
Galveston Bay Area Chapter - Texas Master Naturalists August 2018

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**Next Chapter Meeting**

August 2nd

Don't Teach, Inspire!
Be the Example!
By

Lisa Reznicek
TPWD Interpretive Park Ranger at GISP

At
Extension Office*

## President's Corner by George Kyame, President 2018

Greetings, fellow naturalists. Some four years ago, I found my main focus as a Texas master naturalist. I was surrounded by a knowledgeable staff of long-time volunteers and it seemed I was well-suited for the task of coastal prairie restoration. And so it went, up until the present day; my stewardship mostly involves weekly prairie visits to several sites requiring what I summarize as "PPM" - that is, simply, potting, planting, and maintenance.

Cue maintenance of invasive species. Loosely defined, an invasive species is one "that is non-native or alien to the ecosystem and likely to cause environmental harm". I learned in the beginning that prairie restoration is more than just knowing what grasses and wildflowers belong; for me, the "do not belong" list started with a brief three or four species.

I was aware of this when I joined the team of prairie restorers. So why bring it up now? While planting native grasses on Armand Bayou's largely uninhabited west bank prairie last weekend, the pervasive invasive topic surfaced in stark relief on the vast grassland into which we were digging.

The site we were planting was chosen because it had recently undergone major Chinese tallow tree removal. The small forest of invading trees required the use of contracted heavy equipment to drop the trees and subsequently shred them into wood chips. Stands of tallow have returned, and must be removed, again.

This recent anecdote reminded me that every aspect of field work invariably involves those nasty invasives. Even in the newly-created Exploration Green, invasives have reared their ubiquitous heads, proving the downside of "if you build it, they will come".


And, even a somewhat controlled area, like the Houston Zoo's Attwater chicken facility at Johnson Space Center, can be overwhelmed by the formidable foe, deep-rooted sedge, in a matter of weeks.

This little article is not intended to espouse all of the many invasive control techniques. Those are better left to professional seminars. Let it suffice to be an expository reminder of a major portion of prairie restoration. Hope to see you soon out on the prairie or the wetland.

# Wetland Wanderings: Northern Harriers by Lana Berkowitz

Researching Northern Harriers for Wetland Wanderings posed an immediate dilemma.

While the usual reliable resources agree that the Northern Harrier is the only harrier species in North America, there was less agreement on its scientific name.

Cornell's *All About Birds* and Audubon's *Guide to North American Birds* sites listed Northern Harrier as *Circus hudsonius*. However Texas Parks & Wildlife's website, Houston Audubon and Texas A&M's *Breeding Bird Atlas* went with *Circus cyaneus*. A couple of sites listed *Circus cyaneus hudsonius* as the scientific name.

American Ornithological Society (AOS) says the correct, or current, name for Northern Harrier is *Circus hudsonius*, according to Dr. Carla Cicero. She is the staff curator of birds at University of California Berkeley's Museum of Vertebrate Zoology and answered when I questioned AOS about the Northern Harrier's taxonomy.

AOS used the name *Circus cyaneus hudsonius* until 2017, when the society's committee on classification and nomenclature made a change. With DNA tests plus comparisons of plumage, measurements and ecology, the committee decided to split the harriers of the Americas from those found in Eurasia. *Circus hudsonius* became the scientific name of our Northern Harrier. *Circus cyaneus* became the designation for Europe and Asia's Harrier Hen.

Whew! That's the long way of saying I'm going with Northern Harrier (*Circus hudsonius*), aka Marsh Hawk.

The best time to see Northern Harriers is from October to April. During the winter they are common in wetlands and prairies. However since 1996 only 49 Northern Harriers have been recorded at the Sylvan Beach Spring Hawk Watch, according to Lynn Wright, a hawk watch veteran. But don't let that low number fool you. The harriers tend to migrate when the hawk watchers aren't looking.

