Snow-on-the-Prairie by Diane Humes

Galveston Bay Area Chapter - Texas Master Naturalists October 2015

Table of Contents

President's Corner by Maureen Nolan-Wilde, President 2015

Over the past months, our community has been transitioning to a new volunteer hour reporting system – VMS. It has been quite a journey and one that I am certainly happy to see completed. Because of the efforts of the VMS team, training feedback has been extremely positive. Kudos to team leader Jim Duron, as well as Beth Cooper and her training assistants. On behalf of the team, I'd like to thank each of you for your support and positive attitudes during this transition.

So what is new in the chapter? The Education Outreach committee is implementing a new speaker database and is looking for members to join their team. In addition, a new committee has been formed to implement a Master Naturalist Emeritus program. The objective of this program is to host midday sessions at Carbide for chapter members who may not be able to attend our evening meetings or volunteer/advanced training sessions for a variety of reasons. Our plans are to include a volunteer project for these members, as well as an environment of food, fun and fellowship.

During the summer, I've had a chance to attend some of our partners' annual and volunteer thank-you meetings. It is so gratifying to see them recognize our work and its impact. Thank you for all you do.

Don't forget the TXMN State Conference this month. It is not too late to sign-up for a great weekend of advanced training and networking with other chapter members throughout the state.

I look forward to seeing you on the beach, at the bay, in the prairie, or in the classroom. Be safe.

Next Chapter Meeting

October 1st

Making the Grade: How Healthy is Our Bay?"

By

Anja Borski
Report Card Coordinator
Galveston Bay Foundation

At Carbide Park


Photo by Mel Measles

Prairie Ponderings – A Small Army by Diane Humes

Early in the morning, arriving at Armand Bayou Nature Center for the last Prairie Friday of August, the parking lot was already jammed with vehicles - a pretty good clue that something extraordinary was happening. For the second day in a row, a crew of fifty Shell Oil workers were already busy with tools and heavy equipment, taking care of some great projects on ABNC's "wish list".

Thanks to Shell and its small army, the nature center quickly acquired a roof over the antique Shell gas pump, a concrete pad next to the carpenter's shop, a tall and sturdy deer fence around the sugar cane enclosure, and a beautiful shade cover over the prairie platform. Prairie Friday volunteers also thanked them for lunch: seems too many lunches were ordered; they generously offered to feed us; and we were able to fill the void - sometimes it works to be in the right place at the right time!

Materials for the prairie platform cover were donated by GBAC Master Naturalist and ABNC volunteer Laura Bradley's family, in memory of Bill Inskeep, her father, who enjoyed the peace and joy found contemplating nature's beauty. We remembered him and thanked Laura, then gazed out over the prairie from our shady position, looking out over the largest expanse of restoring prairie around on the following Prairie Friday, when we dedicated the platform. Be sure to visit all these sites as you come out to view the Snow-on-the-prairie and exuberant tall stems of Big bluestem soaring to the sky - it's that time of year!

Almost, but not quite, in spitting distance of ABNC proper, the Nature Center has acquired the management of a unique 24-acre prairie on Space Center Blvd. This site, choked with Chinese tallow trees until recent days, contains large mima mounds - very unusual habitat - favored by the endangered plant Texas prairie dawn, *Hymenoxys texana*. The tiny prairie dawn, thought extinct, but now known from three Texas counties - Harris, Fort Bend, and Liberty - is dormant this time of year. After its re-discovery, Julie Massey had the job of preparing the paperwork for its listing as an endangered species and holding a contest for school children to select its common name. Thanks to ABNC, this portion of its habitat is being protected. The tallows have been removed, to prepare for prairie restoration on this site to improve habitat for all prairie species.

Prairie lovers, please mark your calendars for November 12-14, 2015, when the Southern Plains and Prairies Conference will be held at the Houston Zoo, sponsored by the Coastal Prairie Partnership (CPP) and Native Prairies Association of Texas (NPAT). The first two days will feature expert speakers and sessions on prairie restoration, talking prairies, creating landscapes for birds, pollinators, and other wildlife, and prairie economics. Optional field trips will occur on the third day, which unfortunately, conflict with ABNC's Martyn Farm Harvest Festival. But, you can register for any or all days and registration is now open. See the website for details and to register: southernplainsconference.org. Everybody you know will be there, for sure!

Beautiful things are happening on all our prairies: you will be glad you went out to see.

Wetland Wanderings – Summer Water Quality Research by Charlene Bohanon

Water quality in Galveston Bay is important to us all - whether to provide healthy habitats for aquatic life, seafood that we can safely eat, or a pleasant place to recreate. We are lucky that the overall state of water quality is pretty good, but at times there are hot spots for fecal bacteria which prohibit or restrict harvest in over 50% of oyster waters and limit recreation. The good news is that water quality continues to improve, thanks to community efforts (www.galvbaydata.org) and that citizen water monitoring can lead to many positive outcomes (Stepenuck and Green, 2015).

