The Midden

Hurricane Laura's Rain Bands by Diane Humes

Galveston Bay Area Chapter - Texas Master Naturalists

October 2020

Table of Contents	
Wetland Wanderings	2
Prairie Ponderings	3
Coastal Corner	4
Turtle Lady of South Padre	5
Connections: Forgotten Roads, Prairies, and the Gulf of Mexico	6
Sea Turtle Top Ten Quiz	8
Twenty Years and (Almost) One Hundred Middens	9
Women in Nature: Mary S. Young	9
AT Continues to Zoom	10
Nominating Comm.	10
Heritage Book Study - Review	11
Oct/Nov Activities	12
Next Chapter Meeting	

October 1

Texas Invasive Species Control

Вy

Ashley Morgan-Oliver

with Texas Invasives

Via Zoom

President's Corner by Susette Mahaffey

If I had a 'bucket list', rescuing a baby sea turtle would surely be one of the items on the list! In July Keith and I had that opportunity to rescue one and we took the little guy to NOAA. It was an extremely exciting experience to get him from the family who found him, struggling in the surf, and take him to the people from the Houston Zoo working with rescued sea turtles. Hopefully, the little turtle is growing each day and will eventually be released back into the wild!

Meanwhile, the work with sea turtles formerly done at NOAA is being taken over by Dr. Chris Marshall at Texas A & M who is the director of the Gulf Center for Sea Turtle Research. <u>https://tamug.edu/GulfCenterforSeaTurtleResearch/</u>. Since the last edition of *The Midden*, our chapter has been made a partner with the Gulf Center for Sea Turtle Research because of the many volunteer hours that we do for this program. Dr. Marshall holds the license for working with turtles at both the state and federal level. Many of our chapter members are fortunate to be listed on the license at various levels of expertise to help with sea turtles. This fall there will be a building at Texas A & M on Pelican Island that will house injured turtles, and there are plans for a future building that will serve as a hospital, laboratory, classroom, museum and gift shop. It will be open to the public and available for school field trips. With the growth of the center, our group will have even more opportunities to interact with and volunteer to support the work with sea turtles. It is both an honor and privilege for our chapter to receive the recognition for our work and volunteer spirit!

Plans are moving forward for the state conference in October which will be done via WebEx. The Emeritus team will be doing a breakout session, and we anticipate entering the project competition with our Beach Heroes project. The Emeritus project continues to gain momentum and has the next meeting scheduled for September 22. The Beach Heroes group is planning to make a video of the program and prepare Beach Heroes tubs for the campuses that we serve.

Our outdoor projects are moving ahead with chapter members volunteering with our partners throughout our area. Although we are not yet back to what normal used to look like, we are able to return to many of our activities. Please remember to list all people who are present when you work with a small group and turn that list into the office at Carbide. Please continue to social distance and wear a mask as a courtesy to others.

The October meeting will be via Zoom. Throughout a difficult year, our chapter has moved ahead and made a difference to those around us. We have found ways to work in the natural world that surrounds us.

Those who dwell among the beauties and mysteries of the earth are never alone or weary of life. Rachel Carson

Wetland Wanderings: The Red-Eared Slider (RES) by Lana Berkowitz

According to Teenage Mutant Ninja Turtles legend, a canister of radioactive goo fell from a truck and smashed onto a bowl of pet red-eared sliders that had been knocked down a manhole. The oozing goo turned the turtles into four human-size heroes ready to save the world. Cowabunga!



In reality, the TMNT craze of the 1990s exacerbated the red-eared slider invasion of the world.

The Gulf Coast and Mississippi River are their native habitat, so we are accustomed to seeing the turtles basking along waterways. However adaptable, RES are not welcome sights in states such as California and Connecticut and especially in countries such as Australia and England.

RES (*Trachemys scripta elegans*) are now on the list of 100 of the World's Worst Invasive Species compiled by International Union for Conservation of Nature.

The RES problem started with humans, of course. In the 1900s, the cute little green turtles with a red stripe behind their eyes were collected to be sold as pets in dime stores and markets. "Its small size and cheap price made it a popular pet, and by the 1950s, millions of these turtles were being farmed and shipped abroad as part of the pet trade," according to the Invasive Species Initiative.

In 1975 the Food & Drug Administration banned the sale of turtles less than 4 inches in diameter after it was discovered that some young turtles carried salmonella. One thought was that children were less likely to put larger turtles in their mouths, which could cause infections. However, buyers could still find small ones at flea markets and roadside attractions and the global pet trade continued. When the pet turtles became too big or an inconvenience, owners often released them into the wild, which helped increase their US range with the outer edges now stretching west to New Mexico, east to Florida, north to New York, and south to Mexico.

