Northern Pintail by Debbie Repasz

Galveston Bay Area Chapter - Texas Master Naturalists February 2016

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Next Chapter Meeting

February 4th

Plastic Pollution Prevention Partnership

By

Stennie Meadours

At Carbide Park

President's Corner by Maureen Nolan-Wilde, President 2016

Back in January 2015, the board and committee chairs met to discuss goals and strategies for the upcoming year. As a result, our Chapter has been able to post some very impressive accomplishments, which included the following:

- Over 37,000 hours of volunteer service to our community – another record-breaking year
- 5,500 hours of outreach efforts, which directly impacted 14,626 people
- Over 6,000 pots of native prairie grasses planted at Galveston Island State Park over the past two years
- Expanded social media presence, including a Facebook page and re-booted website
- Volunteer Management System implementation

We will hold a similar meeting in January 2016 and will be sharing the results with you.

Also this year our chapter celebrates our 15th anniversary! What an accomplishment! We will be sharing more about our history, community and more during 2016 in *The Midden*, on our website and Facebook page – so stay tuned.

The board would like to thank you for your continued service to our community. Your work has made a real difference to the lives of people, animals and environment. Also thanks go out to current and past board members who handle the behind the scenes work of the chapter and are key to our success. We are saying goodbye to Cipriano Romero and welcoming Beth Cooper to the board.

February will be a wonderful month, full of new beginnings, as we welcome the members of our latest training class. It will be an exciting time for both new and seasoned MNs as we share the joys of volunteerism within the Galveston Bay area. I am looking forward to meeting the members of the new class and encouraging you to join us in diverse activities throughout the community.

Be safe! I hope to see you on the beach, bay, prairie or classroom in the coming months.

Prairie Ponderings: For Prairie Lovers by Diane Humes

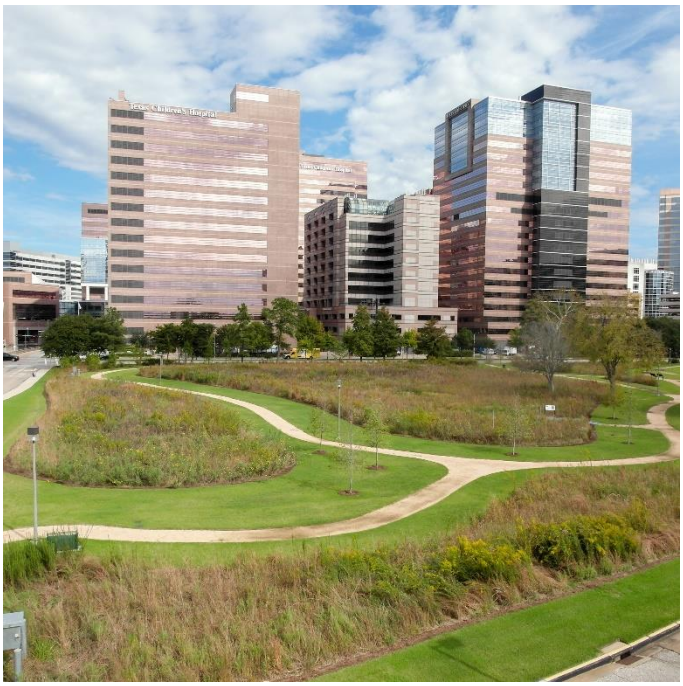
The CPP, Coastal Prairie Partnership, was formed in the Houston area to promote conservation and restoration of coastal prairie ecosystems. Chief among the founding members were our own Dick Benoit - please don't act surprised - and Jaime Gonzalez, who spoke about monarchs and prairies at the August 2015 chapter meeting. Prairies were and are our native habitat - Houston was built on the Gulf Coast Prairie and the cotton and cattle harvested from it.

From November 12-14, 2015, the CPP and NPAT, Native Prairie Association of Texas, jointly presented the "Southern Plains and Grasslands Conference" at the Houston Zoo. This was a meeting for "bringing together the best minds in prairie conservation from the states of Texas, Louisiana, Oklahoma, and beyond". See more at: prairiepartner.org and texasprairie.org.

Beginning with a "whistlestop" tour by light rail of three urban prairies - the first within Hermann Park, the second at Rice University, and the third at M.D. Anderson Cancer Center - conference participants considered the need for enhanced public awareness of and education about prairies. With the strategic placement of these three prairie patches right in downtown Houston, beautiful prairies are within reach, sight, and sound of many Houstonians who may not yet know that they love prairies!

At the conference, one could attend sessions from tracks on restoration, talking about prairies, prairie landscapes for pollinators, birds, and more, and/or prairie economics.

