



Photo by Diane Humes

Galveston Bay Area Chapter - Texas Master Naturalists August 2011

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President's message by Diane Humes, President 2011

June 2011 was hot, dry, and very busy. Members of our chapter and FOGISP conducted Camp Wild at Galveston Island SP. The fourth and fifth grade campers had lots of fun fishing, crabbing, kayaking, seining, birding, beachcombing and studying wildlife. At the flag raising ceremony on the last day, we took the opportunity to surprise Mary Jean Hayden, Camp Wild founder, with the GBAC-TMN Honorary Master Naturalist award. We did well; she was nearly, but not totally, speechless!

Hard on the heels of Camp Wild came Treasures of the Bay, our chapter's workshop presenting a "mini master naturalist" course to local teachers. Fourteen teachers enthusiastically embraced the ideas and will return this fall for extended training, possibly leading to MN certification.

Our chapter's goals are stewardship and education of ourselves and others about our local environment. Exposing the next generation to nature's wonders is vitally important; we all must make it our personal mission to share our enthusiasm with someone else, especially a young person. Please consider helping next year with Camp Wild and/or Treasures; everyone can help do something.



Photo by Root Choyce

Next Chapter Meeting

August 4th
Carbide Park

Oyster Recovery from Ike

By

Jennie Rohrer
TPWD Biologist

Bring a dish to share

The new Agri-Life extension office at Carbide Park is beautiful! And Julie is **very excited about her new corner office!** All extension services will operate from Carbide Park, beginning now.

The **State MN Meeting will be held at Mo Ranch, in Hunt, TX, October 21 - 23.** Please save these dates and consider helping our chapter have a big presence. It will be more fun with you there! Also, save **October 6 for our chapter's 10th Anniversary Celebration.** You won't want to miss this Master Naturalist extravaganza!

Thanks to all who have worked so hard to make so much happen. We couldn't do it without you, but if you need a rest, take a break - re-charge your batteries. That's what summer is for. **See you August 4 at the chapter meeting!**

August and September Activities

ADVANCED TRAINING OPPORTUNITIES

Chapter Meeting - August 4th

Presenter: Jennie Rohrer, TPWD Biologist
Oyster Recovery from Ike
6:30 Social, 7:00 Presentation, 8:00 business meeting
Carbide Park 1 Hour AT

Water Monitoring - Saturday, August 13th

Texas City Prairie Preserve, bring your lunch
New and re-certification
9:00 am - 3:00 pm 5 Hours AT
Presenter: Mel Measeles, Project lead: Frank Budny

Fall Flowering Prairie Plants- Thursday, Sept. 22nd

ABNC
9:00 am - Noon 3 Hours AT
40 maximum participants
Presenters: Dick Benoit and Diane Humes
Project Lead: Ellen Gerloff
Registration: Emmeline Dodd txdodd@aol.com

Ongoing

Galveston Island State Park

Every Saturday- Beach Explorations
Every Sunday- Bay Explorations
10 am. Meet at the Welcome Center
Tours are 1 to 1 ½ hours long.
Prepare for sun and mosquitoes.
Bring water and family.

Heritage Book Study Group

Mondays - September 12, October 3, November 7
Texas City Prairie Preserve
10am-Noon 2 hours AT
Contact: Elsie Smith (409)945-4731
We are currently reading:
Texas Earthquakes by Cliff Frohlich and Scott D. Davis

STEWARDSHIP OPPORTUNITIES

Project of the Year:

Prairie and Wetland Restoration Horseshoe Marsh

The Project of the Year at Horseshoe Marsh will continue through out the year. We are restoring island habitats ravaged by Hurricane Ike. If you can attend please, contact Dick Benoit rbenoit@aol.com

Ongoing Activities:

Tuesdays -

- Sheldon Lakes State Park, Contact: Tom Solomon crandtr@sbcglobal.net
- Texas City Prairie Preserve, Contact: Marybeth

Arnold mbarnold@aol.com

Wednesdays - Wetland Restoration Team, Contact:

Marissa Sipocz m-sipocz@tamu.edu

Fridays- Prairie Friday, ABNC, 9 - Noon Contact: Dick Benoit RBenoitTEX@aol.com

EDUCATION-OUTREACH VOLUNTEER OPPORTUNITIES

Bay & Island Adventures - Volunteers teach six in-class hands-on modules (water, Galveston Bay, wetlands, coastal prairies, birds, Gulf of Mexico) on a once a month basis in Dickinson and Galveston Schools. Presenters and helpers are needed for eleven 4th and 5th grade classes. Contact: Sara Snell snellsw@verizon.net.

