



# THE MISSION ★ ARANSAS OBSERVER

A Newsletter of the Mission ★ Aransas National Estuarine Reserve



SPRING  
2010



## GROWING TOWARD THE FUTURE

by *Sally Morehead,*  
*Reserve Manager*

Spring is in the air and a time for new beginnings. The Bay Education Center, in Rockport, Texas, is almost complete! We anticipate a ribbon cutting this June and a public opening in late June. We can't wait for you to see all of the wonderful exhibits, which include NOAA's Science on a Sphere®. The Center will house museum-quality educational exhibits that teach the importance of estuaries and provide visitors with a better understanding of the inner workings of an estuary. The Mission-Aransas NERR is proud to be a part of this project and support the community with state-of-the-art exhibits and programming.

This has been a very busy season for the Mission-Aransas NERR. Not only were we working on the completion of the Bay Education Center but construction of the Headquarters facility advanced rapidly this spring. Construction of the NERR Headquarters has been amazing to watch. Every day the concrete for new pilings and floors are poured. The building is really beginning to take shape and will change the face of the Marine Science Institute campus. We are all excited to see structure coming out of the



Construction of Bay Education Center in Rockport.

ground and can't wait to move in (which will occur next spring). For a bird's eye view, check out the web cam on the MSI web site at [www.utmsi.utexas.edu](http://www.utmsi.utexas.edu). This is updated weekly, so you too can follow the progress.

Hosting workshops and securing new research grants have also kept us busy this spring and we witnessed the retirement of a cornerstone colleague, Dr. Rick Tinnin, who was the founding Marine Education Services Director and our first Education Coordinator.

Read on to learn about all of the fabulous workshops, research, and educational programs that have occurred and those planned for the future.



Construction of new NERR facility in Port Aransas.

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# IMPROVING THE SYSTEM WIDE MONITORING PROGRAM

*By Britt Dean  
Research Assistant*

The Mission-Aransas NERR constantly strives to improve the validity of our data, while increasing their relevance to local communities. The System-Wide Monitoring Program (SWMP, pronounced "swamp") encompasses five designated sites within the NERR boundary where weather conditions and basic water quality parameters are measured. We have recently enhanced our program by making a few modifications.

We expanded the scope of our water quality data collection by installing a new site in Rockport. This was accomplished in October 2009 as part of a project, , investigating the decline of seagrass in Little Bay, which was funded by the Coastal Bend Bays & Estuaries Program, City of Rockport, Town of Fulton, and Aransas County Navigational District. Although this site is outside of the NERR boundary and not technically part of SWMP, it is maintained using the same protocol to allow for comparison to SWMP data. The data are available in real-time on the web, and may be incorporated into SWMP in the future. One benefit of having a standardized monitoring program in place is that it facilitates the setup and data management of additional sites.



*Research Assistants, Cammie Hyatt, Britt Dean, and Amy Fujarski, giving the old University of Texas "hook'em horns" sign, while Greg Hauger works on the SWMP platform in the background.*

As part of our mandate, the NERR facilitates research at these designated sites as well as other sites within Copano, Mesquite and Aransas bays. While numerous researchers already use SWMP data, publicly it is an untapped resource, and dissemination of this information is a real challenge. Our objective is to connect the data with members of the public who could best use the information, i.e., fisherman and teachers. To increase public awareness, we have recently installed new signs on all SWMP platforms. The goal is to inform boaters of the purpose of the platforms as well as the availability of our real-time water quality and weather data through the internet.



*Installing new sign on SWMP station to increase public awareness of its purpose.*

We have also undertaken some steps to improve the quality of data collected at the SWMP stations. Staff from the reserve worked with individuals from the National Geodetic Survey and the Texas Spatial Reference Center to improve SWMP water level measurements. This effort determined the elevation of our SWMP platforms, and thus the associated water level instrumentation, by measuring them relative to nearby tide gauges and landmarks. More accurate measurements of water levels will allow us to better describe the tidal characteristics of the reserve, something which is very important with the threat of sea level rise. Improving the accuracy of our measurements makes our data more useful not only to the scientific community, but the local public as well.

# COASTAL BEND LIVING SHORELINES TRAINING

by Chad Leister,  
Coastal Training Program Coordinator

Living shoreline projects utilize natural coastal processes to reduce erosion, stabilize the shoreline, and allow shorelines to adapt to dynamic coastal conditions. In February, the Coastal Training Program (CTP) hosted an *Introduction to Living Shorelines* training in Port Aransas, Texas for 72 coastal decision-makers. Participants increased their understanding of living shoreline concepts, the permitting process, and costs compared to traditional shoreline stabilization. The workshop also presented examples of living shoreline projects in Texas and possible funding sources.