Galveston Bay Foundation's (GBF) Water Monitoring Team, which is part of the Texas Stream Team, has grown from four active monitors on the bay to over forty in the past three years and many are Texas Master Naturalists from the Galveston Bay Area Chapter! In addition to sampling regularly at their own sites, several volunteers have assisted GBF's summer interns in conducting short term research projects for the past three years. This research focuses on the unique water quality challenges in marinas including stormwater runoff, low circulation, and boat sewage. It is the only research currently being conducted in our local marinas and is providing very useful information to guide decision making.

Preliminary results from Lakewood Yacht Club have shown that there is not a significant difference between bacteria concentrations during dry weather and wet weather. This information helps water quality planners, marina owners, and boaters understand that other factors may be at play other than just stormwater runoff. However, there have been significantly higher bacteria concentrations at sites with low surface flow rates compared to those with high circulation. This baseline data has prompted GBF to explore the effectiveness of bubblers like those that Watergate Yachting Center uses as a cost-effective best management practice for not only increasing dissolved oxygen, but also reducing bacteria concentrations in marinas.

Another study compared pump-out station locations and bacteria concentrations at Marina Del Sol and Lakewood Yacht Club. Pump-out stations allow boats with onboard toilets to send their sewage to a wastewater treatment facility instead of discharging it overboard. Marina Del Sol's station is located closer to the internal portion of the marina with lower circulation and Lakewood Yacht Club's is near the exit with higher circulation. Both pump-out stations exceeded the bacteria standards for contact recreation, but Marina Del Sol's station was significantly higher than all other sites without pump-out stations and Lakewood Yacht Club's was not, further showing the benefits of promoting good circulation in marinas. Further investigation is needed to understand why the pump-out stations appear to be sources of bacteria. This could be due to the common practice of priming certain types of pumps with lake water or rinsing the hose off in the lake after pumping out.

While these results are preliminary, they have revealed helpful information that is driving change and this would not have been accomplished without the valuable help of the Texas Master Naturalists. More details from these studies can be found at www.galvbay.org/citizenscience and for information on how to become a volunteer on GBF's Water Monitoring Team, please visit www.galvbay.org/watermonitors.

Beach Patrol - More Sand, Less Seaweed by Steve Alexander

Galveston Island's first installment of sand at the west end of the seawall seems to be holding for now. Although the surf has claimed some sand along the lower end of the beach, the dunes are still intact and covered by a thick carpet of green.

More sand is now on the way, as the second installment of rebuilding Galveston Island's beachfront has begun. This time, the plan is to deposit 725,000 cubic yards of sand along the stretch from 61st to 81st street. This will essentially create a new beach some 20 blocks long in front of the seawall where there hasn't been a beach before.

In the August issue of *The Midden*, I mentioned the lack of seaweed on the beachfront this year, especially compared to the deluge we've experienced over the past few years. No complaints from tourists, but oddly enough, offshore fishermen have complained about the absence of seaweed, since their favorite fish like to hang out with it.

Well, it turns out that the explanation for the absence of seaweed this year is quite simple: a shift in the currents has caused the great masses of seaweed to be carried elsewhere. And elsewhere this year happens to be parts of the Caribbean from Cancun to Barbados. So this summer, instead of us, these areas experienced the problems and challenges associated with seaweed-covered tourist beaches.

In the next issue, I'll report results of 2015's sea turtle nesting season along the Texas coast.

Sea Turtle Nesting Season 2015 by T. J. Fox

Each year between April and July hundreds of volunteers patrol Texas beaches from Mexico to Louisiana in an effort to locate the nests of Kemp's ridley sea turtles, the Texas state sea turtle and a critically endangered species.

We started the 2015 Kemp's ridley turtle nesting season with confidence. By April 1 when patrols started, over 100 volunteers had been trained, the patrol schedule for the month of April was ready and on-line (thanks to Don Wilkerson) for all the volunteers to consult, and Joanie Steinhaus with the Sea Turtle Restoration Project (overall coordinator for the effort) had backpacks ready at three locations for the volunteers to pick-up and use while on patrol. Of the 100 plus volunteers, almost half were members of GBAC.

Our responsibility was to patrol the upper Texas coast from Bolivar down through Surfside. Elsewhere along the Texas coast other volunteers were ready to begin patrols. Everything was in readiness. Everything except the sea turtles.