Several speakers addressed soil microbes and the near total lack of knowledge about their functions in prairie habitat, stressing the need for further research. In addition, there was discussion of prairie plant succession in the context of prairie restoration. Restorations tend to focus on the late successional species, but can early successional species facilitate the process? How might climate and weather, soil type, and soil seed banks variously alter plant communities? Again, we need more research.



We learned about how to manage volunteers - ABNC style - that is, never pass up an opportunity to sign somebody up! Others, particularly from the Fort Worth Nature Center, described specific prairie restorations and bison - truly a keystone species for the prairie ecosystem and for the nature center. The Fort Worth herd, beloved of visitors, roams its 210 fenced acres; visitors may get "up close" on the popular "bison-feeding hay rides". Imagine bison on our prairies!

Keynote speaker Larry Allain, NRCS botanist, spoke passionately about why we should save prairies. Describing the incredible species diversity in every level of the Louisiana (and Texas) coastal tallgrass prairie, he correlated plant species diversity with insect species diversity and forb diversity with that of pollinators. When we lost 99% of our prairies, what did we really lose? The Louisiana Black bear may soon be taken off the endangered species list, but where are the bison, cougar, prairie chickens, and whooping cranes?

Said Larry Allain, "we will never restore a prairie that is anything but a pale facsimile to an undisturbed prairie," therefore, "we need to save all the remnants! We must create forb-rich grasslands, because forb diversity is correlated with that of pollinators. We must increase diversity of existing grasslands; plant species diversity correlates with insect diversity. We need to allow fields and vacant lots to go fallow - another avenue for increasing biodiversity. We all need to plant native plants. We need to develop a source of native plants that are abundant and affordable."

That is quite a to-do list. But, prairies are our habitat and our foundation - places for children to explore and play. Prairies are our wilderness. Aldo Leopold said, "I am glad I will not be young in a future without wilderness." Our prairies need all the love we can give them.

Wetland Wanderings: One Plant at a Time by Diane Humes

A recent Houston Chronicle editorial named three features of Houston as modest oases of beauty: Brays Bayou at Mason Park, historic homes, and the downtown skyline. Brays Bayou at Mason Park, unlike the concrete ditches upstream, has a natural channel. During widening for a flood control project, the Stormwater Wetland at Mason Park was created, and the Wetland Restoration Team was formed to plant its ponds. This wetland was constructed to cleanse stormwater entering Brays Bayou, create habitat, and reduce flooding. Now, walking trails line both sides of the bayou - truly an oasis of green with views of the downtown skyline; it is gratifying to have contributed beauty also to the success of this project!

Since 2000, the Team has collected and propagated local native plant species and has planted them in the Houston-Galveston area: along Sims Bayou, at Buffalo Bend Park, Dickinson Bayou, San Jacinto State Park, and in four phases (soon to be five) at Sheldon Lake State Park, in addition to Mason Park. Wetland plants are quite hardy, if you give them water; we say that they will grow if you spit on them! And the habitat benefits are tremendous; baby turtles and dragonflies hatch in the wetlands as soon as we start planting and geese arrive before we finish!

The Team has had its share of adventures, mostly involving mud and/or getting stuck, and we have all learned how to get the jobs done. We like to think that we clean up pretty well, as evidenced by appearances at the annual holiday party. The award-winning Wetland Restoration Team (Gulf Guardian Award and Parks and Natural Areas Award for Mason Park, Mayors Proud Partner Award for work at Sheldon Lake State Park) has just been recognized by the Sheldon Lake State Park staff for its restoration work at the park: in fact, both the Prairie and Wetland Teams were honored as "Stars of the Park"!! Thank you very much; we love what we do!

Many people have muddied their hands and boots in the wetlands and few still remember planting at Mason Park. The faces change, but the mission remains - "restoring the wetlands, one plant at a time".

Beach Patrol: Usual and Unusual on our Winter Beaches by Steve Alexander

Not many people make a habit of visiting the beach this time of year, but if you do, what might you see? One of the sights common to this time of year is low water level, similar to that seen in the photo of a recent December day.

Avid beachcombers love winter, the season of wide expansive beaches full of treasures cast ashore by the Gulf's winter storms. They seek the shore despite blustery north winds, because they know it's the north winds that drive water away from the shore, creating those wide expanses of sand.

Weather cold enough to produce freezing temperatures is much less likely, at least in our neck of the woods. Our climate is just too balmy. In fact, recent December days in Galveston have recorded temperatures in the 80's and even now, mosquitoes still invade my home to bite me.

Although rare, cold spells have occurred here, days like the one seen in the photo of a January day some years ago. On this day, temperatures were so cold, pools of rain turned to ice along the beachfront. And I recall a front-page photo in Port Aransas' newspaper, *The South Jetty*, depicting two young bikini-clad girls on the beach standing next to their constructed snowman.

