

The Midden

Photo by Nathan Veatch

Galveston Bay Area Chapter - Texas Master Naturalists

June 2010

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(Photos by Diane Humes,
Dick Benoit, Vic Madamba,
Barbara Rabek, Allan
Treiman, Nathan Veatch,
and Nelda Tuthill)

It's All Happening Right Now! by Diane Humes, President 2010

The April Chapter meeting at Carbide Park was attended by 106 people, including the Spring Training Class, which is about to come to a grand and successful conclusion - please congratulate and welcome our 19 new members! If you weren't at the meeting, you should have been. Our speaker, Michael Hunt, told us ALL about dolphins and whales in the Gulf of Mexico and let slip that sperm whales live in the Gulf, too. Look it up - in addition to a couple of thousand sperm whales, the Gulf also apparently has giant squid, *Architeuthis*, the sperm whale's food. Well, I am impressed and excited - we found dolphins - whale watching trip anyone?

Also during the meeting, the chapter voted unanimously to confer upon our own Julie Massey the first-ever Honorary Texas Master Naturalist membership. Per our By-Laws, this award may be conferred upon "a person who has made a substantial contribution to the furtherance of the activities of the chapter," elected by two-thirds vote of the membership present at a General Chapter Meeting. Jim Duron presented Julie with the dragonfly certification pin and we were all excited and happy when Julie gave her characteristic "jump for joy."

Our chapter has 170 members, thanks to our emphasis on the 3 F's - food, fun, and friendship. This is in the range of what seems to be a maximum and ideal group number, such that it can effectively function and everyone still have a relationship with everyone else. Much larger and a group begins to need a strict hierarchical structure - or a police force! Not to be facetious, but the board and committees work hard to keep organized and running smoothly; we certainly appreciate any input on how to make improvements.

Finally, I must report that Mary Jean Hayden (Past President, Camp Wild, Treasures of the Bay, Junior Master Naturalist) has sold her house and is moving to Dallas to be close to her family. Go ahead, weep, wail, gnash your teeth, but please wish her well - our loss is Dallas' gain. And, we will surely see her again - at the beach, probably. From HMS Dragonfly (December 2009, by Fran Ryan and Margaret Canavan):

"Miz Hayden is a model of a Texas Master Nat'ralist
And as she moves to Dallas by our Chapter she'll be sorely missed.
She's held forth at the State Park and has led Camp Wild repeatedly.
We know that folks up north of us will welcome her amazedly.
In short, in matters vegetable, animal, and aqueous,
She is the very model of a Texas Master Naturalist."

Next Chapter Meeting

June 3rd

Beautiful Birds

By

George Regmund
Armand Bayou Nature
Center

**Location: Walter Hall Park
League City**

June and July Activities

ADVANCED TRAINING OPPORTUNITIES

Chapter Meeting - June 3rd

Presenter: George Regmund, Armand Bayou Nature Center, will cover Beautiful Birds
6:30 Social, 7:00 Presentation, 8:00 business meeting
Walter Hall Park 1 Hour AT

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

First Monday of every month

Texas City Prairie Preserve

10am-Noon 2 hours AT

Contact: Elsie Smith (409)945-4731

We are currently reading:

The River of the Mother of God by Aldo Leopold

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. Our next work date is June 24th. If you can attend please contact Dick Benoit rbenoit@aol.com

Sheldon Lakes State Park Wetland Restoration

Workdays: Saturdays June 5 and 19, 9 AM until noon

Fun on the Flats, workday on Bolivar Flats, June 12, from 10 AM until noon

Horseshoe Marsh Prairie workday, Thursday, June 24, from 9 AM until noon

Ongoing Activities:

Mondays - Reitan Point, second and fourth, Contact:

Liz Gimmler gimmler@consolidated.net

Tuesdays -

- Sheldon Lakes State Park, Contact: Tom Solomon crantr@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 OPPORTUNITIES

Camp WILD

Week of June 7th 8:30-1:30pm daily

Galveston Island State Park

For information, contact Mary Jean Hayden

bean1219@earthlink.net.

Treasures of the Bay Educator Workshop

June 15th - 18th 9am-3pm

Various locations

Contact Julie Massey jmassey@ag.tamu.edu.

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.

Jr. Master Naturalist Club - Volunteers guide twenty-five 5th graders of Galveston's Austin Magnet School as they conduct experiments, build models and do other activities that give them a deeper understanding of the six topics taught in the Bay & Island Adventures program. The club meets every Wednesday after school and takes six Friday fieldtrips. If you have an interest in conducting one of the modules, helping guide the kids through the activity or observing what goes on, 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.

