
 Roberta Billie
 R. Michael & Renee Booker
 Mr. & Mrs. Louis E. Braswell
 James & Beth Cole
 Brenda Davis
 Donald N. Dickey
 Donald Dohn
 Jimmy Faulkner
 Mary Douglass Foreman
 John & Peggy Glaze
 John Goodloe
 Otilie Halstead
 Tommy & Wanda Harris
 Doug Haywick
 Robert & Connie Hicks

Michael Houston & Barbara
 O'Brien
 Diane Ireland
 Doc & Rosemary Jenison
 Skip & Nancy Jones
 Michael Jordan
 John & Betty Kempton
 Caterina Kenworthy
 Dean & Carolyn Koch
 Ken Marion
 Mary McBride
 William Robert Miller
 Rock O'Neill
 Annie Laurie Palmer
 Harold Parkman
 Charles & Lucia Partin

Sandra Pate
 Mary Riis
 Ian & Jane Robertson
 James & Esther Robson
 Samuel Russ
 Tim & Sandy Russell
 David Ryan
 John & Helen Shriner
 Peter Shuba
 Maud Skiba
 Bebe Kern Somerville
 Bill & Cynthia Staggers
 Jim & Carol Statter
 Jay & Gena Todia
 Leonard & Pamela Turner
 Mary Ann Underwood

Linda Waselkov
 Everette Weeks
 J.D. Weeks
 Charles Weinacker
 Michael & Tina Wilson
 Baldwin County Soil and Water
 Conservation District
 Baldwin EMC Operation Round Up
 Dauphin Island Sea Lab
 Exxon Mobil
 Gulfstream Natural Gas Pipeline
 Lemhi Reginal Land Trust
 National Fish & Wildlife
 Foundation
 Shell Marine Habitat Program
 Shell Oil Foundation



R. Gaynor McCown

Mobile native R. Gaynor McCown, who served as a senior educational policy analyst in the Clinton administration, died Monday in New York after a 10-month fight with a rare form of cancer, said her brother, James McCown.

McCown, 45, was a nationally recognized education expert who was widely and regularly quoted in the national media. Since 2003, she had served as executive director of The Teaching Commission, a New York-based organization focused on creating a nationwide effort to lure highly qualified people to become educators.

She was remembered by friends and family Monday for her kindness and passionate devotion to education reform. Among her fans was Louis Gerstner Jr., the former chairman and chief executive of IBM who established the Teaching Commission three years ago, serves as its chairman and recruited McCown to head the organization. "She had enormous skills, but what really differentiated Gaynor was that she was so passionate about fixing education in America, and so am I," said Gerstner. "I found her to be a real soul-mate in an important effort. "It is a tremendous loss for her family and all of us who worked with her, and I also think it's a tremendous loss for our country because she was doing important work on our failing education system," he said.

McCown grew up in the Spring Hill

area, one of five children of the late Jack and Genie McCown. As a young girl, she won state diving championships and was, her brother recalled, a rambunctious sort.

After losing her mother at age 12, Gaynor McCown matured and, by her high school years at McGill-Toolen, already seemed to know what she wanted to do with her life, her brother said. She always had an idealistic view of the world and a belief that she could change it for the better, he said. "Gaynor honestly never talked about having her own children because she seemed to be focused on making lives of her other children better," said James McCown, a journalist.

She graduated from St. Mary's College in Notre Dame, Ind., in 1983, then spent a year with Holy Cross Associates, a post-graduate Catholic lay service program. She was stationed in poor neighborhoods in Santiago, Chile, counseling families facing drug and alcohol addiction, her brother said.

McCown later worked as a foster home caseworker for Catholic Charities in Chicago before being accepted to the Harvard University Graduate School of Education, where in 1987, she received a master's degree.

Last year, McCown appeared before a congressional panel examining the role of qualified teachers in raising academic achievement. According to congressional transcripts, she told the panel that the United States "has entered the 21st century as an undisputed world leader." "That's the good news. The bad news is that the nation will not continue to lead if we persist in viewing teaching – the profession that makes all other professions possible – as a second-rate occupation. "Top-quality teaching fosters high student achievement – and high achievers can harness their talents and energies to become successful, contributing citizens.

Nothing is more vital to our future than ensuring that we attract and retain the best teachers in our public schools," McCown said. "Gaynor was such a caring person who reached so many people," said Mobile artist Eugenia Foster, a friend of McCown's mother who would become one of McCown's closest friends.