So if you do visit the beach this winter, wide expanses of open beach are much more likely. Add some sunshine, and you have the naturalist recipe for a perfect beach day.

Stop and Smell the Roses – Nature Walks and Hikes by Pat Coldewey

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

Who ever said one cannot continue to learn in one's sixties or that education ends at a certain age? Being accepted into the Texas Master Naturalist Program in 2014 was a true "gift" to me. Two of the most important things I have learned are to observe my surroundings and to help preserve plant and animal life. After completing the twelve-week TMN classes, I began to look at nature in a different light. Morning walks in my neighborhood became routine. I began watching the magnolia trees putting out a bud, a beautiful flower, and then a cone with red seeds. Nuts were appearing on a pecan tree along my walk and a tulip tree that I had never noticed before put off spindly "fingers" that later turned into amazing drooping blossoms. I began carrying my phone with me so that I could capture these transformations and add them to my nature journal.

I recently made another trip to Virginia to visit my daughter Liz, her husband, Daniel, and my grandchildren, Emily, Olivia, James and Clare and was so excited to explore new things with them. Nature walks became a part of our activities when I visited them in Houston and now in Virginia. I have shared so many things that I learned through TMN and now that they are in a beautiful part of the country we can explore even more. I will take you through some of our nature walks and hikes – it is fall in Virginia and the colors are amazing!

Liz and Daniel live on 2-1/2 acres, with a small creek running through the back of their property, and almost daily we walked all around, gathering bright colored leaves and listening to the babbling creek and the sound of the wind blowing through the trees. My brother-in-law and sister were visiting at the time and said the sounds were so relaxing – like an orchestra concert! We traveled to Carter Mountain Orchard, a large property

near Monticello. The view of the Charlottesville area was magnificent. The apple trees were bursting with fruit and the children were able to see all of the different colors and sizes of apples. We took a picnic, sat and enjoyed the beauty around us. We also took several nature walks in their neighborhood, enjoying the daily changes of color in the countryside. We collected and

sealed more leaves each time. We wanted the children to be able to experience the wonders of fall, and I wanted to bring samples home for my own journaling.

I was able to attend their regular Friday homeschooling group and one week the science lesson just happened to be a nature walk. I was thrilled!! It was such an amazing experience for me to look at nature through the eyes of a group of five-year olds. One of our first sightings was a spider web covered with dew and sparkling in the sunshine, then we spotted hundreds of acorns from several large oak trees, mushrooms sprouting up along a walkway, and vibrant colored fall leaves of yellow, orange and red. Near the playground we noticed a beautiful cedar tree with small curved cones. Looking closer, we noticed the cones were actually small pods of yellow pollen. We saw sap running from several spots where tree limbs had been cut. The children wondered what the "sticky stuff" was! This was definitely a great learning experience in just one small spot!! We later found out that the tree was a Blue Atlas Cedar.

My daughter found out about a program called ***Nature Pals Exchange*** that was started by a homeschooling mother. The program encourages families from different parts of the country to pair with one another. You choose a family with children similar in age to your own. It is a seasonal exchange with a different family each season. Liz paired with a family from Washington State and received her package while I was there. Each child in that family had written a note and the package included samples of leaves, berries, lichen and feathers from their area. My grandchildren were so excited!!

So now… Liz and her children are gathering their collection for another ***Nature Pal Exchange*** and I just happened to be in Virginia to go along on more nature walks. We ventured out to Chris Greene Nature Trail in Charlottesville. It was a good 1-1/2 mile hike with my daughter, a 1-year old strapped to her back, a 3, 5 and 7-year old, and MiMi. The morning was perfect with temps in the 50s, sunny and clear. You could not ask for a more beautiful day. Acorns were everywhere, along with more beautiful fall leaves. We found several kinds of ferns, interesting seed pods, nuts, lichen, fungi, woodpecker holes, and trees that had been downed by beavers - a first for me!! A small lake along the walk mirrored the beautiful fall foliage in the background. We brought away a great collection from this one hike. Liz and I went right to work trying to identify these treasures.

Another day my son-in-law was able to join us for a 2-mile hike at Preddy Creek Trails near their home in Barboursville. Daniel took the baby this time and we were off again. I must add that 67-year old MiMi was awfully proud to hold her own with this bunch!! This was a late afternoon hike, beautiful lighting through the trees,

more discoveries, walking along a creek bed, and taking in the continual change of color in the trees. We drove home at sunset with a clear sky and a ¾ moon shining. What a treat!!