Funding from the Gulf of Mexico Alliance allowed the Mission-Aransas NERR to work with the other CTPs in the Gulf of Mexico to coordinate living shorelines training throughout the region. Each event addressed local needs and included lessons learned from previous events. Event partners essential to the success of the Port Aransas event included Belaire Environmental Inc., Coastal Bend Bays & Estuaries Program, Galveston Bay Foundation, NOAA Fisheries, Texas Commission on Environmental Quality, Texas



Panel of permitting agency representatives fielding questions from decision-makers at the living shorelines training in Port Aransas.

## WHAT IS CTP?

THE COASTAL TRAINING PROGRAM (CTP) PROVIDES NEEDS BASED TRAINING TO LOCAL COASTAL DECISION-MAKERS. DECISION-MAKERS ARE TYPICALLY DEFINED AS INDIVIDUALS WHO MAKE ROUTINE DECISIONS ABOUT THE MANAGEMENT OR USE OF COASTAL AND ESTUARINE RESOURCES IN A PROFESSIONAL OR VOLUNTEER CAPACITY.

Department of Transportation, Texas General Land Office, Texas Parks and Wildlife Department, US Army Corps of Engineers, and US Fish and Wildlife Service.

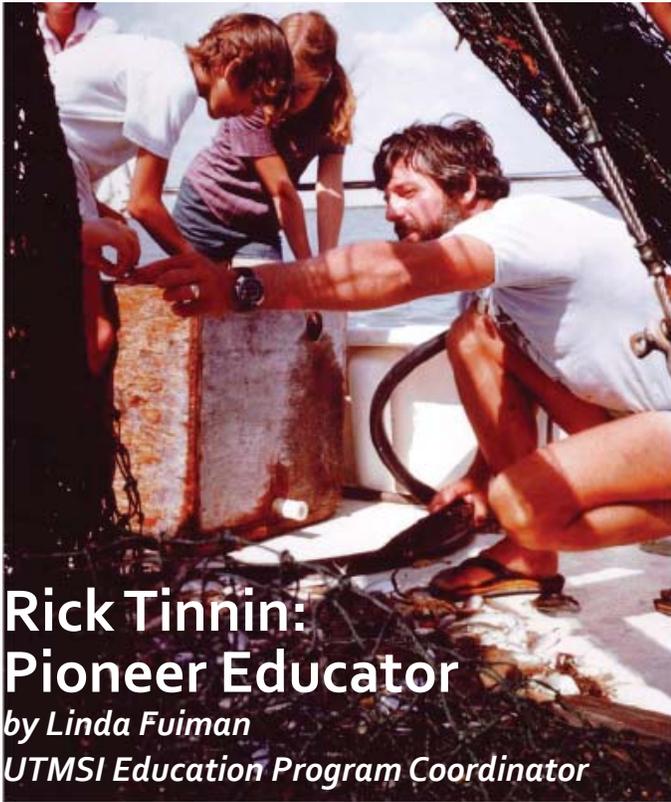
In response to high levels of interest, CTP has submitted a proposal for a living shorelines session at the *Restore America's Estuaries Conference* in Galveston, Texas in November 2010. Additionally, CTP is planning more specialized living shorelines trainings for audiences such as home owners or contractors.



Plants, stone, sand fill, and other materials are strategically placed to create living shorelines, which protect coastal properties from erosion. Photo courtesy of Lee Anne Wilde.

The CTP has a number of upcoming events including two *Erosion and Sediment Control* workshops on June 2, a *Copano Bay Ecosystem Dynamics Panel Discussion* on June 22, and an *Introduction to Coastal Geographic Information Systems Training* from July 13-15. For more information and a complete list of upcoming events please visit our website: <http://www.utmsi.utexas.edu/about-the-institute/mission-aransas-nerr/coastal-training-program.html>.

If you have questions regarding this article, upcoming events, or the CTP, please contact CTP Coordinator, Chad Leister, at [cleister@mail.utexas.edu](mailto:cleister@mail.utexas.edu) or 361.749.6782.



## Rick Tinnin: Pioneer Educator

by Linda Fuiman

UTMSI Education Program Coordinator

January 31, 2010 marked the end of an era when Dr. Rick Tinnin, Director of Marine Education Services for the University of Texas Marine Science Institute (UTMSI) and Education Coordinator for the Mission-Aransas NERR, retired. Rick's career at UTMSI spanned over 36 years and during that time he accumulated a host of well deserved awards and accolades. An outstanding educator and pioneer of the floating classroom, Rick touched the lives of thousands of students and educators throughout Texas and across the country.