"People who knew Gaynor were very engaged by her enthusiasm. One of her favorite sayings was, 'The interesting and the interested.' It was about listening and responding," Foster said.

McCown was diagnosed in January with cancer of the bile duct, which is quite rare, said her brother. At the time, the family had difficulty even imagining her being sick, James McCown said. "This is a woman who has run the New York City Marathon, who was an Alabama diving champion in the late 1960s, who could beat anybody in tennis. She was one of those natural athletes and was always in impeccable health," James McCown said.

McCown and her husband, Jonathan D. Miller of New York, and her other brother, John D. McCown Jr. of Pound Ridge, N.Y., seemed to join together in the fight against the cancer, James McCown said. "She and Jonathan and my brother were fighting up until the last. It's hard to describe how strong a will she had to live. She simply never gave up that will to live," he said. "It wasn't until about 48 hours ago that I think Jonathan and my brother accepted the inevitable." "She was just stellar, fighting, fighting, fighting," said Foster. "It's not so much because she was afraid to die but because she had so much more to give."

In her last days, McCown sent a message to her many nephews and nieces, Foster said. "She told them, 'Make the world a better place. It's not a choice. It's a mandate.' That's the essence of how she lived," Foster said.

courtesy Mobile Press Register

Research Provides Window of Discovery at Weeks Bay

Diatoms Focus of Research in Weeks Bay

Dr. Scott Phipps, Research Coordinator at Weeks Bay Reserve recently attended the 18th annual North American Diatom Symposium hosted by the University of South Alabama in October 2005. He has studied diatom assemblages in Weeks Bay and surrounding waters for many years. In addition, as Research Coordinator for the Reserve, Scott has facilitated many other scientists from a variety of universities and colleges with research focused on diatoms in Weeks Bay and the watershed. What are diatoms and why are they important subjects for research in Weeks Bay?

Diatoms are single celled microscopic organisms that are found in nearly all aquatic environments – from boiling hot springs to the arctic ice pack. They have an outer covering of hydrosilicate – or opaline glass. This glass cover has slits, pores ribs, spines, etc. that are arranged in beautiful and intricate patterns. We use these patterns to identify different species. In Weeks Bay, more than 300 species of diatoms are found suspended in the water column and attached to the surface sediments. This rich assemblage includes species that have various degrees of sensitivity or tolerance to salinity, pH, nutrient concentration, light intensity and pollution.

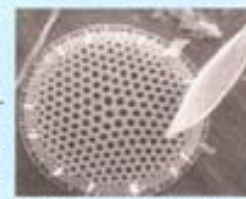


This photograph of living Gomphonema, a common diatom in the Fish River, was taken by Dr. Stephen Landers and Eric Harris at Troy University

The glass covers (called frustules) persist long after the cell dies. The accumulation of frustules in the sediment provides a record of the relative abundance of species that can be investigated hundreds or even thousands of years later.

Inside the diatom cell are chloroplasts that use energy from the sun to assemble complex molecules of carbohydrates, lipids and proteins in the process called photosynthesis. These complex molecules fuel the food chain. In Weeks Bay, the diatom assemblage is very productive. Thus, diatoms produce the abundance of shrimp, blue crabs, speckled trout and redfish found here. In a layer of sediment only 5 millimeters thick on the bottom of Weeks Bay are billions and billions of diatoms that produce literally pounds of shrimp food per square yard every year!

Although we can't see them without the aid of a microscope, diatoms are among the most numerous – and the most beautiful – organisms that inhabit Weeks Bay.



These Weeks Bay diatoms (Thalassiosira to the right and Nitzschia to the left) were photographed with a scanning electron microscope by Dr. Scott Phipps

Alabama Coastal BirdFest 2005

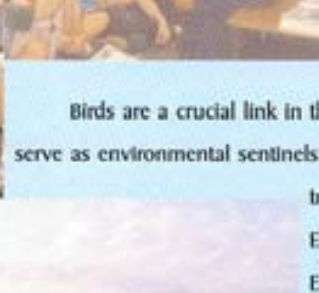
by John Borom



Our Gulf Coast has taken a beating for two years in a row. Twice fall winged migration has been interrupted by hurricanes. However, the interruptions were more for people than the birds. Although it was difficult to find a place to stay, Alabama Coastal BirdFest 2005 attracted 342 birders from 13 different states. They witnessed and experienced the fall migration along the 240-mile long Alabama Coastal Birding Trail and heard presentations by experienced and knowledgeable birders. The presentation by **Dr. Van Rensen** on the rediscovery of the Ivory-billed Woodpecker was heartwarming at the Gulf Coast Exploreum. The presentation by **Bob Sargent** at the Nix Center was beautiful and educational. The food was delicious and the silent auction was fun.