"Northern Harriers migrate north from here and points south but not in large groups like the Broad-winged Hawks or Mississippi Kites. They migrate as a broad front and are not gregarious so we are not likely to see them in large numbers," Lynn noted. "In addition, we usually count from 9am to noon at the hawk watch and, according to Keith Bildstein, Northern Harriers routinely migrate into or through the night."

For identification most observers look for the distinctive white rump, which can be seen in its low flight. The medium-size raptor also has a sharp, down-turned beak; long, sharp talons; and a long, rounded tail. When gliding, harriers sometimes hold their broad wings in a dihedral or "V" shape.

Another good identifier is their tactical flight pattern. Called slow-quartering or coursing, the crisscrossing flying about 15 feet above low vegetation gives the harrier a bird's eye view of small prey. They swoop to grab small rodents, amphibians, reptiles, rabbits and small birds with their sharp claws.

Harriers and other hawk-like birds have eyesight about eight times greater than humans, but Northern Harriers also depend on hearing while hunting.

Photo by Andy Reago & Chrissy McClarren

If you train your binoculars on the face of a Northern Harrier, you can see its resemblance to an owl with ruffled feathers around its face to help direct sound. While males (pale gray/black wingtips), females (brown back/brown-streaked belly) and juveniles (brown back/orange-brown below) have different coloring, all of the birds have facial disks that give them an owl-like appearance.

The North American harriers range from Alaska, Canada and New England south to Central America and the northern Caribbean. They can fly more than 100 miles a day. Their breeding sites are generally north, although there have been scattered reports of Northern Harriers' nests in Texas.

Since the regulation of the DDT pesticide, the fairly adaptable harrier population has seen a recovery. Continued threats for harriers are loss of habitat and predators such as coyotes, skunks, raccoons, crows, ravens and owls, which raid the birds' sticks-and-grass nests on the ground. The population is reported fairly stable in North America, but numbers have declined globally. A Northern Harrier's life span is about 12 years.

# Prairie Ponderings: Copperhead Snakes by Diane Humes

According to our master naturalist founding partner, Texas Parks and Wildlife Department, "The State of Texas is home to 15 potentially dangerous snake species or subspecies. Despite this, each year, there have been more deaths in Texas attributed to lightning strikes than to venomous snakebites."

This is great news, since the Prairie Friday plant nursery seems to be sharing space with possibly a couple of copperhead snakes, one of those "potentially dangerous snake species."

The copperhead, *Agkistrodon contortrix*, with many common names, including chunk head, highland moccasin, (dry-land) moccasin, narrow-banded copperhead, northern copperhead, pilot snake, poplar leaf, red oak, red snake, southeastern copperhead, white oak snake, American copperhead, southern copperhead, and *cantil cobrizo*, is a pit viper closely related to the cottonmouth, which shares the same genus. The genus name appears to come from two Greek words referring to the shape of the fangs. Both species live near water, although copperheads tend to live in forested habitats and drier locations.

The copperhead is common throughout the eastern United States, from Connecticut to Missouri and south into Mexico. Of its five subspecies, the Southern Copperhead, *Agkistrodon c. contortrix*, resides along the Gulf Coast and is probably the guardian of our plant pots.

Copperheads have reddish-brown (copper!) bodies with hourglass banding; their heads are solid color except for two tiny dark spots - probably don't need to examine those too closely. Adults may be 2 to 3 feet in length. Females are longer in length, but males have longer tails. Our two nursery residents are different lengths - but neither is small - so we may conclude that we have one of each. Copperheads mate in spring and produce babies in the fall, so we may learn the answer soon - watch out for baby snakes!

Copperheads are ovoviviparous - the eggs incubate within the mother but are born "live." Mom usually has four - or more. Babies are grayer in color than adults with yellow tips to their tails, 8 to 10 inches in length, and are born "fully-loaded" with venom and fangs.

Ambush predators, copperheads along the Gulf Coast are active during the day in spring and fall, but nocturnal hunters in summer, hiding to avoid the heat of the day. Their main prey are rats and mice, but they will enjoy whatever they can catch, including cicadas in trees! In turn, they are food for other snakes - kingsnakes, racers, and cottonmouths - as well as bullfrogs, alligators, American crows, hawks, owls, opossums, coyotes, and feral cats.