Although red-eared sliders don't have a visible outer ear, they get their name from broad red stripe behind their eye and their habit of sliding off rocks and logs when startled. Their hearing is poor, but they are extra sensitive to vibrations.

They are communal when it comes to basking in the sun. You may see them stacked on top of each other with their legs outstretched to catch some rays. In the winter, they bury themselves in mud or loose soil. If there is a squeeze on resources, RES will travel to find another body of water to eat aquatic plants, small fish and decaying material.



The prolific RES mate underwater. A female turtle digs a small hole on land, deposits up to 30 eggs and leaves. She may produce up to five clutches a year. The number of eggs depends on the female's size. Eggs hatch after 60 to 90 days, depending on temperature. Newborns are on their own. They can grow up to 12 inches long and live 20 to 30 years.

RES are highly adaptable and can tolerate anything from brackish waters to manmade canals and city park ponds, according the US Geological Survey report on nonindigenous aquatic species.

The little turtles can be prey for a variety of predators, including raccoons and wading birds. When they get bigger, sliders' main concern is alligators.

As invaders, RES compete with native turtle species for food, habitat and other resources. The aggressive RES can bully native turtles out of basking sites, a critical resource for reptiles. Reduced access to these sites can slow growth and increase mortality of native turtles, according to the Invasive Species Initiative. There also is concern about turtles raised in captivity having diseases that could harm the native species.

So, humans are trying to control another problem they started. Some states and countries have passed

legislation to control possession and release of red-eared sliders. Management includes hunting or trapping turtles to sterilize or euthanize, which takes a lot of staff resources.

Without guilt, we Gulf Coasters can enjoy memories of catching baby sliders in a bayou and continue feeding strawberries to garden buddies, but don't let your out-oftown cousin take cute little turtle home as a pet. They belong here.

Prairie Ponderings: Bobcats by Diane Humes

Bobcats (*Lynx rufus*) inhabit a wide variety of habitats from Canada to Mexico. Although not strictly prairie animals, our bobcats (*Lynx rufus texensis*) do live on our prairies and near our homes. In the spring of 2010, one young (probably scared) male bobcat was found and trapped in a downtown Houston parking garage! He was relocated to a new home at Brazos Bend State Park and perhaps he is still there enjoying life in the country.

I also have the evidence from my own eyes that these top predators live within our urban/suburban environment, but not with any happy ending. On three occasions, and less than a mile from my home, I have found dead bobcats - car collision casualties - along Bay Area Blvd, Space Center Blvd, and Red Bluff Rd. Proof of former life, anyway, and a breeding population.

Our most common wild cats, bobcats are considered a Species of Least Concern with perhaps a million of them living in Texas. If they have a predator, it is the American alligator. They may be trapped for their fur, but their main problems are habitat loss and human interactions mostly with vehicles. Roads are obviously dangerous, so these cats travel along pipeline easements and creeks and bayous.

Bobcats are small - about twice the size of my house cat - with tawny spotted or striped coats, white bellies, tufted ears, long legs, large paws, but short, black-tipped, "bobbed" tails, between 4 - 7 inches long. Bobcats are good tree climbers, swimmers and jumpers. Usually quiet, they may produce loud growls and snarls, or screams and hisses during mating season.

Like other cats, they are solitary, territorial, and mostly nocturnal, stealthy and elusive. Males are larger than females and wander more widely.



Male and female bobcats may have overlapping territories; they mate in winter. Females make secluded dens - in our area, probably multiple dens in dense brush or hollow trees - and bear 1 to 6 kittens in the spring. Mom does all the work of raising the young, caring for the kittens and teaching them to hunt. She may have a litter every year. Bobcats live for about 12 years in the wild.



Bobcats are fierce hunters. Generalist carnivores, they can take down prey much larger than themselves, but usually eat rabbits. If rabbits are scarce, they will hunt rats, opossums, birds, fish, eggs, insects, and reptiles. Maybe baby alligators and unwary red-eared slider turtles!

They compete somewhat with coyotes for similar prey, but coyotes are active in the day, while cats hunt at night.

Lucky people catch glimpses of bobcats. Reliable friends have seen them at Armand Bayou Nature Center - so keep your eyes open. They are definitely around.

Coastal Corner: Sea Turtle Adventures by Patty Trimingham and Emily Incerto

Whether it is a surprise find inland or a smelly mess on the beach, chapter members who completed Sea Turtle Stranding Network training have been ready to jump into action.