More than 1,000 children and adults attended the free Bird and Conservation Expo on the Faulkner State Community College Fairhope Campus. They heard relevant and timely presentations by **Bobby Harrison, Dr. John Dindo, Dr. Robert Hastings, Kent Schwartz, Dr. Henry Spivey, Lynn Garris** and **Marianne Worley**. They built bird houses, touched rays and seahorses, saw eagles up close, and learned about other creatures. The excellent wildlife art created by **Dr. Bill Summerour** for the poster and notecards was very appropriate and of excellent quality.



The diverse sponsors indicate the importance of BirdFest to the area. These were: Alabama Department of Conservation and Natural Resources, Alabama Gulf Coast Convention and Visitors Bureau, Alabama Power Foundation, Baldwin County Commission, Bellingrath Gardens, City of Fairhope, Conoco Phillips, Dauphin Island Bird Sanctuaries, Dauphin Island Sea Lab, Eastern Shore Chamber of Commerce, Faulkner State Community College, Mississippi Alabama Sea Grant, Mobile Bay Audubon Society, Mobile Bay National Estuary Program, Mobile Convention and Visitors Corporation, The Forum, The Nature Conservancy, U.S. Fish and Wildlife Service and the Weeks Bay Reserve Foundation.

Birds are a crucial link in the chain of life. Just as canaries protected coalminers in the past, birds still serve as environmental sentinels indicating when and where there are problems. The vast distances they travel and exposure to diverse ecosystems make them unique barometers of Earth's health. If birds are at risk, so are people and the chain of life on Earth.



As the human population increases along the coast it is important that more consideration be given the other creatures that share our world with us. Our actions and choices make a huge difference. One way we can help the migrating birds is to protect and preserve stopover habitat they need to survive. All proceeds will be used to do this on the Alabama Coast. BirdFest 2005 was good for ecotourism, good for environmental education and good for birds. It could not have taken place without the help of many volunteers and guides. Thank you all for your participation.

Alabama Coastal BirdFest 2006 is planned for October 19-22. As details develop, infor-

mation will be available at 251-929-0922 and on the BirdFest web site at www.alabamacoastalbirdfest.com.



Hurricane Season

Most Active on Record

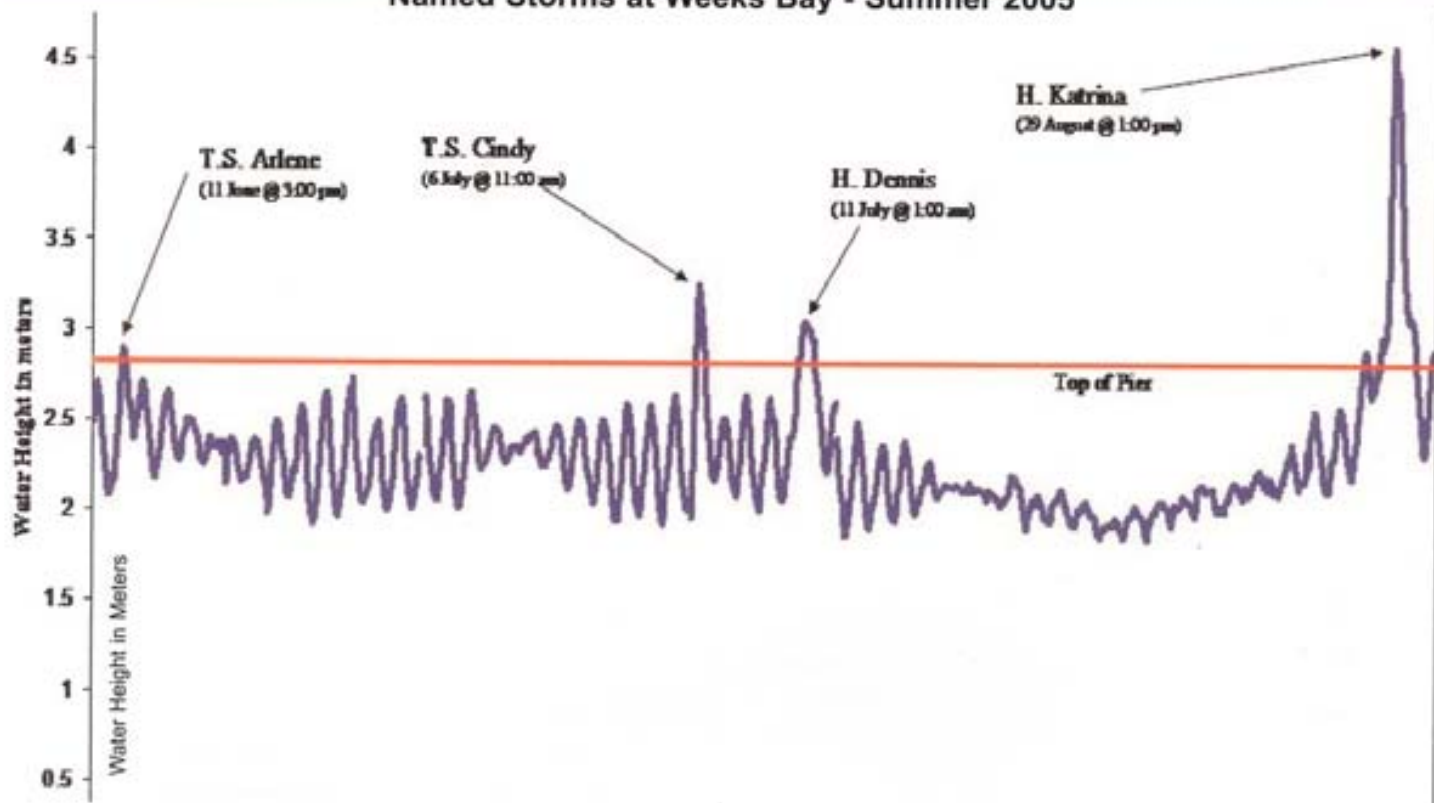
Storms Impact Reserve and Monitoring Goes on