*Rick teaching marine biology aboard the R/V Longhorn.*

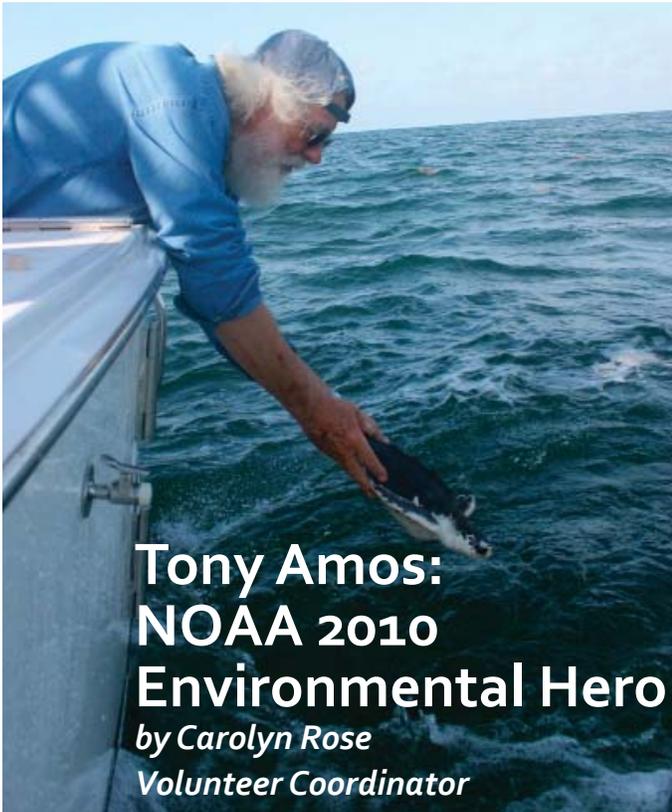
Rick joined the staff of UTMSI in 1974 and accomplished an enormous amount over the span of his career. He was the founder of the Marine Education Services program, which flourishes thanks to his creativity and effective hands-on approach to marine education. Many of the ideas he introduced at UTMSI have been adopted by other agencies and even private businesses. When the Mission-Aransas NERR was established in 2006, Rick became the Education Coordinator and quickly took a leadership role in the national NERR program. His absolute "dream come true" was the completion of the Wetlands Education Center (WEC), for which he worked so hard for so many years. Because of his efforts the WEC is a reality for people to enjoy now and for generations to come.

There is no doubt that Rick's passion is education and nothing makes him happier than when he engages young students and educators in learning about the coastal environment. There is a perceptible sparkle in Rick's eye each time he sees a child's face light-up as they touch a sea star for the first time or look through a microscope and wonder at the profusion of zooplankton. Rick's undying enthusiasm inspires and energizes all who have the honor of working with him.



*Rick training education volunteers to assist with K-12 school groups at UTMSI, just days before he retired.*

Although Rick has officially retired from UTMSI, he has not stopped teaching. While enjoying a new and less hectic life-style, he still finds time to teach marine biology aboard the R/V Katy and wetlands ecology in the salt marsh. As Rick would say, he is still teaching "K through gray" and his co-workers and students wouldn't have it any other way. We wish him well.



**Tony Amos:  
NOAA 2010  
Environmental Hero**  
*by Carolyn Rose  
Volunteer Coordinator*

Tony Amos and the Animal Rehabilitation Keep (ARK), which he founded, have rescued, rehabilitated, and released thousands of sea turtles and marine birds and educated countless people about the human impact on the coastal environment. Tony is one of only ten recipients of the 2010 NOAA Environmental Hero awards. These awards honor individuals and groups of people who demonstrate "tireless efforts to preserve and protect our environment."



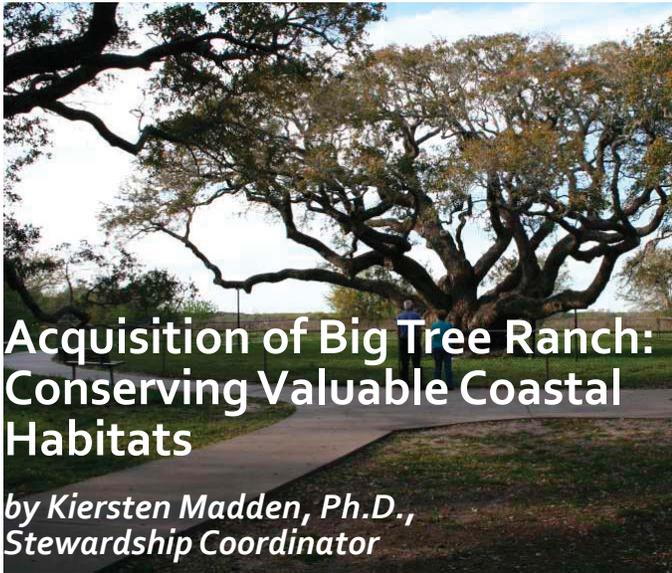
*Tony educating the public about problems confronting coastal wildlife. Photo courtesy of Lynn Amos.*