On my last afternoon before heading back to Texas, the two oldest children, Emily and Olivia, asked me to stay outside with them during "quiet time." The two younger children take naps, but Liz lets the older children read or play alone in their rooms. But today was special, we went down their backyard near the creek, set up chairs, put out birdseed and sat, listened, and watched as dozens of birds arrived - blue jays, cardinals, sparrows, wrens, and chickadees flew in and out of the trees and bushes -- A really special time before heading home!!

I want to close with a quote from Charlotte Mason, *HOME EDUCATION, Volume 1*:

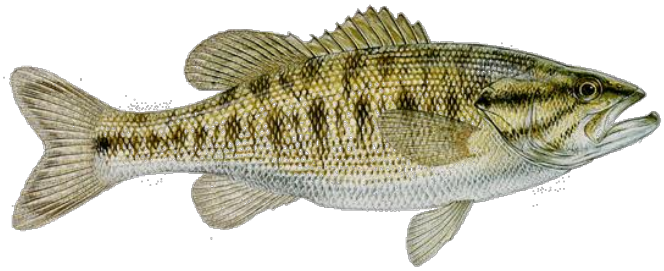
Nature knowledge is most important for young children … Let them once get in touch with nature and a habit is formed which will be a source of delight through life. ***We were all meant to be naturalists, each in his degree****, and it is inexcusable to live in a world so full of the marvels of plant and animal life and to care for none of these things.*

Thank you Galveston Bay Area Master Naturalists for introducing me to the beauty of nature. I encourage each of you to enjoy these amazing nature walks with your own families and friends and to share the ***Nature Pal Exchange*** information, www.naturepalexchange.com with anyone you think may be interested.

'Til next time, STOP AND SMELL THE ROSES, my Friends!!

Guadalupe Bass - Official Texas State Fish by Diane Humes

The Guadalupe Bass was named official Texas state fish in 1989. Often also called Black Bass or Guadalupe Spotted Bass, it is found only in Texas, adapted to life in small streams with fast flowing water, endemic to rivers of the Edwards Plateau - San Antonio River, Guadalupe River, Colorado River, and Brazos River. Populations found in the Nueces River have been introduced. The Guadalupe bass will be the Texas Master Naturalist 2016 certification pin.



The scientific name for Guadalupe bass is *Micropterus treculii.* Micropterus is Greek for "small fin", which is somewhat of a misnomer; the type specimen actually was injured, making it appear to have a small separate fin on the dorsal posterior surface. The fish was caught by and named for Auguste Trécul, French botanist (1818-1896), during a scientific expedition through southern Texas and Northern Mexico from 1848-1850. Trécul discovered many new plant species, particularly cactus, and has the genus, *Treculia*, named after him. But, back to the bass: although "black bass" - Guadalupe, largemouth, smallmouth, and spotted bass - are similar species, they are actually not true bass, but sunfish, in the family Centrarchidae!

As described by Texas Parks and Wildlife, the Guadalupe bass is distinguished from the other "black bass" more by what is doesn't have. It is generally green in color, without the vertical bars of a smallmouth bass, a jaw that does not extend beyond the eyes as in a largemouth bass, but the coloration extends further down on the body than in a spotted bass. If you are a fisherman, you probably get all that.

Guadalupe bass, being adapted to small streams, do not grow particularly large - the state record fish, a whopper caught in 2014, weighed 3.71 pounds at 17 inches in length. Usually adult fish are closer to 1 pound and 12 inches, but powerful. They are favorites of sport fishermen both because of their strength and the beautiful settings in which they are found.

Males and females mature at one year of age; the male builds a gravel nest in shallow, flowing water. The female lays anywhere from 400-9,000 eggs, but the male then chases her away and guards the nest himself. The fry feed on invertebrates, switching to a fish diet as they mature.

In order to improve sport fishing, the TPWD introduced smallmouth bass to Central Texas streams, where they were not originally native. Ironically, this has harmed the Guadalupe bass, due to hybridization. Guadalupe bass numbers have seriously declined; hybridization, plus habitat loss, threatens the long-term survival of this species, so a Guadalupe bass restoration initiative is underway to re-stock the streams with genetically "pure" young fish.

At this year's State Meeting, I heard a little about this effort; during the drought of 2010 when the Blanco River had very low flow, crews were able to electroshock the hybrid fish in several discreet upstream sections, taking advantage of the drought to remove the hybrids before re-stocking, giving the new little Guadalupe bass even better chances of long-term survival! It's a cool little fish, found only in Texas, and needs a bit of a boost.

The Guadalupe bass pin is the 16th pin issued by our organization, counting the dragonfly initial certification pin. Should anyone quiz us about our "bling", we have published information in *The Midden*, starting with the top 10 in February 2010, so as to be prepared with answers! *The Midden* issues with other related articles are: February 2011, 2012, 2014, 2015 and June 2011.