Education and Outreach Committee - Lots of work to do and we can use your help developing a speakers bureau; responding to requests for exhibit booths, fieldtrip guides and presenters, planning Camp Wild and Treasures of the Bay; and developing a library of education-outreach materials. Contact Sara Snell snellsw@verizon.net.

Partner and Associate Programs Many organizations sponsor guided walks and education programs or need volunteers to man their nature center. Go to www.gbamasternaturalist.org click on "Volunteer Opportunities," then click on "Partners, Sponsors and Associates" for the list, then click on their website for information and contact.



Look at all the empty space in the new office!

Prairie Ponderings by Dick Benoit

Monitoring prairies is a very useful tool in prairie restoration. At Armand Bayou Nature Center Prairie we have been monitoring its prairies since the fall of 1999 when Barron Rector and John Jacob established 42 transect lines. These lines are 105 feet apart usually in North to South or East to West directions, and established in areas that acted as controls or are annually mowed and controlled burned areas. Each



spring and fall trained volunteers would drop a $\frac{3}{4}$ meter quadrant every 5 feet between the poles on a transect line and a list of 35 plants would be identified and checked if they were present and then placed in the appropriate column of the transect sheet. These plants varied from desirable prairie plants to undesirable or even invasive plants. The hope was that over time it could be determined if a controlled, burnt, or mowed area's restoration value could be determined. This experience has not only been useful in determining restoration value, but also helped those working on the project become more familiar with the prairie ecosystem.



There has been an ebb and flow of names through the history of this project. Jim Crabb, Laura Bradley, Diane Humes have been consistently on the mentoring team's

list, usually three persons, since very early. But names like Colin Shackelford, Mark Kramer, Barron Rector, John Jacob, Marissa Sipocz, Candy Donahue, were listed when the first transect markers were 1-foot square garden walking stones painted red. Other names on the transect sheets that occur through the years include: Carolyn Lovell, James Blueberry, Mike Jaschek, Nathan Veatch, Ken Russell, John Thayer, Terry Sheely, Barb Nowakowski, Art Chapman, Liz Gimmler, Marybeth Arnold, Sarah Patterson, Bob Patterson, Ray Parker, Gail Gawenis, Beth Frohme, Anne Huysman, Sue McManamen, Jay Cross, Chatt Smith, Jim Waligora, Sam Williamson, Jim Frantz, Jim Duron, Sandy Wilson, Jay Cross, Scott Manusov, Rose Presley and Royce Pendergast.



After its eleventh season the study continues to evolve. Laura Bradley has twice attempted to statistically examine the data collected and this year some modifications were added to the procedure. The same basic list was used, but a more quantitative set of values were added and space for other plants were added to the bottom of the list.

We will meet before our fall collection of data and determine how the modifications have aided us in determining restoration efforts.

Wetland Wanderings by Diane Humes

Extreme hot and dry weather across the southern U.S. this year has made perfect conditions for the wildfires currently burning in California, Arizona, New Mexico, Texas, Colorado, Georgia, and Florida - raging across nearly 5 million acres. Texas is being hit especially hard by this drought, with conditions among the driest ever recorded, as explained in an ABC News release, June 20, 2011:

"We rank behind 1918 and 1956 because they were preceded by other dry years, making the water shortages that much more acute," John Nielsen-Gammon, the Texas state climatologist, said. "The period from March through May was the driest ever, as were the periods from December through May and February through May. The period of October through May was also the driest ever and also the driest eight consecutive months on record."