Patty Trimingham was one of the team members anxiously awaiting her first mission. "My first week on call I had my 'turtle kit' in my car just in case. But after a few weeks of not getting called, I just left the kit in my garage thinking I could load up when/if called," Patty said.

Patty was at the Houston Botanic Garden when Kari Howard of the Gulf Center for Sea Turtle Research called to ask her to check on a turtle in Alief. Alief?

"Yes, Kari wasn't sure if it was a sea turtle or a red slider. The woman who called was unclear. She mentioned fresh water, salt water and a fishhook," Patty said

Heading to Alief, Patty hoped it was a red-eared slider because her turtle rescue kit was at home. "All I had were my gardening gloves and an old sheet I keep in the back of my car," she said.

When she arrived at the home and looked into the large aquarium on the porch, she got a wonderful surprise.

"Holy cow! It was a beautiful, young green sea turtle swimming around in murky, green water! It was about 1.5 to 2 feet long. The word 'excitement' doesn't even cover what I felt. A SEA TURTLE!" Patty said. "I told the homeowner I would be right back with my gloves so I could pick it up.

"By the time I retrieved my gloves, the homeowner was proudly holding the turtle on his driveway. He must have seen my excitement and wanted to help. I told him to put the turtle on the grass so I could get some good pictures."

The beautiful animal appeared healthy, but a thin, black line coming out of its mouth indicated a fishhook could be lodged deep. The turtle would need treatment at the Houston Zoo.

"I wrapped the turtle in my sheet, like swaddling a baby and headed off to the zoo. It rode on the passenger seat so I could keep an eye on it, and it could stay cool," Patty said. It was quite an eventful trip along U.S. 59 with one hand on a powerful flipper-flapping sea turtle.

"Even though I had the AC on, I was sweating," she said. "At one point I had a police officer following me. Wouldn't that have been great to get pulled over with a sea turtle on my seat?" It was a relief to hand the turtle to a vet tech at the zoo clinic. "By the time I got home, Kari texted me that the turtle had been anesthetized and the fishhook removed. The turtle was doing great. Yeah!" Patty said. Mission accomplished!

How did the sea turtle end up in Alief? "Well, the family had been fishing on the Texas City Dike the previous night. I think the turtle swallowed their bait and hook. They must have cut their line and taken it home, calling turtle stranding hotline in the morning," she said. "I was quite impressed that the family kept the turtle and didn't release with the fishhook. They could have easily just released it, and it would have died a slow death."

Emily Incerto got her first stranded sea turtle call in August. A hatchling had washed ashore near Seawall and 59th Street and left with a lifeguard.



"I arrived to find the hatchling swimming in the bottom of a milk carton. While examining it, I noticed it was missing part of its rear flipper and had algae growing on its shell, but it otherwise appeared to be healthy," Emily said.

She took the Kemp's ridley to Texas A&M University at Galveston, completed the Sea Turtle Stranding and Salvage Network paperwork and left the turtle in a crate inside the Sea Life Facility. Later it would be taken to NOAA to get a thorough examination and hopefully one day be returned to the Gulf. Mission accomplished!

Emily's next call was a vastly different experience: A dead turtle had been reported on East Beach.

Emily picked up equipment at TAMUG to process the turtle on the beach with fellow volunteer Leah Bogan.

"Searching the large expanse of East Beach for a turtle carcass was like finding a needle in a haystack. We eventually located it along a deserted stretch of shoreline facing the ship channel," Emily said. "This Kemp's was missing its head and had a large gash through its first two vertebral scutes." They measured, photographed and checked it for tags.

"Thankfully we were able to slide the entire carcass into a plastic bag. Our other option was to remove/bag the shell and a flipper and bury the remainder of the turtle," Emily said. "We carried the turtle back to my car and loaded it into my trunk. With the trunk open and car windows

down, I transported it to TAMUG where I left in the freezer for a future necropsy." Mission accomplished!

"I always believe that we learn more from our challenges, and the dead turtle was a bigger challenge," Emily said.

Here are her tips on what to bring when responding to a possible dead turtle:

- 1. Shovel: Turtles are better at digging sand than humans.
- 2. Rope: It can be used to pull (not carry) the plastic tub back to the car and to tie open the trunk.
- 3. Knife: Just in case turtle body parts need to be removed.
- 4. Mask/Gloves: Not just for coronavirus anymore.
- 5. Equipment from TAMUG: Collect all your turtle data on the beach. (Trust me on this one, you don't want to have to open the bag again.)