PIN	YEAR	PIN	YEAR
Dragonfly	certification	Texas salamander	2009
Post oak	2002	Wood duck	2010
Lindheimer daisy	2003	Texas horned lizard	2011
Green tree frog	2004	Mexican free-tailed bat	2012
Belted kingfisher	2005	Monarch butterfly	2013
Texas prickly pear cactus	2006	Nine-banded armadillo	2014
Grass shrimp	2007	Texas bluebonnet	2015
Texas purple sage	2008	Guadalupe bass	2016

Treasures of Bay Award Recipients 2015 by Julie Massey

Each year our chapter recognizes outstanding service and contributions to natural resource restoration and education efforts with the "Treasures of the Bay Awards!" Here are the 2015 recipients who were recognized at the December chapter meeting.

Nonprofit Award
Audubon Texas Estuarine Research Network (TERN) – Kari Howard, Amanda Hackney, Rebecca Bracken

Chapter Service Award
Ellen Gerloff
George Kyame
Volunteer Management System Team:
Beth Cooper, Jim Duron, Don Wilkerson, Jo Monday

Making a Difference Award
Doris Heard
Stennie Meadours
John Wright
Lynn Wright
Carolyn Miles

Chuck Buddenhagen Memorial Education Award
Bobette Brasfield

Sammy Ray Researcher Award
Vic Madamba

Congratulations to all the award winners!

Vultures: Nature's Clean-Up Crew by Madeleine K. Barnes and Diane Humes

Why do we need to know about our environmental clean-up crew? While often misunderstood and maligned, vultures are critically important in recycling life and cleaning disease from the environment, thereby providing a benefit for us all. Their digestive tract is being studied because of their ability to consume and kill various bacteria and viruses, including anthrax. The resulting sanitized (disease free) excrement continues to kill bacteria when on their feet. Is there a market for vulture sanitizer in our future?

New World vultures found here are Turkey and Black vultures. They are scavengers, with weak beaks and feet, and featherless heads. Black vultures are the more aggressive and in a group will chase away Turkey vultures, first following them to find food. Vultures make no nests, produce one egg clutch each year, and may live 30 years in captivity. Their vocalizations consist of hissing when threatened and grunting when hungry or courting.

Did you know that the Turkey vulture is one of the few birds that can smell, being able to scent food sources from as far as 1-2 miles away? Their body shape during flight was used as a model for airplane design due to their efficient soaring capability. Throughout the world, vultures are in decline, and many species are threatened or endangered due to a variety of issues such as veterinary drug use in the treatment of domestic livestock, chemical misuse, traditional practices, and loss of habitat.

Where did I learn all of this? At the workshop "Nature's Noble Caretakers" on November 7, 2015 presented by Ken Kramm, biologist and Heartwood Chapter member. He regaled us with vulture facts, as well as group activities to demonstrate the three ways vultures locate food sources. He also showed a "vulture restaurant" film with team discussion on social facilitation in feeding.


Photo by Chuck Snyder

Here are a few resources for your perusal. Don't miss out on "The Turkey Vulture Rap" and on the opportunity to sing/dance or toe tap along to "a Turkey Vulture beat!"

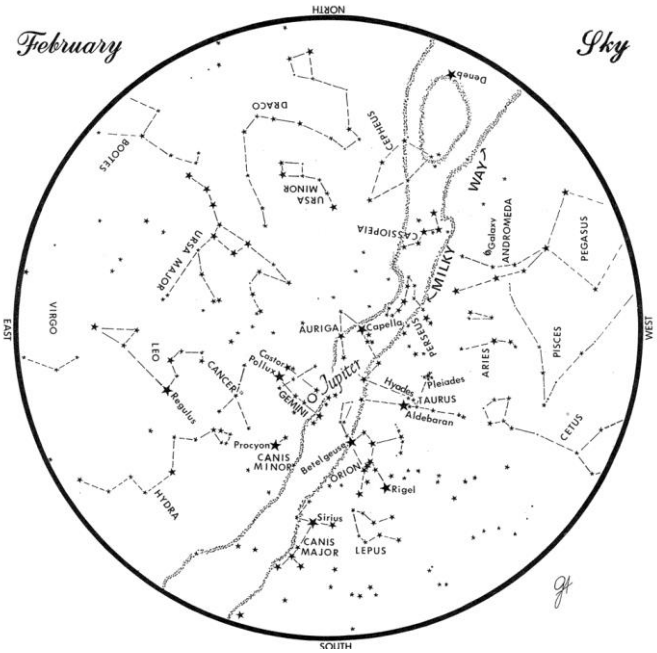
Turkey Vulture Society
https://turkeyvulturesociety.wordpress.com/
You Tube: Ken Kramm - Vultures, Turkey Vultures – Scary Scavengers, Turkey Vulture Rap by Joe Reilly
Ten Most Magnificent Vultures on Earth
http://scribol.com/environment/10-most-magnificent-vultures-on-earth

The Stars at Night AT by Chuck Snyder

On a warm evening in mid-December, a large group of chapter members and guests were treated to spectacular views of the night sky and the rugged surface of the planet Mars – while comfortably seated in the classrooms at the Extension Office!