Prairie Ponderings by Dick Benoit

Tom Solomon and Jim Duron have continued the leadership of the prairie restoration project at **Sheldon State Park Prairie**. They have over 7,000 one-gallon plants on the ground in the nursery ready to plant. About 12 multichapter volunteers have aided them. They do their artistry every Tuesday from 9 until about noon.

Armand Bayou Nature Center Prairie has Tom and Jim as the mainstays leading this restoration effort with the Stewardship Department and up to 20 volunteers. They have about as many plants ready to plant also. This spring they also had a project using the greenhouse as a nursery. On April 9 they had a planting with Deer Park High School students, Boy Scouts on April 10, and San Jac students on May 7.

Texas City Prairie Preserve had a Project of Month planting on April 20 that drew 18 volunteers to plant almost 300 one-gallon plants and bump up 130 seedlings. They have a second project planned on May 8. Marybeth Arnold and Sara Snell mainly guide these projects.

Our Project of the Year has been restoration at **Horseshoe Marsh Prairie**. This is a project that helps the Houston Audubon attempt to repair damages by Hurricane Ike. We have had two workdays so far this year and have one planned for May 20. Also there is Fun

on the Flats on June 12 and another on June 24. Winnie Burkett and Flo Hannah are the Audubon members in charge of this project.



If you are interested in experiencing the prairie in a more relaxed mode, try the evening Prairie Schooner Rides on June 25 and July 23 at Armand Bayou Nature Center.

Wetland Wanderings by Diane Humes

May was Wetlands Month! Activities abound with which to continue to celebrate the wonder of wetlands in June. To learn more about wetland projects, contact me at treimanhumes@earthlink.net.



The Galveston Bay Foundation is working with students at area schools and hosting a Marsh Mania planting day at Sheldon Lake State Park. We have also just completed a Living Shoreline project in Dickinson, with more planned in the future.

The Wetlands Restoration Team has continued planting at Sheldon Lake State Park, but is spending May in the classroom honing and learning wetland plant identification skills. An annual event, the plant ID class focuses on **obligate wetland plants** used for Team freshwater restoration projects, plants that can only thrive in wet environments.

Plant identification is essential - "If you can't name it, you don't know it!" But, how do wetland plants survive such a harsh environment? They are completely inundated by water at least two weeks of the year, by definition. Plants live with water-logged soils and lack of oxygen, water currents, changes in depth and salinity, and occasional drought. So, what do those rushes, bulrushes, sedges,

beakrushes, arrowheads, spikerushes, and grasses do that is different from dry land plants?

Wetland plants have several important physiological adaptations. Lack of oxygen would kill most land plants,



but many wetland species have **aerenchyma**, a spongy, porous air-filled tissue that provides channels for gas exchange from the leaves to the roots and helps the plant to float. Some species pump oxygen to the roots. These successful strategies greatly increase the oxygen pressure

compared to non-adapted species; often the O₂ "leaks" from the roots into surrounding soil - possibly to the benefit of other organisms - oxidizing iron in the soil and leaving the telltale red streaks that indicate wetland soil.

Adaptations to wetland life also include flexible stems and leaves and fibrous root systems for dealing with moving water and changing water depths. Increased depth can cue a stem or leaf to elongate. Changes in depth and salinity could have deleterious effects on cellular osmotic pressure; to maintain internal pressure, some coastal species actively extrude or exclude salt. Other adaptations may include: **adventitious roots** (arising from stems), and **pneumatophores**, which are spongy, aerial roots, "breathing roots," seen in mangroves with special air channels (**lenticels**) for gas exchange.

And, many wetland plants use an alternate metabolic pathway called C₄, used by many cereal crops and prolific weeds. This pathway is more efficient at using carbon and works at higher heat and light intensities than most other plants, resulting in greatly increased primary productivity. So, there may be many reasons that wetland plants do so well, if you remember two important details, "Green side up and just add water!"

Raptor Workshop and Monitoring by Dick Benoit

The Raptor Workshop on March 8, 2010 was given by Diane Humes and Dick Benoit. Diane gave an excellent power point with booklet on the "Owls of the Upper Texas Coast." Dick gave a power point on the hawks of the Upper Texas Coast and shared a DVD on the Spring Hawk Watch at Grimbsy, Ontario. The workshop was attended by 40 participants.

The Hawk Watch at Sylvan Beach, LaPorte, Texas was the fifteenth consecutive watch. It ran from the first of

March through the end of April and 31,072 hawks were counted during the watch. This was the fourth highest total during the duration of the watch. One hundred and thirty-five hours were logged thanks to the dedication of the following: Ken and Dorothy Russell, Bob and Sara Patterson, Beth Frohme, Diane Humes, Marybeth Arnold, Steve Upperman, Gib Larson, Jerry Pels, Allan Treiman and Juliane Gross.