Not aggressive, copperheads freeze when approached, relying on camouflage for protection; it is unbelievable how well they can hide among dry oak leaves. Of all venomous snakes, copperheads live in the closest association with humans and, therefore, account for the most number of snakebite incidents. On the plus side, their venom is one of the least toxic, so serious injuries and deaths are uncommon. Aren't you glad to know?

Just remember: if the snake thinks you are the danger, he will be quick to bite you, so the wise and wary master naturalist will look carefully at all times. In the plant nursery we made sure the snake stayed as comfortable as possible; we left him (or her) some pots to hide among. But, since we haven't signed up for snakebites, the next time we see him we're calling the Chief Naturalist to find the snake a new home.

It is not wise to upset a Wookiee or a copperhead - in the words of Han Solo, "Let the Wookiee win!"

# Beach Patrol: My Writing Life by Steve Alexander

In fall 2006, I became a master naturalist and 10 years later, received my 2,500-hour pin. A paltry sum compared to some members with 10,000 hours, but still an accomplishment I'm proud of, one that equates to about 5 hours a week every week for 10 years.

When I started, like all new members, I farmed out to different activities until I found the ones to my liking: guiding nature walks at Galveston Island State Park, looking for tracks in the sand left by nesting sea turtles, and helping manage the 32- acre Lafitte's Cove Nature Preserve.


While doing these things, I decided to write about what I saw and did. Writing wasn't new for me, since I had written grant proposals and journal articles for decades as part of my job and even published several books. But this was new territory, writing about nature for a general audience. I began submitting my written stories to *The Galveston Daily News.* Fortunately, the editor at the time liked my writing and so began a seven-year relationship during which I wrote about 50 stories for the newspaper.

What did I write about? I wrote about sea turtle patrols and nesting Kemp's ridley sea turtles. I wrote about pulses of seaweed and how these pulses were actually beneficial to the beach. I noted the springtime proliferation of dune wildflowers and described nature's recovery on Galveston Island and Bolivar Peninsula after Hurricane Ike.

A master naturalist-sponsored boat trip to North Deer Island spawned the idea of writing a story about the recovery of brown pelicans. My activities at Galveston Island State Park resulted in three stories: one about Camp Wild, another about beach and bay walks, and still another about the variety of unspoiled natural habitats. And my familiarity with Lafitte's Cove Nature Preserve allowed me to write about the beauty of that west Galveston Island gem.

These and other stories, 25 in all complete with photographs, are now part of a new book entitled *Exploring Galveston: A Naturalist's Guide to the Island*. Without a doubt, these stories and the book itself would not have been possible without my master naturalist experiences.

My experiences are really no different than yours. Where ever and whenever you are out there volunteering as a master naturalist, you're gathering your own experiences, the basis for your own stories. I encourage you to begin writing them down and begin sharing them with others.

## Parasite Safari AT by Madeleine K. Barnes

Did you know that the most common mode of life on earth is parasitism? Parasites make up 70-80% of the species living today. That is really an impressive number and I, for one, knew next to nothing about them.

In early May, 50 master naturalists attended the Parasite Safari AT presented by Dr. Charles Blend, parasitologist and deep sea biology specialist at the Corpus Christi Museum of Science and History. Dr. Blend took us on a tour inside, outside, and, literally, through our favorite wildlife, explaining parasitism. This AT was an introduction to the different types of parasites - protistan, helminth (worm) and arthropod - found in wildlife, their basic anatomy, life histories (hosts), and connections between the hosts, parasites, and environments.

In a simplified definition of a parasite, one organism, the parasite, obtains food and shelter at the expense of another, the host. The key here is that you have two different species involved in this form of symbiosis. Parasites are usually smaller than their hosts and can cause harm without immediate death or carry disease to their host. Note that in some cases, the parasites can cause death. They have adapted structurally over time both internally and externally to this type of life.