Tony began rescuing stranded sea turtles in 1982, and in 1999 he founded the Animal Rehabilitation Keep (ARK) at the University of Texas Marine Science Institute (UTMSI), in Port Aransas, Texas. The mission of the ARK is to rescue, rehabilitate, and release sea turtles and marine birds found sick or injured in the areas adjacent to and on Mustang, San Jose, and Padre Islands, and to educate the public about the problems confronting coastal wildlife and the impact of the increasing human population on coastal resources. Tony recognized the need for the ARK after finding numerous stranded sea turtles while collecting marine debris and other data on Mustang Island beaches. Many of the turtles needed treatment before they could be successfully released.



*Tony assisting with the rescue of "Harley," a spinner dolphin. Photo courtesy of Lynn Amos.*

Although Tony retired from UTMSI in 2003, he has directed and helped conduct the work of the ARK as a volunteer since his retirement. Much of the work of the ARK is conducted by volunteers and Tony has inspired fierce dedication and loyalty in his fellow volunteers. Tony is a personal hero to so many who know of his work and his life-long commitment to coastal wildlife recovery makes him a true environmental hero.



The "Big Tree" – State Champion Coastal Live Oak. Photo courtesy of Kendal Keyes, TPWD.

Noted for its significant ecological, conservation, and historic value, Big Tree Ranch is an 82-acre property on Lamar Peninsula in Aransas County. Located along the shoreline of St. Charles Bay, a secondary bay of Aransas Bay, it is directly adjacent to the Lamar Unit of the Aransas National Wildlife Refuge (ANWR) and Goose Island State Park (GISP), both of which are included in the boundary of the Mission-Aransas NERR. Big Tree Ranch contains live oak-red bay woodlands, coastal prairie, and wetlands.

I recently worked with staff of the Texas Parks and Wildlife Department (TPWD) to draft a proposal requesting funds to purchase the Big Tree Ranch property for conservation purposes. The proposal was submitted to the Coastal and Estuarine Land Conservation Program (CELCP), which provides applicants with matching funds to purchase significant coastal and estuarine lands or to establish conservation easements on such lands. Lands acquired with CELCP funds are protected in perpetuity for enjoyment by future generations.

CELCP recognizes the importance of the NERR system and agreed to dedicate a minimum of 15% of 2011 funding to projects that benefit Reserves. The Mission-Aransas NERR saw this as a great opportunity to work with its partners to acquire funding for the purchase and conservation of local lands. The Big Tree Ranch property was identified as a potential project at a workshop held to discuss the CELCP funding opportunity with local partners and stakeholders. With help from the Nature Conservancy, Aransas First,

the City of Rockport, and NERR staff, TPWD was able to verify the Big Tree Ranch owners' willingness to sell, find the necessary matching funds, and draft a strong proposal.

If purchased, Big Tree Ranch will provide an uninterrupted corridor that connects protected lands from the southern portion of Lamar Peninsula north to ANWR. Most importantly, the purchase of this property will conserve additional habitat for the highly endangered population of Whooping Cranes. Whooping cranes travel to ANWR and the surrounding area each winter and can frequently be seen wading and feeding on the shoreline adjacent to Big Tree Ranch. Acquisition of this property will ensure that these majestic birds have the undisturbed habitat they need to continue to recover from near extinction.



Map showing the location of the Big Tree Ranch property in relationship to Goose Island State Park, the Aransas National Wildlife Refuge, St. Charles Bay, the "Big Tree," and the Mission-Aransas NERR boundary.

In addition to providing significant conservation and ecological value, Big Tree Ranch also has important historic value. It surrounds three sides of a six-acre property on which sits the "Big Tree," a beloved and beautiful historic site that attracts numerous visitors



*St. Charles Bay shoreline of Big Tree Ranch property. Two Whooping Cranes can be seen wading among the remnants of a derelict pier and two more can be observed in the distance. Photo courtesy of Kendal Keyes, TPWD.*

each year. The “Big Tree” is part of GISP and was named State Champion Coastal Live Oak in 1969. It is thought to be one of the largest and oldest trees in the nation and has allegedly been a hanging tree, a pirate’s rendezvous, and a ceremonial site for Native Americans. Acquisition of Big Tree Ranch will ensure that this important historical tree can be viewed in its natural surroundings for years to come.