Historically, nesting season for Kemp's ridley sea turtles begins in early March about two hundred miles below the Texas/Mexico border at Rancho Nuevo, Mexico, where more than 40,000 females were filmed nesting in 1947. As the Gulf waters warm, females move up the coast to nest along the Texas coast. By early April nesting females have usually begun to arrive along the extreme southern coast of Texas.

But, by April 1 not a single nest had been reported anywhere. Even the beaches around Rancho Nuevo were quiet. Everyone was holding their breath. Was this to be another bad year for nesting Kemp's ridley sea turtles?

The effort to reintroduce the Kemp's ridley to the Texas coast began over 30 years ago in 1985 when eggs from Rancho Nuevo were harvested, transported to Texas, hatched and released along the Texas coast. These hatchlings are known as "head-start" turtles. This ten-year effort, the Head Start Program, which saw 20,000 hatchlings released along the Texas coast, was in response to a decline in nesting females along the Texas Gulf Coast of Mexico to fewer than 300 in the mid-1970's.

Starting in 1995, beaches from South Padre Island to Corpus Christi have been patrolled during nesting season. Patrols along other Texas beaches began in subsequent years. The first of these "head-start" females nested on the Texas coast in 1996. Since then the numbers have risen continually through 2012 when 206 nests were reported along the Texas coast.

But, in 2013 the nesting numbers fell to about 150. In 2014 they fell again to 119. Was 2015 to see another plunge? Mexico was also experiencing large drops in nests. Where were the turtles? Why are the nesting numbers in such sharp decline? No one has an answer.

Turtle/Nest Patrollers along the Texas coast ride in UTV's where funding is available and walk when necessary. For the past two years all patrols along the upper Texas coast have been on foot.

Our walking patrol effort involved almost 100 volunteers who patrolled six different routes of approximately two miles each. Routes were patrolled twice-daily, six days per week. This season volunteers walked over 3,225 miles and spent 1,560 hours on the beach.

Photo by Preston Fox

Finally all our efforts were rewarded; on April 27 the first Texas nest was reported at Padre Island National Seashore. The next day a nest was reported on Bolivar. Then activity really began to pick-up, with reports of one to two nests daily. On two successive days seventeen and sixteen nests were found! By the end of the patrols on July 19, 159 nests had been located along the Texas coast, reversing the downward trend.

Along the upper coast, we also experienced a dramatic increase in nests. Last year we had three and this year eleven. Bolivar was the most productive with five nests. Three nests were located on Galveston and three on Surfside. With such good news, Turtle Patrol volunteers hope to witness further exciting nesting success next year - come out to the beach and see.

Pay It Forward – Introducing my Grandchildren to Birding by Pat Coldewey

This is the first in an occasional series of unedited stories by Master Naturalists introducing their love of the natural world to others. - Editor

It all began two years ago. I was recently retired and was looking for an interesting hobby to get me away from the television and out of the house. I have always enjoyed "watching" birds and putting out bird feeders and birdhouses, but never really had the time to study them and enjoy their beauty. I started making short birding day trips to Sabine Pass, the Bolivar Peninsula, around the Trinity and San Jacinto Rivers and to Houston to visit my daughter and her family. Liz, Daniel and the kids lived near Braes Bayou and I began noticing that many of the shorebird species I had seen on my other ventures were "hanging out" along the bayou – great blue heron, yellow-crowned night heron, osprey, cormorant and ibis. We started taking walks along the bayou looking for birds and before long the kids were hooked! I, of course, was thrilled! I bought them one of the waterproof guides and picked up a "Backyard Birding" book for them at Feather Fest. Their enthusiasm only grew and they were now able to identify birds for me.

At a family reunion in Beaumont, Emily (then 5) and her little sister, Olivia (3), ran up to me as I was visiting with relatives and said, "MiMi, we just saw an egret in the ditch!" You can imagine my delight but more exciting was the look on my family's face when these two shouted that out. My reply, "I am teaching them about birds!" Proud MiMi, right? We have now visited nature centers all around Houston, explored the Willow Water Hole near Missouri City and have spent two summer vacations in Galveston, getting up close and personal with the shorebirds along West Beach and at Galveston Island State Park. My next purchase was small youth binoculars. They love them and carry them along when we go birding together.

It is amazing to me how children absorb information. Emily can now join in the conversation when we are observing birds and trying to decide what species they are. Olivia recently showed her mother a picture of a bird in a children's book. The author was calling the bird a cardinal and Olivia pointed out to her mother that the author was wrong! In the picture it was clearly a robin red breast and she had identified it. Remember those birds I mentioned that we were always watching along Braes Bayou? Well, an osprey took up residence in a large tree along the bayou, not far from their house. The osprey would sit on a limb that hung out over the water and watch for fish. We would always look for him when we drove by. Liz called one day to tell me that James (little brother, now 3) shouted out as they drove by, "Mom, look, the osprey isn't on his perch!" Now, what do you think about that?