We learned that there are facultative parasites that do not depend on a host to complete their life cycle (example: threadworms), obligates that are unable to survive independently from their host (example: tapeworm), and intermittents that are occasional (example: leech).

Just as there are differences in parasites, there are different types of hosts: definitive or final (which certainly sounds bad to me), intermediate, reservoir, paratenic, and vector. Some hosts may harbor a pathogen, such as a virus, without visible ill effects, but others may become

Photo courtesy of Chuck Blend

infectious and spread disease when the level of pathogen becomes high enough. Tapeworms and other parasitic flatworms have complex lifecycles in which successive developmental stages are completed in several different hosts. Some parasites can survive in one host while waiting for another that is more suited to their needs. And, some may actually perform some benefit for their host, which is referred to as commensalism.

Why should we be interested in learning about parasitism in wildlife, you may ask? Parasites, after all, are living on or in the wildlife that we care about and are trying to conserve. Parasites depend on their host animals in order to survive and can have tremendous impact on them. Study of the parasite life cycle can also provide important information about the health and diet of the host animals.

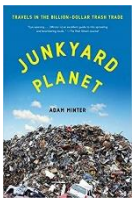
This unique presentation was delivered with enthusiasm, anecdotes, and humor that added to the overall experience for everyone.

Our speaker and his wife, Christy, who provided sound effects, are fellow master naturalists. If you are interested in learning more about this subject, the following books were recommended by Dr. Blend:

*Foundations of Parasitology* by Larry S. Roberts and John Janovy, Jr.
*What's Eating You? People and Parasites* by Eugene H. Kaplan

## Heritage Book Study - Review of *Junkyard Planet* by Madeleine K. Barnes

I had never really thought about the transformation of trash and recyclables into something new that I bought. This metamorphosis from discarded to desirable is a $500 billion industry and is the subject of our latest book selection, *Junkyard Planet*.




The author, Adam Minter, comes from a long line of "trash traders" or "scrapers" and we are privileged to read along as he travels in the billion-dollar trash trade. He makes the point that in order for recycling to exist, there has to be a market for the recyclables. So if there was no money to be made in reusing materials they would end up in landfills.

Do you know where your recyclables go? Many times, our recycling is shipped to other countries where it is broken down under polluting and unsafe conditions. How does this fit with our ideas of recycling as conserving resources and protecting our planet?

Minter, discussing the issue of how to increase recycling rates, states, "If the goal is conservation, then boosting recycling rates is far less important than reducing the overall volume of waste generated – recyclable or otherwise." He points out that many recyclables cannot be recycled forever, some have a limited life before they are "down-cycled" into unrecyclable products or discarded. Metals have more value, as recyclables go, but even they are not 100 percent recyclable.

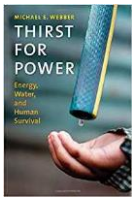
We all want to think that more of our waste is reusable than it really is. This has to do with the conservation model and commitment to reduce, reuse, and recycle in order to save our earth. However the first word is "reduce" which is challenging in our culture where there is so much "new" stuff and all its accompanying packaging.

"If the goal is a realistic sustainable future, then it's necessary to take a look at what we can do to lengthen the lives of the products we're going to buy anyway," according to the author. This does not fit with the current culture built on planned obsolescence. What if, instead of manufacturing all new, thin electronics that cannot be recycled, like certain computers, they were made to be repairable, upgradable models and these were desirable to us as consumers? And, since these were easily repaired or upgraded, the components could be recycled more easily also.

There seems to be a disconnect between what we perceive (or what we are led to believe) as being recyclable and what is of actual value to reuse.

This was an eye-opening book that gave us a look beyond the curtain of our perceptions of recycling and the reality of the journey our "recycling" takes, affecting other cultures and impacting our planet. It makes me think of that quote "the more you know…" and it is important to really know about the whole picture of recycling and the trash trade.