The Turtle Lady of South Padre by Meade LeBlanc

Do you remember the Turtle Lady bringing turtles dressed up as bride and bridegroom on late night television many years ago? I do. It's hard to imagine that someone would pull such a stunt today, but back in the day of Stupid Pet Tricks, anything was possible. Rewatching some clips of her appearances on David Letterman and Johnny Carson on You Tube, you can see her love of turtles as well as her sense of humor and sweet nature as she used that platform to reach millions of viewers.

Her name was IIa Loetscher and she single-handedly started a movement to protect, preserve and rehabilitate sea turtles in the mid-1960s. But, saving turtles was not her first passion. IIa started out as a pilot and was the first female pilot licensed in Iowa and Illinois. She was a pal of Amelia Earhart and a member of an organization formed to support other female pilots in the late 1920s.

Ila moved to South Padre in the mid-1950s after her husband died, a time when there was little development on the island. It was there she first learned about the plight of the Kemp's ridley turtles, which were nearly extinct.

In the mid-1960s, a man named Dearl Adams was elected to spearhead Project Ridley, whose goal was to study the Kemp's ridleys in Mexico and bring eggs to South Padre in order to reintroduce them to the Texas coast. Ila joined Dearl and others on these trips, and, with permission from the Mexican government, they gathered eggs to bring back to an area they named Ranchito Tortuga.



In that first year, 2000 eggs were collected and relocated, and of those, 1102 hatched. In 1974, a female returned to Ranchito Tortuga, and laid 117 eggs. This was the first time a sea turtle had nested on South Padre in over 20 years. The eggs were protected from predators and on July 4, the first hatchling crawled into Ila's hand. She named him Yankee Doodle Dandy, and he became a favorite in his patriotic costume.

She also brought injured turtles to her home to care for them. She kept them in tanks in her back yard, and charged the public to see them, using the opportunity to educate them about the plight of endangered turtles. In 1977 she formed Sea Turtle, Inc., which is still carrying out her mission today.

The operation moved out of her home in 1999 to a facility on Padre Boulevard. Just two years ago, a \$6 million education facility opened, with a staff of about a dozen people and hundreds of volunteers. It has education talks throughout the day (Turtle Talks), indoor tanks, outdoor tanks, and a gift shop where there is plenty of irresistible turtle merchandise.

Nearby is the rehabilitation center, which is connected by a 500-foot walkway. It treats and releases between 40 and 100 injured or sick turtles each year. In some cases, the public can watch these releases. It is also possible to view hatchling releases during hatchling season which is mid-June to early August. Come spring 2021, a completely renovated and expanded hospital will be completed, including a ground-to-ceiling viewing window that will allow visitors to watch turtles during treatment. And there is a turtle cam to see what is going on anytime.

One of Ila's favorite turtles is still there. Merry Christmas, an Atlantic green sea turtle, was found stranded on Christmas Eve in the mid-1980s when a cold snap hit the island and stunned her. She was found to have several physical abnormalities which prevented her release.

Ila's work with sea turtles was widely recognized. In 1981, she was honored as a Wavemaker in the Cousteau Almanac, by Jacques-Yves Cousteau and his Cousteau Society. Some of her awards include Honorable Admiral in the Texas Navy (1984), Gulf Oil Conservation Award (1985), Turtle Lady Park Dedication (1986), and National Wildlife Federation Award (1987).

Ila died in 2000, at age 95, and the effort that started with one dedicated, energetic person has blossomed into an amazing success story. Her love of her little charges was obvious when you saw her hugging and kissing them, dressed up in patriotic garb, in a poncho and sombrero, or in a bridal gown and tuxedo.

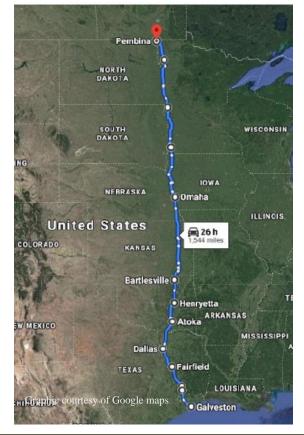
Connections: Forgotten Roads, Prairies, and the Gulf of Mexico by Diane Humes

I confess, in August I took a trip to escape our heat, humidity, and noise. Like Laura Ingalls Wilder, I found a *Little House in the Big Woods*, only in Minnesota, land of 10,000 lakes. By official count, Minnesota actually has 11,842 lakes larger than 10 acres - most in the north and due to glaciers. "Our lake" was 383 acres of wonderful paddling, complete with bald eagles and loon families. We enjoyed hiking the hills, listened to wolves howling, saw black bears, and viewed the Milky Way spread across a brilliant night sky, complete with Perseid meteors and the Andromeda Galaxy!