As forecasted by the National Weather Service, the 2005 Hurricane Season was very active setting a record for the most storms since records have been kept. The season got started early at Weeks Bay. Storms Arlene, Cindy, and Dennis were all significant events that as you may recall followed several flooding events back in April. The Reserve staff constantly watches the weather and follows emergency procedures to protect assets and properties of the state as best as possible. Hurricane Katrina produced a storm surge greatly impacting Reserve waterfront structures yet nothing to compare to the devastation imposed on our neighbors to the west in Mississippi and Louisiana. The storm surge produced by Katrina brought waters to the highest level experienced in the area since Weeks Bay Reserve was established in 1986.

Hurricane Ivan last year caused damages that the Reserve continues to deal with. Damaged structures have either been repaired, in the process of being repaired or preparations for such are in progress. The recent storms this hurricane season have come to the area earlier and initiated protection measures to be taken. Tropical storm Cindy had moderate winds and heavy rains causing flooding situations in many areas. Hurricane Dennis as it threatened the Gulf coast early in the week (week of July 4-8) initiated a "full-boarding-up" of all structures, vehicles filled with fuel, boats protected, and measures undertaken to back-up and protect office equipment. Similar procedures were successfully implemented for Katrina yet nothing could protect several waterfront structures from the destructive forces of the storm surge. The Reserve lost the Manatee Park fishing pier, Nature Trail overlook boardwalk, decking off the Fish River Marina fishing pier, and suffered damage to about 300 feet of boardwalk behind the Interpretive Center.

One of the final preparations before a storm event is to make sure monitoring equipment is deployed as part of SWMP (System-wide Monitoring Program). The graphic below is the measure of water level. A bench mark showing the level of the fishing pier at the marina near Highway 98 Bridge is shown as a horizontal line. One can see the up and down measure of the normal tidal cycles (below the top of the fishing pier) followed by the significant high water of the storms. The storm surge associated with Hurricane Dennis was 24-28 inches over the top of the fishing pier as compared to that of Hurricane Ivan last year when the water level reached 44 inches over the top of the fishing pier. Hurricane Katrina produced high waters reaching farther than past storm events since designation in 1986. Reserve staff continues to watch the weather and be prepared, as we should all be, living and working on the Alabama coast. As the hurricane season officially comes to a close on November 30, forecasters are predicting seasons ahead may be as eventful as those in recent years.

Named Storms at Weeks Bay - Summer 2005



Education

School Groups Visiting Reserve Picks up Following Storms

Even though the fall field trip season was interrupted by several Hurricanes the education programs at the Reserve continued with over 200 school students and 50 adult chaperones visiting the Reserve since August.