The Heritage Book Study will finish our discussion of *Junkyard Planet* on Aug. 6 after reading pages 136-270.




This is a change in our reading schedule, so we will meet on **Sept. 10** (due to Labor Day) to discuss the first half, pages 1-101, of our next selection *Thirst for Power, Energy, Water and Human Survival* by Michael E. Webber. We will close our discussion of this book with pages 101-202 on Oct. 1.

We welcome your participation each month for two hours on the first Monday of the month starting at 10 a.m. at the Extension Office*. We look forward to seeing you and let us know if you have read any good naturalist books lately. Happy trails!

## A Brief History of Saving Our Beautiful Bayous by Jennifer Trandell

Bayou is a regional term commonly used in Louisiana and Texas to describe many local waterways. The word is derived from 'bayuk" meaning 'small stream' from the Native American Choctaw tribes living in the Southeastern United States. Bayous are common natural features of flat, low lying areas like marshes and swamps. Most of the time a bayou is an extremely slow-moving river. These slow streams are minor channels to a larger body of water.


Photo by Jennifer Trandell

During the mid-twentieth century, urban development was accelerating across the United States with few regulations. Many of the protected wild spaces were part of the National Park Service with the regulatory mindset of protecting rural spaces. As the population increased, an unfettered demand for housing and commercial development emerged. Urban areas sprawled into the countryside. During the 1960s, farmers, landowners, and conservationists became increasingly interested in the development plans of urban centers.

In the Houston area, the Harris County Flood Control District proposed a water plan that included channelizing or concreting miles of waterways as a means of flood control. Miles of natural settings along the bayous were bulldozed and paved over with hundreds of more miles to be concreted. A group of homeowners along a portion of Buffalo Bayou created the Buffalo Bayou Preservation Association to protect the natural beauty of their neighborhoods. As more trees fell, more concerned citizens opposed the flood control district's plan.

The late Texas Lady, Terry Hershey, aggressively campaigned for the protection of the bayous and was a founding member of the currently named Bayou Preservation Association. Armand Yramategui, a native Houstonian and a local conservationist, also campaigned for the protection of local watersheds after a birding adventure 20 miles southeast of Houston to the untouched wilderness of the Middle Bayou area (Armand Bayou). Yramategui recognized the need to protect the beauty and diversity of the bayous from encroaching development and, along with the Bayou Preservation Association, openly opposed the Harris County Flood Control District's water plan. Through grassroots campaigning, Hershey's, Yramategui's, and many citizens' voices were heard at the local and federal levels leading to the eventual halt of the proposed water plan project and are believed to have directly led to a section in the 1972 National Environmental Policy Act requiring federal agencies to notify the public of plans that could have negative environmental impact.

The bayous are corridors and connectors for the unique wildlife inhabiting the wetland zones, riparian woodlands, and native coastal prairies of the Texas Gulf Coast. The convergence of these three ecological zones promotes an extraordinary diversity of species including safe resting habitat for the Central Flyway of the great North American bird migration. Our volunteer work as master naturalists continues the incredible environmental legacy of the concerned citizens that tirelessly campaigned to save many of the natural places we support today.

# The Big Picture: Where Deer, Antelope, and Astronomers Play by Diane Humes

*An astronomical interferometer consists of two or more separate telescopes that combine their signals, offering a resolution equivalent to that of a telescope of diameter equal to the largest separation between its individual elements.*

When peering into the universe or "just" exploring our Milky Way galaxy, radio astronomers prefer radio telescopes that "see" a broader range of wavelengths and are not bothered by Earth's atmosphere. Radio telescopes scan for wavelengths longer than visible light - radio waves created by stars, pulsars, quasars, black holes - maybe even aliens.

In 1980, the National Radio Astronomy Observatory dedicated its Very Large Array (VLA), a linked set of radio dishes, in New Mexico. You probably saw these telescopes in the movie *Contact*. They are part of one of the world's best and most impressive radio telescope set-ups of all, located about 50 miles west of Socorro, NM.