Back by popular demand, the dynamic duo of Diane Humes and Allan Treiman presented an updated version of *The Stars at Night,* an advanced training course that earned rave reviews a few years ago.

Diane set the stage for the adventure that followed with an informative lecture on the basics of observational astronomy. Topics covered included: our position in the Milky Way Galaxy; identification of visible planets, stars and constellations in the Texas sky; comets, meteor showers, and other celestial objects and events; and helpful tips for finding stars and planets in the night sky. She also discussed light pollution and its unfortunate impact on our ability to enjoy the night sky in most of our populated areas.



Armed with this practical information, the group then set out to observe the sky first-hand. Rather than being limited to the few stars visible outside the building, the destination was the StarLab Planetarium, on loan from the Lunar and Planetary Institute (LPI). Diane continued her discussion within the planetarium, where the stars and planets were projected on the ceiling and rotated to simulate the apparent motion of the Earth and stars in the night sky. More than one participant was heard to describe the experience with one word: "WOW!"

The planetarium was able to hold only half the group comfortably, so the other half was treated to a first-hand update on the highly successful Curiosity Rover Mission on the planet Mars.

Dr. Allan Treiman, Senior Staff Scientist at LPI, is a key member of the Chemistry & Mineralogy team, providing input to determining the path and pace of Curiosity as it slowly traverses the surface of the planet. Allan described the process used to decide where Curiosity will go next, a decision that must be updated virtually every day. Unlike a video game or steering a drone, there is no real-time feedback from Curiosity; photos and other data are only received once per day, and the team must quickly analyze the results and decide where to go next. Maximizing the science while preserving and protecting the rover are key objectives of the team.

Allan treated us to a feast of photos of the barren but highly varied surface of Mars, pointing out the geology and the processes at work – past and present – that shaped the planet. Of particular note was the impact of erosion, primarily caused by windborne sands. Also present is evidence that Mars had lakes of water in its earlier existence. During its three years on the surface of Mars, Curiosity has sent back a treasure trove of data and photos from its instruments.

A humorous aspect of Allan's talk was his discussion of the "creatures" observed in photos of the Martian landscape. The wind-sculpted rocks take on the appearance of earth-based animals – at least in the eyes of some observers who are still looking for Martians…!

Thanks to Diane and Allan for sharing their knowledge and insights with us, and special recognition to LPI for making the StarLab Planetarium available to us.

As a postscript to the training, Diane provided this update on a trip to Brazos Bend SP:

ADDENDUM: STAR DATE 12132015 by Diane Humes

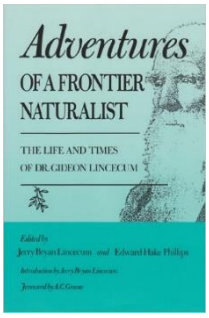
After an incredibly gloomy day - two inches of rain and a 20-degree temperature drop - as predicted, skies began to clear just before sunset. Following an intense double rainbow, a sliver of setting crescent moon played "hide and seek" with the clouds. At the George Observatory in Brazos Bend State Park, visitors gathered to await the peak of the Geminid meteor shower. Skies were much darker than in the 'burbs, with the constellations of Orion, Taurus, Boötes, Perseus, Pegasus, Cygnus, Lyra, and Aquilla shining brightly overhead.

As the evening progressed, the stars Sirius, Castor, and Pollux rose above the treetops and the show began. We witnessed at least 30 bright meteors, mostly radiating from Gemini, before heading back home. The temperature obviously reached the dew point - grass along the road shone like snow in our headlights and ground fog obscured the view. But it was a beautiful night, with bright stars all the way home.

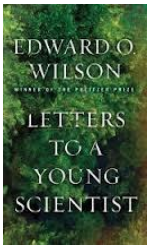
Heritage Book Study – Review of *Adventures of a Frontier Naturalist: The Life and Times of Dr. Gideon Lincecum* by Madeleine K. Barnes

Who is the person considered to be the father of Texas botany? The answer to this and much more was the book selection for November and December 2015. This book is a resurrection of the original autobiography of Dr. Gideon Lincecum, as edited by one of his relatives, Jerry Bryan Lincecum and the writer, Edward Hake Phillips.