Grasses in Classes Project

Wins Award



The Baldwin County Grasses in Classes Program was awarded a Gulf Guardian Award in the Youth/Education category. Gulf Guardian Awards are given by the Gulf of Mexico Foundation to recognize individuals and organizations who contribute to the environmental health of the Gulf of Mexico. This year the award ceremony will take place March 28th at the Harte Research Institute in Corpus Christi, Texas in conjunction with the State of the Gulf Conference.

In July, Education Coordinator **Margaret Sedlecky** conducted a presentation about the Baldwin County Grasses in Classes Program at the National Marine Educators Association Conference (NMEA) in Maui. The idea for the BCGIC program was sparked by a similar program that had been presented at the NMEA Conference in St. Petersburg FL the previous summer.

Visit the Foundation's Web Site at

www.weeksbay.org

Our website has been viewed over 480,151 times by 58,471 unique visitors during the last 11 months. Visitors are from all over the globe, not just the U.S.A. People from the following countries visited the first 17 days in November: Canada, Netherlands, Poland, United Kingdom, Peru, Australia, Singapore, Mexico, Germany, Brazil, Belgium, Norway, Turkey, Portugal, Switzerland, Spain, France, New Zealand, Japan, Hungary and Cyprus.

Grasses in Classes Project Moves to the Beach

In October, 42 students from Fairhope High School planted over 1,200 dune plants at Gulf State Park as part of the Baldwin County Grasses in Classes Program. In April of this year, **Megan Anderton's** students began the dune restoration nursery by potting over 3,000 plants that had been donated by the Natural Resource Conservation Service, Plant Materials Centers. The plants doubled in size over the summer and had to be divided by the students in August to prepare them for the restoration project in October. The Weeks Bay Reserve Volunteers donated 200 additional sea oat plants for the project. Half of the plants will remain in the nursery for further propagation and future restoration projects.

The beach restoration project took place on October 19th and 20th in partnership with the US Fish and Wildlife Service and Gulf State Park naturalists. Volunteers from Weeks Bay Reserve, Auburn Marine Extension Service and Alabama Sea Grant assisted the students with the project. This is an example of how federal, state and county agencies can work together to provide the resources and the expertise to reach a common goal. The weather was great and the restoration project proceeded without a hitch. All the partners involved deemed the project a big success! Additional restoration projects are being planned for this spring with all three Grasses in Classes High Schools.

Fairhope High School students and their teacher Megan Anderton planting grasses



*Holiday
Open House
Weeks Bay Interpretive Center
Tuesday, December 20th
11am-1pm
Come join us for some Holiday Cheer
with cookies and hot cider*

Coastal Training Program (CTP)

CTP Program Takes Show on the Road

CTP - Community Leader Wastewater Training held on August 23-25, 2005



A Community Leader Wastewater Training workshop was held on August 23-25, 2005. The target audience was elected and appointed officials, and utility board members in Mobile and Baldwin Counties. Half-day events were hosted on three consecutive days in three separate locations. Meeting locales were Foley, Daphne and Mobile. Participants learned about: wastewater, treatment plant processes, wastewater management issues, and what treatment systems currently exist in the area; governance issues such as permitting, reporting, compliance, remedies, and emergency responses; and, alternative wastewater systems

Participants received a Certificate of Training and were able to receive three-credit hours from the Alabama League of Municipalities.

Community Leader Stormwater Training to be held on 15 December 2005

Did you know?

The three largest sources of storm water pollution are: herbicides and pesticides, urban runoff, and sediment.

Every eight months the oil and petrochemical products that wash off our roadways and parking lots are the equivalent of an Exxon Valdez spill. Decaying leaves and organic materials in the storm drain increase bacteria and mosquito production and decrease oxygen essential for fish life.

In an invitation to the upcoming 15 December **Community Leader Stormwater Training**, David Yeager of the Mobile Bay National Estuary Program claims, "increased stormwater runoff can be called a by-product of growth and development. As we continue to build and grow, management of storm water is not an isolated problem confined to the boundaries of one city; as with most natural processes it does not conform neatly to political boundaries. It is imperative that local officials recognize the challenge before them; storm water runoff is a major problem that encompasses social, political, and engineering dimensions; management costs will continue to increase over time; and the most effective tool for solving storm water runoff challenges is to work cooperatively and across political boundaries to creatively develop management systems that respond to regional coastal demands."