The VLA is an incredible sight - 27 huge radio dishes in a Y-shaped configuration, each 82 feet in diameter and ten stories high, operating as a single telescope - an interferometer - with an apparent radio telescope antenna size of 22 miles across and the sensitivity of a dish 422 feet in diameter. Each dish can move along a track, as needed, to fine-tune its images.


Photo by Diane Humes

Looking near and far using the VLA, scientists have found water ice on Mercury, studied active regions of the Sun, looked at black holes in the centers of other galaxies, and the formation of the earliest stars in the universe. Connecting the VLA with 10 other radio telescopes located in Hawaii, New Hampshire, Texas, the US Virgin Islands, Iowa, Arizona, California, Washington, and two other sites in New Mexico forms the Very Long Baseline Array (VLBA), with an effective diameter of more than 5,000 miles. Using data from the VLBA astronomers will be able to complete a 3D map of the Milky Way galaxy and other ultra-cool projects.

As if that were not enough, the VLBA achieves five times higher precision when linked with dishes at Areceibo, Puerto Rico, Green Bank, Virginia and Effelsberg, Germany. This increased baseline creates the High-Sensitivity Array (HSA), capable of gathering data from the farthest extent of the universe.

The VLA site was chosen for its isolation; few people inhabit the wide Plains of San Agustin. Mountains shield its dry short-grass prairies from outside influences and towns are small and far away - perfect habitat for radio astronomers and endangered wildlife. While visiting the VLA, we saw a large herd of "rare" pronghorns living practically under the radio dishes!


Photo courtesy of TPWD

Pronghorns, *Antilocapra americana*, were first seen and recorded by Lewis and Clark on their 1804 - 1806 expedition. At that time they were nearly as numerous as the bison with whom they roamed; they are the fastest mammal in North America, clocked at 60 mph. However, by 1920, as with bison, they were heading for extinction. With habitat restoration and re-stocking programs, their numbers are now over 1 million, but they are not widespread except in Wyoming and Colorado; it is very special to see a pronghorn.

Pronghorns are often called antelopes but, in fact, are the only extant members of their family and are actually more closely related to giraffes and okapi. The pronghorn is the only animal in the world with horns that branch and the only horned animal that sheds them every year as though they were antlers. Both males and females can have horns, but the male has much larger horns and the female horn is seldom branched or pronged.

In Texas, pronghorns are found only south of Marfa and between Alpine and Ft. Davis. Coincidentally, the Texas radio telescope used in the VLBA is at Ft. Davis; it appears that deep science may have the same requirements for success as wild species - adequate

water, clean air, and wide open spaces lacking most of the trappings of human civilization.

If you want to get away from it all - follow the astronomers! or the pronghorns!

## The Great Cephalopod King Retires by Julie Massey

Nathan Veatch, the Great Cephalopod King, is hanging up his teaching tentacles (at least for the training class).

When I received Nathans's note, my heart was sad. Surely the Cephalopod King can't retire?

Then I started to think of Nathan's legacy. Nathan taught people to look beyond the slime and tentacles to discover the amazing world of cephalopods – up close and personal.

The number of people who experienced the wonders of cephalopods thanks to Nathan is staggering. Nathan educated teachers in the Treasures of the Bay Workshops, Conference for the Advancement of Science Teaching, 15 master naturalist training classes and Camp Wild. Texas A&M Galveston Sea Campers dissect squid thanks to training by a master naturalist who was trained by Nathan.

Consider how many teachers use squid dissection in their classrooms because of Nathan Veatch. Nathan introduced a teacher, Mr. McWhirter, at Dunbar Middle School in Dickinson to cephalopods. The next year, Mr. McWhirter hosted "Cephalopod Day" at Dunbar; it was so popular that the entire campus participated, over 820 students! Mr. McWhirter became a major buyer of squid, purchasing cases of squid for "Cephalopod Day" at Dunbar.