Photo by Steve Upperman

The Galveston Bay Area is feeling the effects of drought. Our soil is dry and cracked, trees are dying, bayous and ponds are evaporating. Water-dependent critters are seeking shelter in deep pools, migrating elsewhere, finding a means of going into stasis, or dying. High temperatures, persistent strong southerly winds, and no rain with runoff have caused salinity levels in our bayous to mimic those of Galveston Bay proper. In Armand

Bayou, the salinity at the mouth of Clear Lake is 18 ppt - half-strength seawater! Levels upstream at Bay Area Park and Big Island Slough are 10-11 ppt.

Although Armand Bayou is an estuarine habitat, these salinity levels are extreme and will surely affect the freshwater-loving species in the bayou. In fact, high salinity DOES appear to be having an effect on two of our favorite invasive species; water hyacinth is looking bad and nearly absent even in the upper reaches, while the elephant ears in Horsepen Bayou appear to be dying a slow death. It's an ill wind that blows no good.....

Our area's ecology has been shaped by the extremes of our climate over millenia, perhaps such as we are currently experiencing. We are the Texas coastal tallgrass prairie, where trees were to be found in riparian areas only. The native plant and animal species we know today surely have within themselves the genes that have survived previous extremes. Do we have enough remaining habitat as a reservoir? Will this be a victory of the natives over invasives? Will this become a new normal?

The Wetland Restoration Team is restoring freshwater wetland habitat, but Phase II planting at Sheldon Lake SP is going slowly until we get some rain. There is no water in the freshwater ponds, but plants are holding their own. Both wetland plants and team members are hardy and adaptable; the Team has instead installed a demonstration wetland in front of the new headquarters building at SLSP, taking advantage of the potential for rainwater from a large culvert.

In addition to Phase II planting at SLSP, the Team will be planting a teaching wetland at CCISD's Education Village on Hwy 96 in League City. This wetland will be in a wonderful location, next to the Dick Benoit Prairie Park, and give students K-12 the opportunity to learn first-hand about wetlands. Planting will begin in August and continue into September. To join the planting and to mentor student planting, contact: Charriss York, cyork@tamu.edu or Mary Edwards, mcedwards@neo.tamu.edu at the Coastal Watershed Program.

Think globally, act locally.

Heritage Book Study Group^{by Nelda Tuthill}

July 11, 2011

The group discussed *Land of Little Rain* by Mary Hunter Austin (1868-1934). The book focused on the arid and semi-arid regions of California between the High Sierras south of Yosemite. She wrote of the region's climate, plants and animals and of its people: the Ute, Paiute, Mojave, and Shoshone tribes; European-American gold prospectors and borax miners; and descendants of Hispanic settlers.

August 1, 2011

The Group will view and discuss a video entitled *Land of Little Rain* starring Academy Award-winning actress Helen Hunt portraying Mary Austin as a poet, novelist, critic and playwright, exercising her feminist ideals and

becoming one of the first and foremost American writers to document the complex culture and heritage of the American southwest.

September 12, 2011

The Group will begin discussing *Texas Earthquakes* by Cliff Frohlich and Scott D. Davis published by University of Texas Press. One reviewer wrote "When nature goes haywire in Texas, it isn't usually an earthshaking event. Though droughts, floods, tornadoes and hail all keep Texans talking about the unpredictable weather, when it comes to earthquakes, most of us think we're on terra firma in this state. But we're wrong! Nearly every year, earthquakes large enough to be felt by the public occur somewhere in Texas."

Camp Wild is a Fun Event^{by Tawy Muehe}

Camp Wild is a special event for kids and it is the first one of the summer. Children in the 4th and 5th grades are able to learn about the sea life and wildlife at Galveston Island State Park. They are able to learn to kayak, fish, crab, seine for bay and beach creatures, bird, and dissect squid, fish, and owl pellets.



Photo by Frank Budny

These experiences develop life long memories and encourage students to learn and develop a career in environmental sciences.

Most of the specialists and leaders come from the GBAC - Texas Master Naturalist organization. The specialists and leaders are delighted to share their knowledge with these students and it is exciting to watch children's enthusiasm as they touch, feel and learn about the world around them.



Photo by Root Choyce

The motto of the Galveston Bay Area Chapter is 'Food, Fun and Friendship' which is generously shared with these students. The Friends of Galveston Island State Park provide the financial and physical resources to make this event happen each year. Camp Wild was started in the summer of 2001 and every year it has grown and students and adults look forward to participating in the event.