The family has grown -- Emily is now 7, Olivia 5, James 3 and Baby Clare 1; and, they recently moved to Virginia. I went for a visit this May and on one of our first shopping trips to Lowe's I purchased a wrought iron hanging basket stand, two bird feeders and birdseed. We placed it in a spot where the whole family could watch and observe. Before long the birds arrived – cardinals, blue jays, gnatcatchers and nuthatches.

On Mother's Day we ventured out on a hike in Shenandoah National Park in the Blue Ridge Mountains. With Daniel's keen eye, we spotted our first Eastern towhee rummaging under some trees. A few days later we encountered Canadian geese on a stroll along Preddy Creek in Barboursville, VA, and then an Eastern bluebird in their neighborhood. Liz bought the family a Readers Digest "Book of North American Birds" with wonderful descriptive information and I ordered a great DVD, "Your Backyard," that helps young birders identify 18 common feeder birds by sight and sound. We are

continuing to learn together and I am so proud of this love of birding that I can share with them.

Here are a few text and phone messages I have received since I returned home from my trip:

Daniel – "We just saw a male cardinal feeding a female cardinal in the backyard."
Liz – "I saw a wild turkey today!"
James – "MiMi, a tufted titmouse came to our feeder!"
Liz – "Daniel saw an owl on his run yesterday."

My advice to other parents and grandparents, "Get those kids outside!" There is so much of nature to explore and share with them – priceless memories guaranteed. In the words of Henry David Thoreau,

Each new year is a surprise to us. We find that we had virtually forgotten the note of each bird, and when we hear it again, it is remembered like a dream. Reminding us of a previous state of existence . . . The voice of nature is always encouraging."

Other suggested books are *How to Raise a Wild Child* by Scott D. Sampson, *What the Robin Knows* by Jon Young and, of course, *Last Child in the Woods* by Richard Louv.

HAPPY BIRDING!!

Noah: Build Me an Ark by Diane Humes

And God said unto Noah: "Make thee an ark of gopher wood...Come thou and all thy house into the ark; for thee have I seen righteous before me in this generation. Of every clean beast thou shalt take to thee by sevens, the male and his female: and of beasts that are not clean by two, the male and his female. Of fowls also of the air by sevens, the male and the female; to keep seed alive upon the face of all the earth. For yet seven days, and I will cause it to rain upon the earth forty days and forty nights; and every living substance that I have made will I destroy from off the face of the earth." (Genesis 6: 14 and 7: 1-4)

In the Old Testament account of Noah and The Flood, God expressed his dismay at the wickedness of man and sent a great flood over all the Earth, covering even the mountaintops with water, to "take him out" - all except for Noah and his family. All aboard the Ark - Noah, his family, and all the living creatures Noah collected - survived to re-populate the planet after the floodwaters receded.

Parable or ancient history, the National Museum in Prague, Czech Republic, is currently hosting a wonderful exhibit on world biodiversity called "Noah's Ark" - even building an ark to hold all the animals! Despite the cute, fuzzy animals on the advertisement, this is a serious exhibit about zoogeography, invasive species, extinction, and preservation. If you can't get to Prague, or prefer concentrating on our local species, the Houston Museum of Natural History has just opened a very wonderful exhibit on the flora and fauna of the Texas Gulf Coast in the Farish Hall of Texas Wildlife. In addition, a special exhibit opens October 2 at HMNS: "Biodiversity in the Art of Carel Pieter Brest van Kempen" - 50 original paintings of unusual species in their distinctive habitats.

Museums, parks, and zoos are arks, in a way, preserving plant and animal species that may have lost their homes in the wild. Much can be learned by studying museum collections, which have become repositories of the last remaining examples of extinct animals, including 1600 passenger pigeon specimens, mostly preserved in Europe. From its collections, the National Museum in

Prague displayed animals and plants from the entire world - representatives of all major biomes: Africa, Arctic, Australia, Galapagos, South America, Madagascar, Asia, and Oceans. The animals were lifelike and in their habitats - animal tracks, sounds, and scat, as are the specimens at HMNS!

Living things have been on earth for ~ 4 billion years, existing as single-celled life forms for the first 3 billion years. The modern classification system - NOT the one we learned in school, at all - has five kingdoms, of which the plant kingdom has changed the least. Many protozoans are considered more closely related to animals or plants than to other protozoans; therefore, modern kingdoms now consist largely of unicellular protozoans, branching out occasionally to include multicellular organisms - animals, plants, and fungi.