This half-day training event will take place at the Cypress Workshop, USA Brookley Center, in Mobile. As will all CTP training events, the goal is to work toward improved decision-making in coastal AL.

Wetland and Realtors Course

In partnership with the Baldwin Association of REALTORS, the Weeks Bay Reserve Foundation and the Baldwin County Wetland Protection Program, the Reserve Coastal Training Program hosted a Wetland and Realtors workshop on August 25, 2005. The overall goal of the program was to provide real estate professionals with current, information about wetlands, their types and identification; the existing state of wetland regulation and permitting; and methods and options for wetland conservation to promote informed decision making and the distribution of educated advice about wetlands and their protection.

Native Plant Sale Overcomes Hurricane Challenge

The plant sale provided a tremendous selection this year overcoming the challenge that hurricane impacts put on local growers. In addition to raising much needed funds, it promotes the use of native plants in home landscaping, an alternative to exotics so common in our markets today. For more information on the volunteer program at the Reserve contact **Maureen Nation**, at 928-9792.



DECEMBER

CALENDAR

JANUARY

- 6 Citizens Advisory Committee Meeting**
6 PM - Reserve Auditorium, public is welcome
- 8 Weeks Bay Advisory Committee Meeting**
Reserve Auditorium - 2PM, contact **Cathy Pembroke**, 928-9782.
- 13 Guest Lecture Series. "Birding in Turkey"**
presented by **John and Bev Winn**. 7:30 p.m. Government Street Baptist Church in Mobile. Bring a friend and your favorite finger food and fellowship around the wassail bowl.
- 17 Christmas Bird Count at Dauphin Island**
Contact **John Porter** 861-2120.
- 18 Christmas Bird Count at the Mobile Tensaw Delta** Contact **Roger Clay** 626-5474.
- 20 CTP Advisory Committee Meeting**
Conference Room 10 am - 11am
- 20 Open House at Weeks Bay Reserve**
11 am - 1 pm, in the classroom
Holiday cheer with light refreshments
- 25 & 26 Christmas Holidays**
The Interpretive Center will be closed. All trails and boardwalks will remain open for your walking and sightseeing pleasure
- 30 Christmas Bird Count at Gulf Shores** Contact **Greg Jackson** 205-987-2855

- 1 & 2 New Year's Day Holidays**
The Interpretive Center will be closed. All trails and boardwalks will remain open for your walking and sightseeing pleasure
- 1 Christmas Bird Count at Fort Morgan** Contact **Sara Whitfield** 251-344-8158
- 3 Citizens Advisory Committee Meeting**
6 PM - Reserve Auditorium, public is welcome
- 10 Natural History Film. "Private Lives of Dolphins."** Graceful, intelligent and playful, bottlenose dolphins are not only the friendliest wild animals, they are also the most complex. (60 minutes) Faulkner State Community College Fairhope Campus, Centennial Hall, 7:30 pm. Bring a friend.

FEBRUARY

- 7 Citizens Advisory Committee Meeting**
6:00 PM - Weeks Bay Reserve Auditorium
Public is welcome
- 14 Natural History Film. "Eagles Masters of the Skies."** This breathtaking film is packed with memorable moments in stunning locations across the globe. (50 minutes) Government Street Baptist Church in Mobile. 7:30 p.m. Bring a friend.

Post Hurricane Coastal Cleanup a Great Success



On September 17th, 85 citizen volunteers arrived at the Weeks Bay marina to help remove debris from the water and shoreline of Weeks Bay and its tributaries. It has been three hurricanes (Dennis, Ivan and Katrina) and one tropical storm (Cindy), since the last coastal cleanup. This of course meant there was plenty of work to be done, with debris strewn throughout the watershed. Many coastal cleanup sites, such as Fairhope, Daphne and Meaher Park choose not to attempt volunteer hosting this year due to safety and other concerns. Fortunately **Mike Shelton**, Weeks Bay Watershed Coordinator, had previously assessed potential cleanup sites near the Weeks Bay marina and was able to direct volunteers to those areas that would not prove hazardous.

An especially encouraging sign of this year's clean up was the number of young people who participated. The lack of available host sites did not deter these stewards from contributing. Students from Robertsdale, Fairhope, Daphne and Mobile arrived at Weeks Bay, offering their time and energy to the cleanup project. The enthusiastic volunteers demonstrated their commitment to protecting habitat and improving aesthetics by collecting and properly disposing of approximately 1700 pounds of manmade debris. The debris ranged from remnants of storm damaged piers to Tupperware and other kitchen utensils. Their contributions were greatly appreciated.