A big "Thank You" to all volunteers who helped with the event.

Image Seekers - Who We Are by Master Gardener Margie Jenke

The *Image Seekers* Photo Club is open to all Master Gardener and Master Naturalist volunteers. We meet at 1:30p.m. (unless otherwise noted) on the second Wednesday of each month at the Galveston County Extension Office.

The **primary** objective of the *Image Seekers* Photo Club is to provide photographs for the Master Gardener and Master Naturalist Digital Images Library. The Digital Images Library was developed and is maintained to support educational programs conducted by the Galveston County Extension Office in collaboration with its core of dedicated Extension volunteers. Photographs are utilized in PowerPoint presentations, publications, newsletters, print media articles as well as our Master Gardener and Master Naturalist websites. If you need photographs for a presentation, seminar, newsletter or other publication, and the Digital Images Library doesn't have what you need, Image Seekers will try to provide you with the photos you require. Please allow ample time for the group to capture, review and edit them for your use.

The **secondary** objective of *Image Seekers* is to promote better understanding of each individual's camera as well

as educating each other on becoming better photographers.

We will cover every function of your camera with hands on demonstrations at our meetings. You will also learn how to use both the artistic and the technical side of photography for creating that perfect shot. Book reviews, camera accessories and how to take incredible macro shots are examples of topics that will also be covered.

Image Seekers is known for its engaging meetings, guest speakers, and field trips. Laughter prevails throughout each of these events. Beginner to Advanced Master Gardener and Master Naturalist photographers are welcome to join us. You may become a member of Image Seekers simply by attending a meeting. Be sure and bring your camera and your camera's manual.

Any photographer who would like to have their photographs critiqued is welcome to join in at any of the *Image Seekers* monthly meetings. The next meeting is Wednesday, August 10th at 1:30pm at the county extension office.

Treasures of the Bay by Jamie Ashby

"The teachers have been talking and we all agree this is the best workshop we've ever had!"

This was an actual comment made by one of the 14 teachers who attended the highly successful Treasures of the Bay workshop in June.



Photo by Nathan Veatch

Treasures of the Bay is a mini-Master Naturalist program which jam-packs as many of our training activities as possible into four days of interactive learning. From cruising Armand Bayou, to exploring the Texas City Dike, to observing specimens in Galveston Island State Park, the teachers were always on the move and highly motivated by constant hands-on activities.

A highlight of the week was a visit to the National Marine Fisheries sea turtle facility.

The workshop concluded on Friday at Texas A & M in Galveston with dissection activities that teachers felt could easily be repeated in their classrooms. Some of the most beautiful gyo-taku prints were created by this very talented group of teachers! In keeping with the Master Naturalist motto of "Fun, Food, and Friends", participants were delighted by the delicious boiled shrimp luncheon which was provided by Cliff and Tawy Muehe. Teachers who successfully completed all four days received a certificate and a \$50 stipend. Many thanks go out to all the Master Naturalists who helped make Treasures of the Bay a huge success!

What is “Treasures of the Bay”? by Jamie Ashby

Teachers learning from Master Naturalists, professors, and biologists

Realizing the importance of protecting our environment

Exploring habitats of all kinds

Analyzing fish and squid through dissection

Seining the Gulf and Bay

Understanding the need for “going green”

Resources galore—shell collections, posters, handouts!

Enjoying “Food, Fun and Friendship”

Sifting the sand for beach treasures



Offering teachers hands-on experiences

Finding living organisms at the Texas City Dike

Touring the National Marine Fisheries Services sea turtle facility

Hiking the prairie at Texas City Prairie Preserve

Enjoying a shrimp boil on Friday

Bayou cruising at Armand Bayou Nature Center

Accepting the responsibility for teaching students about nature conservation

Yea, for Treasures of the Bay!