Tens of billions of species have gone extinct during the last 4 billion years - you need only peruse the fossil collections of any natural history museum to learn that. During this vast time, the continents have wandered, oceans have come and gone, as have mountains and glaciers. The earth environments we recognize as home have existed for about 10,000 years, since the last glaciation. Modern humans have been around for a comparatively short time - 200,000 years - and have gained dominion over the Earth, although there is scholarly debate about the exact time-frame during which humans have had such significant planetary effect. But, whether it is 7,000 or 200 years, there is no doubt that people have disturbed the world's ecosystems for their own purposes - terraforming, if you will - farming, lumbering, mining, hunting, fishing - in the process draining wetlands, irrigating deserts, damming rivers, removing mountains, creating great holes, and polluting.

Humans have, deliberately or accidentally, transported plants and animals around the globe, creating "novel" ecosystems everywhere, filled with non-native and/or invasive species. Naturalized non-natives are difficult to spot, especially if they arrived 300 years ago in ballast water. Plant species have crossed oceans in the name of gardening: North American white pines, eastern cedar, and black spruce grow at a Czech castle (American plants were all the rage in the 18th century); Chinese tallow trees fill our landscape (seemed like a good idea, once); and water hyacinth (very pretty in ponds) from South America floats around the whole world.

The International Union of Conservation for Nature (IUCN) keeps track of the status - extinct, extinct in the wild, critically endangered, endangered, vulnerable, near threatened, least concern, data deficient, not assessed - of species worldwide and has attempted to assess and monitor all living species on the planet for the last 50 years. The data makes up the IUCN Red List, which now includes 73,686 assessed species, of which 22,103 are threatened with extinction.

The IUCN lists are a basis for conservation initiatives throughout the world. In Texas, 100 species of animals and plants are considered Threatened or Endangered, including the whooping crane, Texas Prairie Dawn, and the Houston toad. Invasive species, habitat loss, and pollution are the main problems for our flora and fauna.

The IUCN Red List is incomplete, because the total number of species on Earth is unknown, with estimates ranging from five to 30 million; fewer than 2 million species have been formally identified, according to the Millennium Ecosystem Assessment, an international synthesis of scientific information on ecosystem change.

Biodiversity is the foundation of life on Earth. At the same time, no other feature of the Earth has been so dramatically influenced by man's activities. By changing biodiversity, we strongly affect human well-being and the well-being of every other living creature.

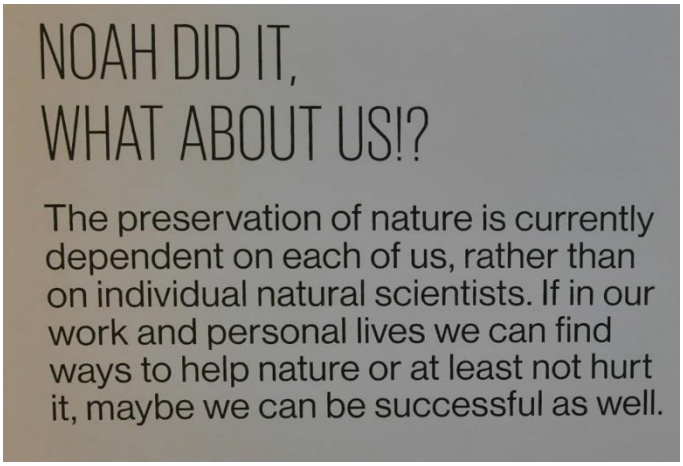
So, with one third of all assessed species considered threatened, and less than half of all known species assessed, and perhaps two to ten times more yet to be discovered, with changes in biodiversity more rapid in the past 50 years than at any time in human history, it would appear as though there might be a problem. People are trying; a global target to reserve ten percent of terrestrial land for nature has been met; in fact, almost twelve percent of land is preserved in more than 100,000 nature reserves, with more every year. But, are the world's parks enough space for all species?

A professor of tropical ecology, Dr. Dan Janzen, was doing cutting-edge research in Costa Rica. Already launched in a brilliant career, he realized that he could retire someday, credited with a stack of highly insightful

research papers, but the rain forest he studied and loved very likely would be gone. Changing course, he began figuring out how to save and restore the rain forest at Guanacaste, which became the basis for Costa Rica's national park system, now comprising 32 national parks, 51 wildlife refuges, and 8 biological reserves - places master naturalists like to visit!

Edward O. Wilson, considered the greatest living naturalist, has written a new book, *Half-Earth: Our Planet's Fight for Life*, sure to be controversial, in which he suggests that in order to save the world's biodiversity, humans need to retreat to half the Earth, leaving the other half to the plants and animals. We need to wait until 2016 for publication, but his idea might not be too difficult. Several studies agree that 10% of all land surface on earth is now urban, about 10% is wilderness - remote, but perhaps not all protected. The remaining 80% is pretty well connected by roads, with about 40% devoted to agriculture, but with low human density. We all can study, learn, and figure out how to reserve the most needed habitats for nature - each doing whatever we can.