Photo by Frank Budny

When added all up, our Great Cephalopod King's teaching tentacles have taught over 17,300 students and teachers the wonders of cephalopods - quite a legacy.

Thank you, Nathan, for your expertise, dedication and for being our Great Cephalopod King! All hail the King!

## Six Kites Over Seabrook by George Kyame

It all started for me about seven years ago whilst gazing overhead at a gracefully soaring, falconesque gray bird with a whitish head. Indeed, it was a Mississippi Kite.

From a backyard in a bedroom community 20 miles southeast of Houston, I was witnessing what appeared to be a local denizen. Amateur birder, as I am still to this day, I was caught unawares. At the time the only experience I had had with this species was a rough identification of some kind of "gray eagle" in the pine trees at my father's home in southeast Louisiana.

During this same period I was accruing many bird lifers. Then I joined TMN-GBAC and became a hawk watcher. I was already an observer, but now I became a watcher with the learned and practiced skills of a citizen scientist whose goal is to record the northward spring migration of raptors.

The Mississippi Kite is one of the top two counted species at the spring hawk watch in La Porte. The other is the northeastern-bound Broad-winged Hawk. Shall we put it this way? During the Spring 2018, a total of 10,683 Mississippi Kites was tallied. That total includes 7,303 in one morning!


Photo by John Wright

*Ictinia mississippiensis*, the Mississippi Kite, actually has a range that extends from the southern Atlantic shore to the southern plains, and yes, includes our regional Texas Coast. In riparian woods, this kite is a gregarious bird of prey often living in groups. This agile, sky levitator feeds primarily on insects while on the wing. Frogs, toads, lizards, snakes and small mammals such as bats and mice are not off the menu.

What I find most soothing and hypnotic about the Mississippi Kite is the almost effortless low altitude soaring while adjustments are made with its bandless tail. The triangular tail seems the sole, vector-choosing mechanism of these near overhead flyers.
Hey, Spring Class of 2014, remember the aerial show put on by a pair of Mississippi Kites on our last day of class after canoeing May's Pond? 'Twas as a celebration of all things naturalist! I watch that everyday times three.
As it plays out, that Mississippi Kite flying above the garden in 2011 turned into two Kites, a breeding pair. Every mid to late spring, a tad after migration count, they return. In 2014, I noticed four. My first thought was: "No way, are things a-changing?" Appears it is the case. I observed, proudly like some discoverer, that four soared.

Fast forward to 2018. There are six Mississippi Kites habitually circling what must be their range and territory. I can stare for hours, *sans* optics, as these avian wonders routinely dip to 30-40 feet overhead. Heck, I don't even have to crane skyward. Their shadows cross the yard span like blips on a sonar. Still, look up!

## Save the Date - Upcoming Events


### Coastwide Fall Cleanup

September 15, 9 to noon

http://www.glo.texas.gov/adopt-a-beach/volunteer/cleanups/index.html



Photo by Bobette Brasfield

### Adopt-a-Highway Cleanups

September 21 and November 16

Start time: Sunrise at 16922 Beachcomber in Jamaica Beach

Contact: Bobette Brasfield

# Camp Wild Fun (Photos by Chris Anastas)



Next year, volunteer and join the fun!

# Guppies by Julie Massey

It has been a great summer. Camp Wild was a terrific success! It took an army literally to make it all come together with months of planning and coordination.

One group of campers used these words to describe Camp Wild: inspiring, challenging, adventurous, fun and awesome!

Thank you, master naturalists, for being inspiring, challenging, adventurous and fun to make Camp Wild AWESOME!

**It's all adding up**
Thank you all for reporting your education contacts on VMS. I really appreciate having the data to tell the story of the impact you make with your education, outreach and stewardship efforts. From January to June 2018, you have had 15,931 educational contacts. Phenomenal! Thank you!

**Straws are in the News**
Recently, you may have seen plastic straws hit the front page of the Galveston Daily News; see the June 27, 2018 edition. The article highlights how Galveston eateries are choosing to move away from plastic straws to paper or bamboo.