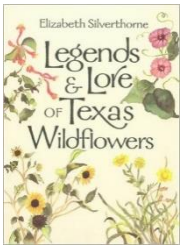
Take a trip back in time to see what the south looked like and the perspectives of the early settlers in the area. The book chronicles the timeframe of 1783, when Dr. Lincecum was born in Georgia up to his death in 1874. During his lifetime, Dr. Lincecum witnessed the growth of the union from 15 to 38 states. He was the father of thirteen children and traveled through many of the southern territories. What is most important in his extensive writings and letters are the detailed descriptions of the various flora and fauna that he found.



During his life, Dr. Lincecum was a teacher/educator, veteran, hunter, woodsman, explorer, merchant, Indian trader, tax collector, school founder, masonic lodge member & founder, writer, translator, Indian lacrosse exhibition team road manager, botanical medical practitioner, and self- taught scientist/botanist. This man was certainly a doer. He became knowledgeable of the local botany as known to the European settlers/explorers and to the Choctaw Indians. While he was a naturalist, he was not a conservationist. However Dr. Lincecum was a proponent for the development of game laws to prevent over hunting and fishing. He founded the town of Long Point in Washington County, Texas, was a veteran of the War of 1812, and is buried in the State Cemetery at Austin. This selection was both surprising and entertaining by being very readable and informative both in human and natural history. Add this one to your naturalist reading list.



The first reading selection in 2016 is *Letters To A Young Scientist* by Edward O. Wilson. We will meet on February 1st to discuss the second half of this book. We will begin reading the first half of *Legends and Lore of Texas Wildflowers* by Elizabeth Silverthorne for discussion on March 7th.



Good news! If you want to know the book club selections and meeting dates for each month, check out the monthly calendar on the chapter website. After clicking on the calendar tab on the home page, you will see the current month. When you see the entry for the book study meeting and move the cursor over it, you will see the selection that is being discussed on that date. You can choose the previous month or the next month down at the bottom of each calendar. We welcome your participation each month for two hours on the first Monday of the month starting at 10:00 a.m.at the Agrilife Extension office. We look forward to seeing you!

Important Message

Chapter messages no longer come from Alan Wilde's personal email. They now come from Galveston Bay Area Chapter - Texas Master Naturalist (gbacmessages@gmail.com) through a service named Constant Contact. Please add the new address to your email address book. If you are not receiving the messages, check your spam folder.

Did You Know There are Space Grant Colleges? by Carolyn Miles

As Master Naturalists, we are familiar with Sea Grant colleges, but did you know there are Space Grant colleges?

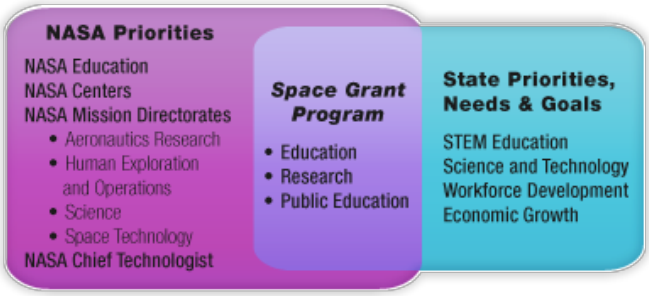
Below is some information about the Space Grant College program from NASA:

What is Space Grant?

NASA initiated the National Space Grant College and Fellowship Program, also known as Space Grant, in 1989. Space Grant is a national network of colleges and universities. These institutions are working to expand opportunities for Americans to understand and participate in NASA's aeronautics and space projects by supporting and enhancing science and engineering education, research and public outreach efforts. The Space Grant national network includes over 850 affiliates from universities, colleges, industry, museums, science centers, and state and local agencies. These affiliates belong to one of 52 consortia in all 50 states, the District of Columbia and the Commonwealth of Puerto Rico.

Program Goal:

Contribute to the nation's science enterprise by funding education, research and public engagement projects through a national network of university-based Space Grant consortia.



Objectives:

- *Establish and maintain a national network of universities.*
- *Encourage cooperative programs among universities; aerospace industry; and Federal, state and local governments.*
- *Encourage interdisciplinary education, research and public service programs related to aerospace.*
- *Recruit and train U.S. citizens, especially women, underrepresented minorities, and persons with disabilities.*
- *Promote a strong science, mathematics and technology education base from elementary through secondary levels.*

Texas Space Grant Consortium academic members:

Austin Community College
Angelo State University
Baylor University
El Paso Community College
Houston Community College Northwest
Lamar University
Lone Star College
McLennan Community College
Prairie View A&M University
Rice University
Sam Houston State University
San Jacinto College
Southern Methodist University
Sul Ross State University
Tarleton State University
Texas A&M University System (multiple schools)
Texas Christian University
Texas Southern University
Texas State University - San Marcos
Texas Tech University
Trinity University
University of Dallas
University of Houston System (multiple schools)
University of North Texas
University of St. Thomas - Houston
University of Texas System (multiple schools)

The Midden Deadline

for the next issue

March 6th

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

Guppies from Julie

Dolphin Challenge Needs You!
Join us on Saturday, February 27, 2016, at Texas A&M Galveston for Dolphin Challenge!