TMN on Dolphin Watch by Mary Vogas

On April 17, thirty-three naturalists and friends boarded the *Earl Milam* at the Texas A&M campus on Pelican Island to venture into the Galveston Ship Channel to watch for dolphins. There were two trips. These trips were led by Michael Hunt, primary investigator of the Dolphin Research Team and a professor at UHCL. Each three hour trip traveled to the jetties and back to the Texas A&M campus dock. The ship's captain did a good job maneuvering the boat through the ship channel getting us very close to many of the dolphins that made for good photo opportunities. Observers enjoyed seeing single dolphins and groups of dolphins. They particularly liked seeing multiple dolphins surface and swim together. Also, we saw quite a few brown pelicans, especially when we arrived at the jetties.

The group enjoyed being able to ask Michael Hunt their

dolphin questions. Some of the things learned by our naturalist group were that the dolphins are more active



when not feeding and some information on family life and dolphin behavior. Also, many thought this was a fabulous

opportunity to observe dolphins and received a better understanding of the gulf/bay geography and dolphin populations.

For days before the trip, we didn't think we would be able to go because of the weather. However, the weather turned out great! This was a very worthwhile trip for our

naturalists group and we hope we can do another trip in the future! For now, if you are interested in a trip to the Amazon, Michael Hunt is planning to take a group there this summer. If interested, please contact him at huntm@uhcl.edu for details.

Food, Clothing, and Shelter on Matagorda Island by Diane Humes



Economists speak of the basic human necessities of "food, clothing, and shelter." But what about living on Matagorda Island, a barrier island in the Gulf of Mexico, an ephemeral place, in geologic terms, about 5000 years old? Made from shifting sands and constantly contoured by

wind and wave, a barrier island is only temporarily stable. Inhabitants of the island must cope with searing sun, gale-force winds, washover by the sea, continual salt spray, a shifting substrate low in nutrients, unreliable ground water and recurrent droughts. What life strategies do plants and animals need to meet the requirements for adequate food and water, shelter from the sun, wind, and tides, and reproduction to ensure the continuation of the population?

Plants and animals that establish themselves on a barrier island are colonizers, hardy species that can survive in tough circumstances. Plants generally arrive by seed or fruit, dispersed by birds, wind, or water. Animals may fly or swim or float; the mainland is 5 miles distant. After they arrive, they must survive and reproduce; diversity for all species is much lower than on the mainland.



From April 25-27, 37 master naturalists, spouses, and friends trekked out to the island to see for themselves. We traveled on the *Skimmer*, piloted by Captain Tommy Moore out of Fulton, TX. Matagorda Island is as inhospitable to humans as other creatures; we had shelter in the bunkhouse, but brought all other provisions, including drinking water. There was electricity; we provided our own food, fun, and friendship!



Matagorda Island National Wildlife Management Area is jointly administered by TPWD and USFWS. It was a cattle ranch and, in WWII, a bombing range. Evidence of its former uses is disappearing; USFWS is removing old culverts that drained the fields to

promote grazing land. Now most of the 56,000+ acres are returning to wetland habitat for myriads of shorebirds and other waterfowl. In fact, it is not now a separate island; since Cedar Bayou filled with sand, it is joined to San Jose Island.

Most vegetation is low and herbaceous and most plants are annuals. Few trees with woody stems survive the environment. Widespread and rapid growth of roots from buried stems makes these pioneer plants good sand binders; low profiles avoid wind damage. Most beach plants are succulent with small, inconspicuous flowers, which open early or late in the day or at night, to lessen water loss. The top four plant families on the island are the composites, grasses, legumes and sedges (Asteraceae, Poaceae, Fabaceae, Cyperaceae).



Matagorda Island is inhabited by insects (mosquitoes!), reptiles - we saw an alligator, amphibians, birds, and nine mammal species. Mammals need relatively more food and water and a larger foraging space to maintain their energy levels, so are fewer and more widely-spaced than on the mainland. Amphibians also have difficult lives on the island, since they need fresh water and cannot live in salt water. Thirty-seven bird species nest on the island, but many more use it as a way-station.



all-time low in 1941 of 16 birds. The Aransas flock, the only wild, migrating flock, now numbers 250 birds.