The "land of lakes" is a long way from Texas, yet we are more connected than we think.

There is a road running along Minnesota's westernmost border with North and South Dakota - US Highway 75. Called the King of Trails Scenic Byway in Minnesota, it runs through the Red River Valley north to Winnipeg, Manitoba, Canada, and also runs south - all the way to the Gulf of Mexico, in fact, to Galveston!

The King of Trails Scenic Byway was built on a Native American pathway, but most Native Americans used trails originally blazed by bison. Bison traveled the prairies seeking three things: proximity to water, salt licks, and convenient paths to both. Historically, many roads were originally bison trails.



Most remaining North American prairies are found along this route. Who knows what we can glean along the way about the history of the land? Next time I visit the Northwoods, I might want to try driving this back road.

This is not a short trip; the distance from Galveston to the Canadian border is approximately 1550 miles. Google Maps, which the bison and early Americans never had, insists on driving the newer Interstate highways, but you can follow US 75 nearly the entire way. The route is most obscure on our end. Although 1950 era maps show US 75 from Dallas to Galveston, I believe I-45 is now built over the old highway. From I-45 north in Conroe you can pick up US 75 and on it go to Willis, New Waverly, Huntsville, Madisonville, Leona, Centerville and on to Buffalo, TX.

Buffalo, Texas was platted in 1871 because of the International & Great Northern Railroad line. It was named for the American bison that formerly lived in the area, supposedly mentioned along with wild horses on General Stephen F. Austin's map of Texas. Perhaps those bison mapped this section of the highway?

The Buffalo, TX Chamber of Commerce advertised for settlers: "Where else in Texas will you find lands that will produce half a bale, to a bale and a quarter of cotton to the acre, will make prize corn fields, will produce abundantly the finest truck garden, from tomatoes and peppers to melons...enormous yields of pumpkin yams...where hogs thrive...where blackberries grow wild...Elberta peaches and plums from staple crops...and yet improved farms with all these possibilities can be had at from \$10.00 to \$20.00 per acre."

Continuing from Buffalo, you come to Dew, Fairfield, and Corsicana where you get back on I-45 to Dallas, then follow US 75 to Richardson, Plano, McKinney, Sherman and Denison before leaving Texas. Keep going to Durant, Caddo, Atoka, Pharaoh, Henryetta, Okmulgee, Tulsa, and Bartlesville, Oklahoma.

Cross into Kansas and head for Buffalo, KS, named for the former denizens of nearby Buffalo Creek. Once a busy town, today's Buffalo has little to offer except arrowheads and other artifacts along the creek from former Native American campsites. Perhaps more clues about the road's origins? US 75 follows the Missouri River to Topeka, Omaha, Nebraska, and Sioux City, lowa, tracing the route of the Lewis and Clark Expedition. For sure, Lewis and Clark did not use Google Maps, either!

Finally, in Luverne, Minnesota the King of Trails National Scenic Byway officially begins. The former Native American trail runs through Pipestone National Monument, 1.5 miles north of the town of Pipestone, MN. The monument contains the quarry for the red clay-rich rock used to carve pipes, valued and shared by many Native American tribes for at least four hundred years. Is it any wonder that a trade highway might have led to this spot?

Further up the road the glacial geology gets very interesting. In Ortonville, from the base of the Ortonville Dam, Big Stone Lake becomes the source for the southeast flowing Minnesota River, which turns north in Mankato to join the Mississippi River in the Twin Cities. But, at the north end of the lake, the Bemis moraine, a glacial ridge not five miles wide, crosses the river valley; from there the Red River of the North flows north to Canada.

This is the high spot - called Buffalo Ridge - and at 1995 feet above sea level, it is the divide between water flowing north to Hudson Bay and south to the Gulf of Mexico.

Highway 75 continues north to Moorhead, MN, sister city to Fargo, North Dakota, and Crookston and the Manitoba border at Pembina. Winnipeg is but a simple journey after that, traveling now on MN 75 to the end of the road. Contemplating the return journey, I could say that it was "all downhill" from Buffalo Ridge.

During our northern sojourn, we visited the source of the Mississippi River in Itasca State Park, a northern paradise of 32,500 acres of old-growth forest, rolling hills, and 100 of Minnesota's lakes. Still within the glacially confused area and 1475 feet above sea level, the Mississippi trickles out of Lake Itasca as a shallow stream barely 12 feet wide. From its headwaters it wanders 2552 miles before reaching the Gulf of Mexico, joined by most of the waters of the US along the way.