"What does a refractometer measure?"
"Fishes that spend most of their lives in freshwater but migrate to saltwater are called . . .?"
"The Marine Mammal Protection Act was enacted in what year?"

Can you hear the clock ticking as you try to answer these questions? Let's put a buzzer in your hand and face you off with a team of enthusiastic, determined high school students! Whew! The pressure is on!

Welcome to the fast paced, fun, exciting world of National Ocean Sciences Bowl! National Ocean Sciences Bowl (NOSB) is a nationally recognized and highly acclaimed high school academic competition that provides a forum for students to test their knowledge of the marine sciences including biology, chemistry, geography, physics, geology, social sciences and technology. Texas Sea Grant sponsors the National Ocean Science Bowl competitions in Texas.

We need you to make Dolphin Challenge a success! Training will be provided!

Volunteers are needed in every competition room for each round! Roles include:

- Moderator: essentially in charge of the round; must be able to read aloud clearly and quickly and keep the competition running smoothly; those with a background in the marine sciences are preferred for pronunciation of scientific terms
- Rules Judge: must know all the Competition Rules; ensures quiet during the game and that the rules are consistently and correctly followed by everyone in the room.
- Science Judge: must have a technical background (generally a graduate degree) in marine sciences and be prepared to address challenges to content by participating students.
- Timekeeper: operates time clock and must know the rules that apply to timing.

Training for Dolphin Challenge will be conducted at the Texas A&M AgriLife Galveston County Extension Office at Carbide Park on the following dates:

February 3 – 10 a.m. – noon
February 9 – 10 a.m. – noon
February 19 – 1:00 p.m. - 3:00 p.m.
February 23 – 10 a.m. - noon

Dolphin Challenge volunteers will enjoy a great lunch, receive a terrific t-shirt and bask in the admiration of high school students from across Texas!

To learn more about NOSB, visit their website at http://www.nosb.org/.

If you would like to volunteer, please contact Julie at 281-309-5063 or jmassey@ag.tamu.edu.
Many thanks!

Volunteer for the Spring 2016 Training Class!

The year 2016 is off and running! Master Naturalists are digging, planting, testing water, exploring and getting ready for the Spring Class!

You can help to make the spring class a huge success. Plan to be a training class volunteer - mentor a new class member, bring potluck or breakfast goodies, introduce speakers, set up equipment and much more.

You'll have fun meeting the new class members, learning and volunteering!

The spring 2016 Class begins on Thursday, February 11, 2016, at Armand Bayou Nature Center! Volunteer now by contacting Sara Snell at 281-309-0276 or snellsw@verizon.net.

The Midden

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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

February and March Activities

ADVANCED TRAINING OPPORTUNITIES

Chapter Meeting - February 4th; Plastic Pollution Prevention Partnership by Stennie Meadours
6:30 Social, 7:00 Meeting, 7:30 Speaker
AgriLife Extension Office; 1 AT hours

Bee my Valentine - February 13th
9 a.m. - 1 p.m.; 4 hours AT; Fee to be announced
Location: Extension Office; Presenters - Mel Measeles

Raptors - February 29th
2-4 p.m.; 2 hours AT; Location: Extension Office
Presenters - Lynn and John Wright

Nature Journaling - March 7th
1-4 p.m.; 3 hours AT; Location: Extension Office
Presenters - Suzanne Becker

Note: Register with Emmeline Dodd txdodd@aol.com

Ongoing
Galveston Island State Park (Resumes in March)
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
Feb. - *Letters to a Young Scientist* by Edward Wilson,
Mar. - *Legends & Lore of Texas Wildflowers* by Elizabeth Silverthorne

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: 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: 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 http://txmn.org/gbmn/partners/ for the list, then click on the link to the organization's website.

BOARD AND COMMITTEE MEETINGS

Board Meetings - Feb. 2, Mar. 1
2-4p.m. at the Extension Office

Committee Meetings (at Extension office)
Communication - Mar. 7; 9-Noon
Advanced Training - Feb. 15, Mar. 21; 10-Noon
Education/Outreach - Feb. 16, Mar. 15; 10 to 11:30a.m.
Stewardship - Meets quarterly

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

Texas A&M AgriLife Extension