Matagorda Island is an isolated place - hard to access. It is bounded by the Gulf of Mexico and beaches and low dunes, and the bayside filled with oyster reefs, barely above water. Birds take refuge on beach and reef; dolphins surf in the wake of our boat as we travel back and forth. Oysters, fish, and crab abound in the waters. Man's influence would seem small, but for the flotsam of human commerce among the sand dollars and shells.



The bird life found on the island in April is particularly interesting. Island trekkers observed eighty-four species of birds, including beautiful spring migrants - painted and indigo buntings, orioles, tanagers, and grosbeaks taking refuge in the vegetation and many shorebirds feeding in the wetlands.

We are all incredibly fortunate to have been able to visit the island - perhaps it gave us a taste of what Galveston Bay and Galveston Island were like before the big city moved in. Many thanks to Nathan Veatch for arranging the trip, the boat, our guide, and the weather, and the AT Team and Emmeline Dodd, Diane Olsen, Diane Humes, Ellen Gerloff, and Steve Alexander for taking care of details. All 37 participants had a great and instructive visit to Matagorda Island, filled with food, fun, and friendship.



The aplomado falcon, *Falco femoralis septentrionalis*, extinct in south Texas since the 1930's, and re-introduced to the island in 1998, gave us thrilling flybys. The falcon is succeeding on Matagorda Island, preying on sparrows and other grassland birds.

Another endangered bird species inhabiting the Matagorda area is the whooping crane, *Grus americana*, a winter resident across Aransas Bay on the mainland at



Aransas National Wildlife Refuge. Every spring the whooping cranes fly to Wood Buffalo National Park in Alberta and the Northwest Territories of Canada to breed and nest, returning in the fall, hopefully, each pair of birds with a chick. Ray Kirkwood, Mid-Coast Chapter TMN, spoke of the history of the efforts to save the whooping crane from extinction and increase its numbers from the





(Editor's note: The message below was recently received for publication in The Midden)

Dear Galveston Bay Area Chapter, Texas Master Naturalists:

We thank you for your recent visit to Matagorda Island. Your many contributions to our cause are greatly appreciated, because there are so many of us and so few turkeys, hogs, deer, and people that it makes our survival extremely difficult. Your recent presence on the island infused us with new life and a sense of purpose. Because of you, life will go on. So, please return next spring to our peaceful island paradise. Our offspring will be glad to see you.

Yours truly,

The Mosquitoes
Matagorda Island, Texas



GBA MN Heritage Book Study Group by Nelda Tuthill

The Heritage Book Study Group met Monday, May 3, at Texas City Prairie Preserve to begin the study of *The River of the Mother of God*, a collection of essays by early 20th century Wisconsin environmentalist, Aldo Leopold.

As an introduction to Mr. Leopold, the group viewed a DVD, "Aldo Leopold: Learning from the Land." The film featured first-hand accounts by his daughter telling the story of how he and his family learned from the land and each other at their weekend retreat, the "Shack."



Most of the Book Study Group members work with children in Master Naturalists' activities. They appreciated the learning methods that Mr. Leopold used with his five children.

The Group will continue discussion of the collection of essays at the next meeting, Monday, June 7. Rachel Carson will be the author of the next book to be studied by the Group. For July and August the Group will be reading *Edge of the Sea*. "The edge of the sea is a strange and beautiful place ..." This is how Rachel Carson opens the door on another world where the sea meets the land.

The GBA MN Heritage Book Study Group meets the first Monday of each month at Texas City Prairie Preserve, 10 AM to 12 NOON.

Guppies from Julie

Summer is upon us and that means Camp Wild! If you have not had the opportunity to volunteer with Camp Wild, don't miss out this year! Camp Wild is held from June 7 to 11, 2010 at Galveston Island State Park!

Camp Wild is a blast and there are all sorts of volunteer opportunities! If you would like to be a Camp Wild volunteer, please contact Mary Jean Hayden at bean1219@earthlink.net! See you at camp!

June is also the month for the Treasures of the Bay Educators Workshop! This mini-Master Naturalist course for teachers is a great way to help teachers bring the wonders of our area to their classrooms and their students! The workshop will be held from June 15-18, 2010. The workshop is free this year thanks to a generous grant!

Plan to join us at the Treasures Workshop - bring a potluck dish to share with the teachers, greet the teachers or help the instructors! We may have as many as 24 teachers sign up for the workshop so plan to volunteer and introduce the teachers to the Master Naturalists "Food, Fun and Friendship" way of learning! If you would like to volunteer, please contact Bill Ashby at 281-482-1526 or jashby@comcast.net.



The Texas Horned Lizard population is increasing at Matagorda Island National Wildlife Refuge.



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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

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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



The Midden Deadline
For the August Issue

Monday, July 5th

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