After cleanup efforts were finished volunteers were invited to the clubhouse at Safe Harbor to enjoy refreshments and camaraderie. A special thank you is extended to **Mr. and Mrs. Bentz** and **Mr. and Mrs. Rochford** for preparing and setting up lunch. Gratitude is also due to **Harry Anderson, Richard Coram, Pat and Gary Gover** and all other volunteers who ensured that the clubhouse was left neat and tidy.



ExxonMobil Intern Assists Reserve Programs

An ExxonMobil internship grant allotted to the Weeks Bay Reserve Foundation allowed Weeks Bay Reserve staff the pleasure of working with **Anya Mallory** this summer. Anya is an undergraduate student with the University of South Alabama Department of Biological Sciences. Whether helping with *Hydrilla sp.* eradication efforts, performing nutrient analysis, removing otoliths (calcareous concretion of the inner ear used for aging) from bass or routine maintenance of boats and equipment, Anya proved ambitious and diligent.



In addition to helping Reserve staff, Anya also worked with graduate mentor **Tami Wells**, under the guidance of **Dr. Anne Boettcher**. Anya spent many hours wading in the *Juncus roemerianus* (black needlerush) that dominates the terrestrial-marsh interface of Weeks Bay. Some of the ecological functions of *J. roemerianus* are shoreline protection, sediment stabilization, support for detrital-based food webs, and habitat for aquatic organisms. Anya collected baseline vegetation diversity and density information from within the marsh in anticipation of a larger study to begin in January of 2006. The study, lead by Dr. Boettcher, will assess changes in vegetation zonation and sediment transport as a result of storm impact and land use change.

Anya helps Mike Shelton assemble tarps to be used in the control of Hydrilla sp, an aquatic exotic invasive plant in the Weeks Bay watershed

Stewardship Program Initiates.....

Weeks Bay Weed Trackers

A Call for Volunteers to Locate Exotic Invasive Plants

Exotic invasive plant species, or weeds, are species that are non-native and exhibit a tendency to spread out of control. Studies have demonstrated that exotic invasive plant species can substantially alter a number of ecosystem functions, including nutrient cycling, carbon storage, hydrology, and erosion. For example cogongrass (*Imperata cylindrical*) can alter natural burn regimes by increasing the chance of wildfire occurrence.

Some exotics are capable of hybridizing with native plant relatives, resulting in unnatural changes to a plant's genetic makeup; others have been found to harbor plant pathogens, such as bacterial leaf scorch (*Xylella fastidiosa*) that can affect both native and non-native plants, including ornamentals. Because of these traits exotic invasive species are considered by many to be the second greatest threat to natural ecosystems, surpassed only by direct habitat destruction.

Recognizing that exotic invasive plant species pose a threat upon the ecological health and stability of the Weeks Bay watershed, the staff of the Reserve has initiated the creation of the Weeks Bay Weed Trackers program. The program goal is to found a group of dedicated citizen volunteers willing to assist with field data collection for the purpose of mapping, threat assessment, and the creation of a weed management plan. For more information please contact **Eric Brunden**, at 251-928-9792 or email ebrunden@dcnr.state.al.us

TAKING SCIENCE TO MANAGEMENT

Learning More about the Watershed to Better Protect Water Quality and Coastal Habitats...

Tracking Pathogen Sources in Fish River

Since 1998, Fish River has been included on the ADEM/USEPA list of impaired waters for being contaminated with pathogens. The suspected sources are stormwater runoff and failing septic tanks and sewer lines. Weeks Bay Reserve with assistance from the Weeks Bay Reserve Foundation and the Scott Ireland Memorial Fund are trying to determine the actual sources. A source tracking method being used is designed around the principle that certain strains of the enterococcus bacteria are specific to humans and can be used as indicators of human fecal contamination.

A trial sampling was carried out at two locations on Cowpen Creek. No human markers were detected in Cowpen Creek at AL 181. Human markers were detected in Cowpen Creek at CR 33. Three additional and more comprehensive rounds of human enterococcus biomarker testing were performed in the Fish River watershed. Ten environmental samples were taken in August and September 2004 and again in June 2005. None of the environmental samples tested positive for the human enterococcus marker in the August 2004 or June 2005. In September 2004, results were different. Human markers were detected in Polecat and Cowpen



This map of the Weeks Bay Watershed indicates sampling locations testing positive for human markers.