The Mississippi River Watershed is the largest watershed in North America; although we do not live within it, we are affected by it through the Gulf of Mexico. For many years, scientists have studied and measured the "Dead Zone" in the Gulf at the mouth of the Mississippi. This is an area of hypoxia, low dissolved oxygen levels, detrimental to marine life. This year's dead zone is predicted to reach 6,700 square miles larger than average - and is caused by excess fertilizer washing off fields and lawns throughout the vast Mississippi River drainage. The Mississippi River also discharges a huge amount of trash into the Gulf and I'm sure we have cleaned at least some of it up from our beaches. The most common items are plastic: cigarette butts, bottles and caps, food wrappers, and small bits in various colors. In fact, the density of plastic in the Gulf of Mexico at the river's mouth is no less than that of the Great Pacific Garbage Patch. We are all connected, indeed!

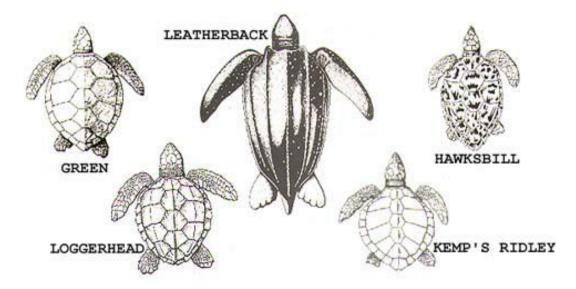
Top Ten Quiz Ridley's Believe It or Not Sea Turtles by Steve Alexander

- 1. _____ Primary food sea grasses and algae
- 2. _____ Females return to sandy shores to nest
- 3. _____ Adults found exclusively in Gulf of Mexico
- 4. _____ Only one pair of prefrontal scales
- 5. _____ Most endangered
- 6. _____ Largest and fastest
- 7. _____ Laid 195 nests on the Texas coast in 2008
- 8. _____ Source of tortoiseshell jewelry
- 9. _____ Large head, brownish color, heart-shaped carapace
- 10. _____ Appendages modified as flippers

Possible Answers

- Leatherback
- Green
- Loggerhead
- Kemp's ridley
- Hawksbill
- All five

(Answers may be used multiple times)



Answers on last page.

Twenty Years and (Almost) One Hundred Middens! by Diane Humes

If you have been a Galveston Bay Area Chapter member since 2001, congratulations!

The Midden editor has suddenly awakened to the thought that the Midden Team is approaching publication of Midden issue 100.

If you have read all of them, double congratulations and, maybe, a prize!!

Alas, however, I cannot find one issue - the second one published. I'm hoping it is still around - in a very safe place, I'm sure. Could you do me the utmost favor and let me know if you are still in possession of Volume 1, Issue 2, published in 2001? And please thank Joanna Mendoza for most patiently aiding this search.

Thank you, thank you. Can you believe it - 20 years and (almost) 100 Middens?

Women in Nature: Mary S. Young (1872-1919) by Sheron Evans

Mary Sophie Young was born in Ohio, but she moved to Texas as soon as she could. She received her PhD from the University of Chicago in 1910 and accepted a position at the University of Texas that fall, becoming the first official curator of the UT herbarium as well as a botany professor.

She collected plants from the Austin area, and other areas of Texas. She did make a collecting field trip to our area, visiting Alvin in 1918. But her favorite place to collect was in the Trans-Pecos region. She often wrote of the vastness of the Texas landscape. "The view before us was certainly magnificent - the foothills in the foreground, with our canyons winding out through rolling green hills to the plains beyond." Traveling alone as a young woman was frowned on, so she would hire a UT student to accompany her, and to help her set up camp and hunt. They traveled in an old buggy, pulled by two donkeys. They slept in abandoned adobe buildings or under the buggy. She would ration purchased supplies, augmented by the rabbits that they would shoot. She almost always carried a shotgun.

Mary Young's contributions to the knowledge of the biodiversity of Texas plants in the 9 years she was at UT are significant. She added over 10,000 well- documented collections to UT's herbarium before her death. Five plant taxa have been named for her, including *Styrax platanifolius* ssp. *youngiae* - Young's Snowbell, which she first collected in the Davis Mountains in 1914.



Young in West Texas with her team of donkeys during a summer collecting trip (Texas State Historical Association. *The Southwestern Historical Quarterly*, Volume 65,)

Advanced Training Continues to Zoom by Verva Densmore

As the summer heats up, we continue to stay cool and safe with our on-line Advanced Training offerings. Here is a review of the classes presented since our last Midden publication.