Plastic to the Sea: Musings on Sea Turtle Patrol 2011 by Diane Humes

Sea Turtle Patrol for me means walking the beaches of Galveston, enduring sun, wind, and, yes, drenching rain, searching through the sargassum, jellyfish, and human detritus for signs of sea turtles. Until now my evidence of the existence of sea turtles has come from plastic bags, bottles, and light sticks with the characteristic diamond-shaped bite marks. But on June 28, I had the opportunity to meet Bennie, a very good turtle, a Galveston girl and

faithful to her hometown, a headstart Kemp's ridley from 1992. She had been found by an early-rising jogger, laying a nest of 113 eggs on west Galveston Island.

This was Bennie's second nest this season; two weeks earlier she laid a nest containing 104 eggs, also on west Galveston. This is very encouraging news for Kemp's ridley sea turtles and also for Galveston turtle patrollers!

Steve Alexander and I were happy to meet Bennie and have the opportunity to watch her get a radio-satellite tracking device. We will be able to follow her movements and learn more about her life at www.seaturtle.org.



Bennie - Photo by Diane Humes

Sea Turtle Patrol often seems more like “trash patrol”. And, most of the trash is made of plastic, a chemical entity that has been present on planet Earth for less than a century. The very qualities that make plastics desirable - strength, durability, and inertness, resistance to degradation, transparency, low density, low cost and disposability - help explain why plastics are the dominant forms of litter - marine debris - found in the world's oceans and washed up on beaches.

Where does the trash come from? It is thought that 70 - 80% of marine debris is land-based. Wherever you live, your watershed belongs in the global watershed that ultimately leads to the ocean. Plastic floats or is blown by the wind and the ultimate receptacle is the sea. Also, ocean dumping still occurs, either deliberately (legally and illegally) or inadvertently - remember all the rubber duckies, Nike shoes, and hockey sticks lost in shipping across the Pacific! And, a lot of beach trash originates on the beach.

The world's oceans are not just full of floating beach toys. Plastic debris is often placed in four categories, based on size, function, and location. Microlitter is very small (< 0.5 mm) granules of polyethylene, polypropylene, and polystyrene, usually found in the sediments, and may originate from cosmetics - facial scrubs and exfoliants - or air blasting particles used to strip paint from aircraft or clean engine parts. Mesolitter is larger debris, sized 0.5-10 mm, usually translucent and transparent, rounded or rod-shaped, often the raw material or feedstock of plastics manufacturing, sometimes called nurdles.

Macrolitter fragments are visible from shoreline or aboard ship, in size up to 10-15 cm. The megalitter category includes the fragments measured in decimeters. Macrolitter and megalitter items are those found on the Top 10 beach litter list.

Plastic fragment densities in the world's oceans have been counted in the thousands to hundreds of thousands of pieces per square kilometer. Plastics become brittle when exposed to light and high temperatures; this process is slower in the ocean, especially when the plastic is below the water. Plastic does not ever decompose, but breaks into ever smaller bits - remaining stable and chemically identifiable as plastic even at the microscopic level.

What are some consequences of the load of plastic debris in the oceans? Large numbers of marine vertebrate and invertebrate animals become entangled, particularly by discarded fishing gear. Some seabirds are known to forage on nurdles; albatrosses may preferentially choose red and pink plastic artifacts such as bottle caps and fishing floats. Turtles and some whales seem quite attracted to plastic bags and plastic sheeting, to their detriment. Fish and other animal species also ingest plastic debris. A recent study in the north Pacific gyre found plastic in the stomach contents of lanternfish at intermediate depths. Estimates suggest fish there may be eating 12,000 to 24,000 tons per year of plastic debris.

Ocean Conservancy's Top 10 categories of litter found in 25 years of beach cleanups:

1. cigarette butts
2. food wrappers / containers
3. caps and lids
4. cups, plates, forks, knives, spoons
5. plastic beverage bottles
6. plastic bags
7. glass beverage bottles
8. aluminum beverage bottles
9. straws / stirrers
10. rope

In addition, floating plastic debris provides a substrate for colonizing species. Megalitter items often become a multispecies habitat for groups of species that would rarely be encountered together in nature, including algal dwellers, rock shore taxa, and pelagic species. This suggests that floating plastic has the potential to be a significant vector in the worldwide dispersal of marine organisms. For example, beach debris in Florida carried a bryozoan previously known from Brazilian waters and a nylon rope mass stranded in New Zealand carried Indo-Pacific oysters.