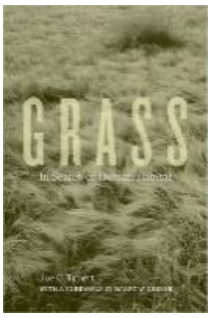
Perhaps the message at the exit to the National Museum in Prague had it right:



Heritage Book Study - Review of *Grass: In Search of Human Habitat* by Madeleine K. Barnes

The Heritage Book Study Group meets the first Monday of each month at the AgriLife Extension Office, from 10 am until noon. We welcome your participation and look forward to seeing you!

During the summer months of June and July, we read an intriguing book, *Grass: In Search of Human Habitat*. The author, Joe C. Truett, former senior biologist with the Turner Endangered Fund, took subjects near and dear to prairie preservationists - grassland ecology and range science - and wove them into aspects of his own upbringing in the Piney Woods of East Texas.

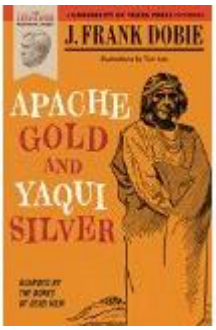


His writing has been described as being "from the heart", entertaining, and informative. He combines a love of cowboy culture and homespun introspection into his writing with the credo of East Texas - questioning and comparing what he observes with what he is told by "authorities". He learned a major principle from his father: "Be careful whom you believe".

Studying plant ecology, he learned that grasses produce most of the calories consumed by people, yet account for only 2% of the world's 400,000 species of vascular plants. He explores in this book the grass/prairie composition of species and fascinating interrelationships between the large and small grazers; bison, antelope, deer, and prairie dogs and predators like coyotes.

Dr. Truett considers humankind's love affair with grass and its need to modify and control this habitat, going back to savanna-like landscapes of early hominids, translating to food and safety. Later, he says, human affluence played a large part historically in the importation of grass species to meet the desired goals of shortgrass for greens, fairways, lawns, and streetside embellishment. This same affluence has led to demands to preserve and return wildlife back to private and public spaces. He poses this question for contemplation: "Will we ordinary folk be able somehow to defy our age-old pattern of exploiting to the limits of our technologies? By just about any reliable measure, colossal challenges lie ahead of us. They will command all the creative energies we can muster, out on the grass."

We are currently reading the first section of 150 pages of *Apache Gold and Yaqui Silver* by J. Frank Dobie, a wonderful classic to be discussed on September 14th, with the last half of the book read for discussion on October 5th. Beginning November 2nd, we will be discussing the first half of an autobiography, *Adventures of a Frontier Naturalist, The Life and Times of Dr. Gideon Lincecum*, a "must read" for a Texas Master Naturalist. Please join us for the reading of this book!



Sea Center Texas Trip by Frank Budny

On July 30, 2015, 21 Galveston Bay Area Master Naturalists visited Sea Center Texas and the Brazosport Museum of Natural Science. At Sea Center Texas, we began our fish education with a power point presentation on ichthyology prepared by Roy Morgan of the Cradle of Texas Chapter. His presentation covered many fish-related topics including the evolution of fish, classes of fish, fish anatomy, biology, and identification. Unfortunately, due to our time constraints he had to run through parts of his presentation quickly. He was however, willing to share his slides with our chapter and there will be copies available in our library for those who would like to study it further. It's worth a look.

We then took a tour of the aquaria at Sea Center. Roy also led us on this tour as he described the marine environment and creatures in each of the habitat tanks. The aquaria cover several different marine habitats. The salt marsh exhibit has stone crabs, killifish and juvenile reds. In the coastal bay aquarium we viewed species such as catfish, black drum, croaker, and a large tripletail. The coral reef tank had corals, urchins and anemones.

Granite boulders recreate a man-made jetty in the jetty aquarium. This exhibit is complete with barnacles and other shelled animals as well as spotted seatrout, pinfish, sheepshead and flounder. The artificial reef aquarium represents an offshore platform. Its typical residents include triggerfish, grouper and eel. The 50,000 gallon Gulf of Mexico showcases fish normally found in the open waters of the Gulf such as Jack Crevalle, Moray eels, tarpon, and snapper.

The next activity was the hatchery tour. This is where redfish and speckled trout are raised to assist nature in maintaining a strong recreational fish population in Texas Bays. Mature male and female fish are brought to the hatchery and placed in large environmentally controlled drums. Careful control of light and temperature induces them to spawn. Eggs are transferred to incubators and hatched. After 2 or 3 days they are moved to outdoor ponds where they grow to about finger size. They are then loaded into tank trucks and transported to bays to enhance the natural population.