Mercury Discussions held at the Reserve

Mercury in the fish, water and atmosphere around Weeks Bay were the subject of discussion at a gathering of Weeks Bay staff and federal, university and private experts on October 21, 2005 at the Reserve. Past and present monitoring efforts were examined and future research collaboration was outlined during the day-long meeting. **Mike Shelton** led the presentations with the results of the bass monitoring project conducted over the last two years. **Dr. David Krabbenhoff**, Senior Scientist with the US Geological Survey (USGS) in Madison, WI presented the atmospheric deposition data collected at Weeks Bay before the untimely

interruption wrought by Hurricane Katrina. The USGS monitoring station collected wet and dry mercury deposition data from April to August 2005. The data generated by the station showed unique deposition patterns that warrant further investigation as indicated by Dr. Krabbenhoff. In addition to the deposition data presented by USGS, scientists from Southern Company including Alabama Power and ARA, Cary, NC gave an overview of mercury monitoring near their coal-burning power generation facilities throughout Georgia, Alabama and Mississippi. Coal fired power plants are the primary source for atmospheric mercury worldwide. **Dr. Bill Landing** and a graduate student from Florida State University and **Dr. Jane Caffrey** of the University of West Florida presented data collected in Pensacola and other portions of Northwest Florida on mercury concentration in rainfall. All the numbers presented indicated the need for future investigation and that the Weeks Bay would be the place for the collaborative effort.



Coal fired power plants are the primary source for atmospheric mercury worldwide

Dr. Scott Phipps and **Eric Brunden** added their expertise to the research design process. USGS reissued their commitment to deployment of a new mercury monitoring station in order to examine any seasonal or meteorological effects on atmospheric deposition. In addition, comparison of two basins, Waterhole Branch and Polecat Creek, and the conditions that impact mercury entry into the ecosystem was discussed. Finally, the examination of mercury methylation in primary and secondary producers in the ecosystem in a mesocosm study was outlined. Mesocosms are small scale representations of the natural habitat in which conditions can be manipulated to look at changes in mercury processes. USGS scientists in Tuscaloosa and Madison will collaborate with Weeks Bay staff and have provided much of the funding for the proposed experiments.

Rain Garden "How-To" Workshop Held

Stormwater runoff from residential rooftops can carry many different pollutants into our surface water streams, rivers and bays. Several easy and inexpensive methods exist to reduce the amounts of the water that drains from homes into urban gutters or rural roadside ditches. On October 8, 2005, a workshop was held at the Reserve to teach local residents one method that nearly anyone can use, rain gardens. No the rain garden does not grow rain, but does enhance plant's ability to naturally treat rooftop pollution and promote the infiltration of rain into the ground. Alabama Cooperative Extension System (ACES), Alabama Master Gardeners and Weeks Reserve developed a "how to" manual which assists homeowners in deciding if a rain garden is suitable for their site, the dimensions it needs, the placement in the lot and the types of plants to grow to promote the best runoff treatment. **Mike Shelton**, led the program with an overview on rooftop runoff pollution that can include high concentrations of nitrogen, some organic compounds and even pathogens.

Eve Brantley, ACES at Auburn University, followed with design and plant information. **Mike Shelton** instructed Workshop participants on construction and planting of the Rain Garden



www.weeksbay.org

2005 Christmas Ornament

Now Available

The 2005 Christmas ornament depicts an Osprey on a nest at Fish River. The cost is \$10.00 and proceeds will help the Foundation help the Reserve. For more information call 990-5004.

The ornaments can be purchased at the following locations

Weeks Bay Reserve

Fairhope Pharmacy

Eastern Shore Art Center



James Hurtubise (right) Pastry Chef and Facilities Manager for the Faulkner State Community College Culinary Arts Program poses with his creation, a solid chocolate Ivory-Billed Woodpecker on a delicious apple spice cake with almond icing. Dr. Van Remsen (center) Curator of Birds at the LSU Museum of Natural History, was the speaker at the BirdFest reception and Dr. John Borom (left).

Weeks Bay Reserve Foundation
Post Office Box 731
Fairhope, Al 36533
251-990-5004
www.weeksbay.org



Bald Eagle
(*Haliaeetus*
***leucocephalus*)**

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"There is no other door to knowledge than the door nature opens; and there is no truth except the truths we discover in nature." - Luther Burbank