- August 6 (Thursday 7 PM): Restaurants to Reefs at August chapter meeting with Mike Niebuhr, GBF. (1.25 hour)
- August 11 (Tuesday 7 PM): Red wolves on Galveston Island with Ron Wooten. (1.5 hour)
- August 15 (Saturday 10 AM): The Secret Life of Seeds with Laurie Gonzales, Refuge Biologist-TRNWR/US Forest & Wildlife Service & Lower Trinity Basin Chapter. (1.5 hour).
- August 18 (Tuesday 1:30 PM) Galveston Bay Injured Bird Response Team: Past, Present & Future with Stennie Meadours, GBAC & other team members. (1.5 hour).
- August 20 (Thursday 10 AM): Galveston Bay Bottlenose Dolphin Research with Kristie Fazioli, EIH-UHCL & Galveston Bay Dolphin Research & Conservation Program. (1.5 hour).
- September 12 (Saturday 2pm) Raptors The Ultimate Apex Predator with Erich Neupert, Executive Director Blackland Prairie Raptor Center
- September 14 (Monday 10AM) Heritage Book Study. The first half of Timothy Egan 's book *The Worst Hard Time: The Untold Story of those who Survived the Great American Dust Bowl.*
- September 30 (Wednesday 2:00 PM) Galveston Bay Diamondback Terrapins with Mandi Gordon, EIH.
- October 1 Chapter Meeting: Texas Invasive Species Control by Ashley Morgan-Olivera.
- October 5 (Monday 10AM) Heritage Book Study will discuss the second half of Timothy Egan 's book The Worst Hard Time: The Untold Story of

those who Survived the Great American Dust Bowl

Some of these presentations were recorded with the permission of the presenters with the understanding that they can be used for educational purposes. Please note that you cannot receive AT or VT credit for watching the recording.

However, if you are interested in the material you can access the recordings via the chapter website <u>www.TXMN.org/GBMN</u>. Click the Membership tab at the top of the page, then Advanced Training, and finally Presentations.



If you have suggestions for future classes, please share your ideas with Ellen Gerloff at <u>egerloff@sbcglobal.net</u>.

And, as always, continue to watch your email for information about upcoming classes. Even if you have completed your required hours of AT, you won't want to miss these interesting and informative presentations.

Nominating Committee by Diane Humes

Many thanks to our Nominating Committee: George Kyame, Lynn Wright and Chris Anastas. They will be performing the duty of finding a slate of officers, to be elected at the December chapter meeting. Officers will include President, Vice President, Secretary, and Treasurer. All current officers are eligible to remain in office, if they so choose.

According to the chapter's bylaws, a slate of officers must be presented to the membership 15 days prior to the Annual Meeting. So, if you are considering an officer position for 2021, please contact a member of the Nominating Committee before November 18, 2020.

Thank you to everyone who has worked for our chapter's continued maintenance and improvement.

Contact George at <u>gwhammy23@aol.com</u>; Lynn at <u>lynn-wright@comcast.net</u>; Chris at <u>chrisk775@gmail.com</u>.

Heritage Book Study - Review of A Farewell to Ice: A Report From The Arctic by Madeleine K. Barnes



We live on the Gulf Coast of Texas and we are nowhere near the Arctic; there is no ice formation in the Gulf of Mexico. So, you might ask, what is the relevancy of Peter Wadhams' book?

The author, Peter Wadhams, is Professor of Ocean Physics and Head of the Polar Ocean Physics Group in the Department of Applied Mathematics and Theoretical Physics at Cambridge University. He has made annual research visits to the world's poles in submarines, snowmobiles, planes, and ships to measure ice caps for fifty years. As a scientist he writes in a technical style, however, don't be put off by this as he shares wonderful personal accounts of some of his experiences and breaks down the science into understandable language. He has a very dry British wit, and if there is one thing that stands out, it is his passion for ice science and his mission to communicate what is happening to the ice and to our planet.

Professor Wadhams states "Our planet has changed colour. Today, from space, the top of the world in the northern summer looks blue instead of white. We have created an ocean where there was once an ice sheet. It is Man's first major achievement in reshaping the face of his planet." He has documented the retreat of sea ice and the far-reaching impacts of this to offshore permafrost in the shallow Arctic seas. This isn't just about sea level rise, or the decrease in the albedo (reflectivity) of the solar radiation back into space, but the release of methane which is 23 times more effective in raising global temperature than is carbon dioxide.