The World of Monarch Butterflies by Mary Vogas

Twenty-one naturalists and interested people attended the monarch butterfly workshop on June 23 at Texas City Prairie Preserve given by Vic Madamba. It was very educational and a fun-filled workshop. We learned many things about our Texas state insect, the monarch butterfly.



Photo by Frank Budny

place that they move through and some even winter in Texas. The monarchs that migrate to Mexico live to be about eight to nine months of age; the ones that don't migrate might live around two to five weeks.



Photo by Sarah Patterson

For example, we learned the number of eyes the monarch butterfly has, how it breathes and how to tell a male and a female adult butterfly apart! The monarch butterfly undergoes four different stages in its life cycle which is called complete metamorphosis. This whole process takes about thirty days. The stages are egg, larva (caterpillar), pupa (chrysalis) and adult. The caterpillar sheds its exoskeleton five times and gets a little larger each time it molts.

There are two populations that migrate. One population west of the Rockies migrates to California and the other population east of the Rockies migrates to the mountains west of Mexico City. There are hundreds of millions of them that migrate to Mexico. Texas is the number one

Vic also taught us how to tag butterflies! Through the Monarch Watch, you can get the tags that you stick to one of the wings of the butterfly. You have to be very careful not to get the oils from your fingers on the sticky part of the tag or else they might not stick very well. Tagging has helped define the timing and pace of the migration.

If you are interested in tagging, please go to www.monarchwatch.org. Also, you can ask Vic; he is a wealth of information! We also received seeds of milkweed to plant, so there can be more habitat for the monarch butterflies as they travel our way!

Naturalist Humor



Sign up for Texas Master Naturalist Listserv

What is the Texas Master Naturalist Listserv? The LISTSERV is an excellent means of learning and sharing information about the Texas Master Naturalist Program. The TMN LISTSERV averages about 1 or 2 messages a month, however sometimes, like leading up to the annual meeting and registration, messages are more frequent. The LISTSERV is moderated so spam and other messages of that sort do not come through. This is not different from the messages Alan Wilde sends.

How to I subscribe to the list? To join the TMN LISTSERV mailing list, send an email to listserv@listserv.tamu.edu with the following command as a single line in the body of the message: subscribe tmn Firstname Lastname where Firstname and Lastname is your real name. You will then receive a response asking you to confirm this request, giving you both a web and email option for confirming your subscription

Random Shots



Food!



Fun!



Friendship

Guppies from Julie

Our New Office!

Summer is proving to be a time of change for the Galveston County Extension Office! We have moved to our new building at Carbide Park in La Marque. We have lots of indoor space with multiple meeting rooms and great outdoor space. There is even the opportunity to enhance our Carbide Park Prairie Demonstration Project. Please plan to stop by for a visit!



Our new address is 4102 B Main Street (FM 519), Carbide Park, La Marque, Texas 77568. The office phone numbers have not changed. You can reach me at 281-309-5063.

10 Year Celebration!

In preparing for the office move, I have sorted through years of program materials (including calendars dated back to 1989!). I have found many photos filled with the smiles and friendships of many Master Naturalists. The photos are a wonderful reminder of how much you have accomplished and how we have grown.

Please plan to join us to celebrate the Chapter's 10 year anniversary on October 6, 2011! Come and visit with Master Naturalists (past and present) and share the Food, Fun and Friendships that make the Galveston Bay Area Chapter one of the best chapters in the state! Stay cool and enjoy your summer!



Julie in her new office - Photo by Diane Humes



Improving Lives. Improving Texas.

Texas AgriLife Extension Service programs serve people of all ages regardless of socioeconomic level, race, color, sex, religion, disability, or national origin. The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Court of Texas cooperating.

The Midden

This newsletter is published by **Galveston Bay Area Chapter - Texas Master Naturalists.**
 Texas AgriLife Extension Service
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For comments on this issue or to suggest content for future issues, please contact **Nathan Veatch at 281-480-6985** or by e-mail at nveatch@swbell.net.

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The Midden Deadline

For the October Issue

September 5

If you have Advanced Training or Volunteer opportunities, please submit information to Diane Humes treimanhumes@earthlink.net