I was inspired by the TED Talk by Molly Steer, a nine-year old from Australia. Molly has formed an organization called Straw No More to encourage school children to stop using plastic straws. She is very articulate in her message! I encourage you to watch her TED Talk at https://www.youtube.com/watch?v=Rr5Py1r9xjw

Our chapter reduces our trash pollution impact by bringing our own plates, utensils and drinking cups to meetings. Kids like Molly Steer and Texas Master Naturalists are making a difference for our wonderful, blue planet!

**Put it on your Calendar – October 26-28, 2018**
Join us for the Texas Master Naturalist Annual Meeting as we celebrate our 20th Anniversary. The meeting will be held October 26-28 in Georgetown. Check out the website at


https://txmn.org/2018-annual-meeting/

See you in Georgetown!

## *The Midden*

Published bimonthly by the Galveston Bay Area Chapter - Texas Master Naturalists. The purpose of *The Midden* is to inform communicate and educate chapter members and the community. If you have an article that contributes this purpose or want to join the team, please contact Diane Humes, treimanhumes@gmail.com.

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

*The Midden* is posted on the GBAC-TMN chapter website: www.txmn.org/gbmn two weeks prior to chapter meetings. Archived issues also on chapter website. If you prefer to receive *The Midden* in hard copy and are not currently receiving it, please contact: Julie Massey, julie.massey@ag.tamu.edu.

**Midden Team**
Diane Humes, Managing Editor
Madeleine K. Barnes — Lana Berkowitz
Verva Densmore — Carolyn Miles
Chuck Snyder — Jennifer Trandell

## *The Midden* Deadline
**for the next issue**

**August 26**

If you have Advanced Training or Volunteer Opportunities, please submit information to Tim Long, tikibloke@yahoo.com

# August and September Activities

## ADVANCED TRAINING OPPORTUNITIES

**Chapter Meeting** – Aug. 2; Don't Teach, Inspire! Be the Example, Presenter – Lisa Reznicek, TPWD Interpretive Park Ranger at GISP
6:15pm Social, 7pm Meeting, 7:30pm Speaker
Extension Office*; 1 AT hour

**Why Ecology Matters!** – Aug. 4
9:30am-noon; 2.5 hours AT, Location: Extension Office*
Presenter – Cindy Howard, Chapter member
Register with Emmeline Dodd txdodd@aol.com

**Archeology of the Upper Texas Coast** – Sep. 8
9:30am-noon; 2.5 hours AT, Location: Extension Office*
Presenter – Jason Barrett, TXDOT
Register with Emmeline Dodd txdodd@aol.com

**Ongoing**
Galveston Island State Park
10am 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. Extension Office*
10am-noon; 2 hours AT
Contact: Elsie Smith (409) 392-7003
See page 5 for meeting dates and books.

## STEWARDSHIP OPPORTUNITIES

**Ongoing Activities:**
Mondays – Galveston Island State Park, Contact: Chatt Smith chattsmith@gmail.com

Tuesdays –
- Sheldon Lake 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 Llosa mllosa@tamu.edu

Thursdays –
- Stormwater Wetland Team, every Thursday, 9am - noon. Contact: Mary Carol Edwards mary.edwards@agnet.tamu.edu
- San Jacinto State Park, Contact: Jim Duron wishkad@yahoo.com

Fridays – Prairie Friday, ABNC, 8:30 – 11:30am, Contact: Chatt Smith chattsmith@gmail.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 staff 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
(At Extension Office* monthly unless specified)

**Board Meetings** – usually First Tuesday, check calendar

**Committee Meetings**
Advanced Training – Third Monday, 10am-noon
Education/Outreach – Third Tuesday, 10 to 11:30am
Stewardship – Meets quarterly
Communication – Meets quarterly, check calendar
Midden Team – Aug. 27, Monday 9-noon

TEXAS A&M AGRILIFE EXTENSION



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

*Extension Office = Texas A&M AgriLife Extension Service – Galveston County Office (Carbide Park)