If the proposed project is funded, Big Tree Ranch would be added to GISP and managed by TPWD for conservation and recreation.



Visit: <http://lighthouse.tamucc.edu/MissionAransas/HomePage> to get real-time water quality and weather data, collected at the Mission-Aransas NERR SWMP stations.

## GREEN TIP

Wondering how you can be more “green” at the office?

Try turning off the lights every time you leave the room – even if it’s just to go to the rest room.

Also, take time to turn off all your electronics before leaving for home at the end of the day. You can even go the extra step of unplugging your energy strips and surge protectors - this will ensure that none of your electronics draw power overnight. Finally, try going paperless – distribute company information and post company materials online whenever possible.



# CALENDAR OF EVENTS

## MAY

- 15 ARRIVAL OF SCARLETT ISABEL PALMER (SALLY’S NEW BABY GIRL)

## JUNE

- 2 EROSION AND SEDIMENT CONTROL TRAINING, 1-4:00 PM AND 6 - 9:00 PM, BEACHFRONT PAVILION, ROCKPORT / CTP
- 2 HERONS HAPPEN! FUND-RAISER FOR THE ANIMAL REHABILITATION KEEP, 5 - 7:00 PM, PELICAN LANDING RESTAURANT, PORT ARANSAS
- 22 ECOSYSTEM DYNAMICS OF COPANO BAY PANEL DISCUSSION, 6 - 8:00 PM, UTMSI, PORT ARANSAS / CTP

## JULY

- 13-15 INTRODUCTION TO COASTAL GEOGRAPHIC INFORMATION SYSTEMS (GIS) WORKSHOP, 8 – 5:00 PM; TEXAS A&M UNIVERSITY - CORPUS CHRISTI / CTP

## SEPTEMBER

- 16-19 THE ROCKPORT HUMMINGBIRD FESTIVAL: FALL MIGRATION OF NATURE’S FLYING JEWELS / EXPLORITAS

## NOVEMBER

- 3-5 GULF ESTUARINE RESEARCH MEETING, UTMSI, PORT ARANSAS
- 7-11 EXPLORING THE GULF COAST / EXPLORITAS



**MISSION ★ ARANSAS  
NATIONAL ESTUARINE  
RESEARCH RESERVE**

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**MISSION ★ ARANSAS NATIONAL ESTUARINE RESEARCH RESERVE**

**STAFF**

Reserve Manager: *Sally Morehead*  
Executive Director: *Georgia Neblett*

**STEWARDSHIP**

Stewardship Coordinator: *Dr. Kiersten Madden*  
Cooperating Scientist: *Dr. Ken Dunton*  
Animal Rescue: *Candice Mottet and Amanda Terry*  
Research Assistant: *Anne Evans*

**COASTAL TRAINING**

Coastal Training Program Coordinator: *Chad Leister*

**EDUCATION**

Education Specialist: *John Williams*  
Exploritas Coordinator: *Reta Pearson*  
Volunteer Coordinator: *Carolyn Rose*  
Education Assistant: *Richard Lamb*



**RESEARCH**

Research Coordinator: *Dr. Ed Buskey*  
Research Assistants: *Cammie Hyatt, Britt Dean, and Amy Fujarski*  
Cooperating Scientist: *Dr. Tracy Villareal*  
Graduate Research Fellows: *Jena Campbell and Bridgette Froeschke*



*The Mission-Aransas National Estuarine Research Reserve includes 185,708 acres of federal, state, and private land, on the south Texas Coast. A great diversity of habitats are contained within the Reserve, including tidal marsh, riverine, marine, prairie, mangrove and woodland. Protecting these habitats, encouraging resource conservation and providing opportunities for research and education are among the major goals of the Reserve. The Reserve is administered by the University of Texas Marine Science Institute and the National Oceanic and Atmospheric Administration, in partnership with governmental agencies and private organizations. Mission-Aransas NERR partners include the United States Fish and Wildlife Service, Texas General Land Office, Texas Parks and Wildlife Department, Texas Department of Transportation, Coastal Bend Bays & Estuaries Program, Coastal Bend Land Trust, Nature Conservancy, Fennessey Ranch, and Aransas County / City of Rockport.*