After lunch, we traveled to the Brazosport Museum of Natural Science. We listened to a presentation on shell collecting by one of the master naturalist volunteers at the museum and then looked at the vast collection of shells. The malacology section of the museum has over 14,000 mollusks and related specimens from Texas, the region, and around the world. The Texas exhibit is a beach display with examples of probably every shell found on Texas beaches. The museum also has other sections featuring exhibits on fossils, wildlife, geology and archeology. Brazosport is an excellent museum. The displays are all outstanding and definitely worth a visit.

Adopt-A-Beach - September 26! by Diane Humes

Thousands of Adopt-A-Beach volunteers remove an average of 500 tons of trash each year from Texas beaches. Through two large scale cleanups, and a number of smaller ones, Texans arrive by the thousands to show their dedication to keeping Texas beaches clean.

Since 1986, more than 476,000 volunteers have removed 9,000 tons (more than 17 million pounds) of trash from Texas beaches and estuaries.

Help us clean up our shores today!

Sheldon Lake Team Wins Mayor's Award! By Maureen Nolan-Wilde

I wanted to share the news: the Sheldon Lake State Park Prairie Wetland Restoration has just been awarded the Proud Partner Award for 2015 to be awarded by Houston Mayor Annise Parker through Keep Houston Beautiful. This restoration project has been a multi-year effort, beginning in 2000, aided by master naturalist volunteers from Galveston Bay Area and Gulf Coast Chapters, and other dedicated master naturalists and folks who live near the park, but are not master naturalists. The prairie and wetland teams work with Marissa Sipocz, Wetland Restoration Team leader, and continue to restore both prairie and wetland habitat on this formerly farmed land.

Congratulations to all for this wonderful accomplishment and well-deserved recognition. Sheldon Lake State Park wetlands and prairies are a beautiful example of what can be done - one plant at a time.

(Editor's Note: Letter altered as noted below.)

Keep HOUSTON Beautiful

31st Annual
Mayor's Proud Partners Luncheon
Mayor Annise Parker

Outstanding Proud Partner
Mr. and Mrs. John Nau
Silver Eagle Distributors, L.P.

August 24, 2015

Ms. Marissa Sipocz
Wetland Program Manager,
Texas Coastal Watershed Program
Texas A&M AgriLife Extension Service
1250 Bay Area Blvd.
Houston, TX 77058

Dear Ms. Sipocz,

Congratulations! In recognition of your tremendous efforts on behalf of our city, Keep Houston Beautiful is honored to inform you that **Sheldon Lake State Park Prairie Wetland Restoration** has been selected to receive the **Proud Partner Award** in the 2015 Mayor's Proud Partners program.

(Logistical portion of letter removed.)

Again, congratulations on this well-earned achievement. We look forward to seeing you at this year's luncheon.

Sincerely,

Robin Blut

Robin Blut, Executive Director

Cc: Dr. Douglas Steele, Director, Texas A&M AgriLife Extension Service

Way to go!

Guppies from Julie

Fall is a time for planning the next year when you work for Texas A&M AgriLife Extension and Texas Sea Grant! As I meet with my colleagues to plot and plan, I get to reflect on your accomplishments. It is a very good time for me.

In August, Texas Audubon and TERN hosted a volunteer appreciation dinner. Many of our chapter members were recognized for their work with colonial waterbird monitoring, recovery and habitat restoration! TERN actually bestowed a few of our members as "royalty" or Royal TERNs! These dedicated volunteers who will become the leads for the program in the next year. Congratulations to our TERN program volunteers!

Congratulations also go to Becky Edmondson, Class of 2005! Becky lives in Houston and has marshalled her resources to create two amazing community projects, the Willow Waterhole and a community garden in her neighborhood!

Here is Becky's note. I think it reflects the impact Galveston Bay Area Master Naturalists make on each other and the world we live in!

Becky Edmondson wrote . . . "As another Thursday MN meeting approaches and I have another conflict (exploratory dog park meeting for the Willow Waterhole), I wanted to write to… to tell you just how much my MN experience meant to me.

Our GBA program was first rate. I learned so much . . from our speakers and our field trips. Can you believe the most terrifying part of the program was when we had to introduce the stranger next to us to the group? I didn't think I had public speaking in me at all. Who knew that in the next 10 years I would be speaking regularly?

And if the program weren't enough on its own, I met so many inspirational people. Sara (Snell), even though we were classmates, you became my mentor. When I told you how frustrating my neighborhood experience was you gave me some advice and a spreadsheet!

This May my neighborhood won First place in the Neighborhood of the Year competition in the Physical Revitalization category for our community garden at the Neighborhood USA conference that was held in Houston. I share this award with my GBAMN family because without the knowledge and confidence I gained through my MN experience this never would have happened.