Ice is an amazing and intricate naturally occurring phenomenon. Reading this book gives you a whole new appreciation for the process of ice formation, the myriad of different types, including how they are formed to how they breakdown(melt). As naturalists, we are constantly reminded of the complexity and connections that occur in our natural world. The most important thing that I learned from this book is, according to Professor Wadhams, this same balancing act exists with the Arctic Ocean sea ice, the "earth's thermostat," in regulating the overall temperature and weather, our climate system.

Given everything that Professor Wadhams has identified about what is affecting the equilibrium of our earth, is there time to implement scientific steps to address these impacts and what are they? You will have to read the book to find out. This is a very serious and compelling book that is educational, thought provoking, engaging, and insightful. The more you know.... the more you can share. I highly recommend this excellent book to enhance your understanding about the complexity of warming temperatures and what this means for us. For more information, take a look at the following video with Peter Wadhams:

https://www.youtube.com/watch?v=m-58wuR7D8M&t=7s



Our next Zoom AT meeting will be on Monday, October 5, to conclude our discussion of the second half (pages 155-312) of Timothy Egan 's book *The Worst Hard Time: The Untold Story of those who Survived the Great American Dust Bowl.* On November 2, we will meet to discuss the

first half (pages 1-126) of *One More Warbler: A Life with Birds* by Victor Emanuel. If you want to join us for either or both of these AT

us for either or both of these A I opportunities, please contact Madeleine Barnes at <u>Mad2Btmn@aol.com</u> to be added to the list for additional information and receive the Zoom meeting link and password.



We welcome your participation each month for two hours on the first Monday of the month starting at 10am for these AT meetings. Please note that we welcome everyone to participate whether you are TMN certified, recertified, or just want to remain a chapter member. We look forward to seeing you and let us know if you have read any good naturalist books lately. Happy trails!

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, <u>treimanhumes@gmail.com</u>.

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: <u>https://txmn.org/gbmn/</u> 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

Lana Berkowitz	
Carolyn Miles	
Diane Humes, Editor	

October and November Activities

ADVANCED TRAINING OPPORTUNITIES

Chapter Meeting - October 1, Texas Invasive Species Control Presenter - Ashley Morgan-Oliver with Texas Invasives 6:15 Social, 7:00 Meeting, 7:30 Speaker Via Zoom, 1 AT hour

Galveston Bay Diamondback Terrapins

Wednesday, September 30 at 2pm Location: via Zoom Presenter - Mandi Gordon, EIH Register with Emmeline Dodd <u>txdodd@aol.com</u>

Ongoing

Heritage Book Study Group First Monday of every month. Via Zoom 10am-noon; 2 hours AT Contact: Madeleine Barnes 281-474-9406 See Pg. 10 for meeting dates and books.

STEWARDSHIP OPPORTUNITIES

For a complete list of stewardship activities, go to our chapter website at https://txmn.org/gbmn/what-we-do/.

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<u>sm@verizon.net</u>.

Education and Outreach Committee - We can use your help in supporting outreach efforts, responding to requests for exhibit booths and presenters, planning Treasures of the Bay; and developing a library of education-outreach materials. Contact Sara Snell snellsw@verizon.net.

<u>Partner and Associate Programs</u> - Many organizations sponsor guided walks and education programs or need volunteers to staff their nature center. Go to <u>http://txmn.org/gbmn/partners/</u> for the list, then click on the link to the organization's website.



BOARD AND COMMITTEE MEETINGS (Via Zoom monthly unless specified)

Board Meetings - usually First Tuesday, see the chapter calendar at <u>https://txmn.org/gbmn/events/month/</u>

Committee Meetings

Advanced Training - Third Monday, 10-noon Education/Outreach - Third Tuesday, 1-2:30pm Communication - Meets quarterly, check calendar Midden Team - October 26, Monday, 9-noon



Texas A&M AgriLife Extension provides equal opportunities in its programs and employment to all persons, regardless of race, color, sex, religion, national origin, disability, age, genetic information, veteran status, sexual orientation, or gender identity. The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Courts of Texas Cooperating.



The Midden Deadline for the next issue

October 25

If you have Advanced Training or Volunteer Opportunities, please submit information to Mike Petitt, <u>mpetitt_houston1@comcast.net</u>.

Answers to Ridley's Believe It or Not Sea Turtles Top Ten Quiz

- 1. Green
- 2. All five
- 3. Kemp's ridley
- 4. Green
- 5. Kemp's ridley
- 6. Leatherback
- 7. Kemp's ridley
- 8. Hawksbill
- 9. Loggerhead
- 10. All five
- IU. All live