I participated in a panel discussion for the Center for Houston's Future on "Strong communities, healthy neighborhoods" and met Andrea White on the editorial board for the Houston Chronicle and she wrote this article for their Gray Matters magazine. I thought you might enjoy it!"

http://www.houstonchronicle.com/local/gray-matters/article/Growing-a-community-growing-a-community-garden-6418484.php?t=25ba58b972438d9cbb

Congratulations to Becky and her community on this amazing award! And thanks to all of you Texas Master Naturalists who are making a difference on our small blue planet!

Sea Grant Texas
Science At Work For Texans
http://TexasSeaGrant.org
Master Naturalist ™

The Midden

Published bimonthly by the Galveston Bay Area Chapter - Texas Master Naturalists.

Texas AgriLife Extension Service
4102 B Main (FM 519) Carbide Park
La Marque, TX 77568

Hard copies mailed and available electronically two weeks prior to GBAC-TMN chapter meetings on chapter website: www.gbamasternaturalist.org. Archived issues also on chapter website. If you prefer to receive *The Midden* electronically only, please contact: Julie Massey, julie.massey@agnet.tamu.edu.

Comments? Suggestions? Want to join the team? Contact: Diane Humes at treimanhumes@earthlink.net.

Midden Editorial Team

Steve Alexander	Comm. Team Chair
Diane Humes	Editor
Carolyn Miles	Production Editor
Chuck Snyder	Photo Editor
Madeleine K. Barnes	Proofreading Editor

The Midden Deadline

November 1st

If you have Advanced Training or Volunteer Opportunities, please submit information to Cindy Howard, howardc@uhcl.edu

October and November Activities

ADVANCED TRAINING OPPORTUNITIES

Chapter Meeting - Oct. 1st
Making the Grade: How Healthy is Our Bay?
Presenter: Anja Borski with Galveston Bay Foundation
6:30 Social, 7:00 Speaker, 8:00 Meeting
AgriLife Extension Office; 1 Hour AT

Welder Wildlife Foundation Trip - Oct. 11-13
Learn about the ecology of the South Texas Brush Country. AT hours to be determined. Trip cost is $100 plus car pool cost.
Register with Ellen Gerloff egerloff@sbcglobal.net

Texas Master Naturalist State Meeting - Oct. 23-25
AT hours varies. Location: Marble Falls, TX
Register on TMN State Website

Vultures - Nov. 7th
Time - 9 to Noon, 3 hours AT
Location: Extension Office
Presenters - Ken Kramm
Register with Emmeline Dodd txdodd@aol.com

Ongoing
Galveston Island State Park
10 am at the Welcome Center
Every Saturday- Beach Explorations
Every Sunday- Bay Explorations
Tours 1 to 1 ½ hours long. Bring water and family.

Heritage Book Study Group
First Monday of every month. AgriLife Extension Office
10am-Noon; 2 hours AT
Contact: Elsie Smith (409)945-4731
We are currently reading: *Apache Gold and Yaqui Silver* by J. Frank Dobie. In November we will begin reading *Adventures of A Frontier Naturalist* by Dr. Gideon Lincecum

STEWARDSHIP OPPORTUNITIES

Ongoing Activities:
Tuesdays -

- Sheldon Lakes State Park, Contact: Tom Solomon crandtr@sbcglobal.net
- Texas City Prairie Preserve, Contact: Jim Duron wishkad@yahoo.com
- Environmental Institute of Houston at UHCL, Contact : Wendy Reistle reistle@uhcl.edu

Wednesdays - Wetland Restoration Team, Contact: Marissa Sipocz m-sipocz@tamu.edu

Thursdays -

- Stormwater Wetland Team, every Thursday, 9 - Noon. Contact: Mary Carol Edwards mary.edwards@agnet.tamu.edu
- San Jacinto State Park, Contact: Tom Solomon crandtr@sbcglobal.net

Fridays - Prairie Friday, ABNC, 8:30 - 11:30am, Contact: Dick Benoit RBenoitTEX@aol.com

EDUCATION - OUTREACH VOLUNTEER OPPORTUNITIES

Bay & Island Adventures - Volunteers teach six in-class hands-on modules 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 Stennie Meadors Stenmead@aol.com

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.

BOARD AND COMMITTEE MEETINGS

Board Meetings - Sept. 29, Nov. 2
2-4p.m. at the Extension Office

Committee Meetings (All at Extension Office)
Communication - Nov, 2, 9-Noon
Advanced Training - Oct. 19, Nov. 16, 10-Noon
Education/Outreach - third Tuesday, 10 to 11:30a.m.
Stewardship - Meets quarterly. Next meeting to be determined.

TEXAS A&M AGRILIFE EXTENSION