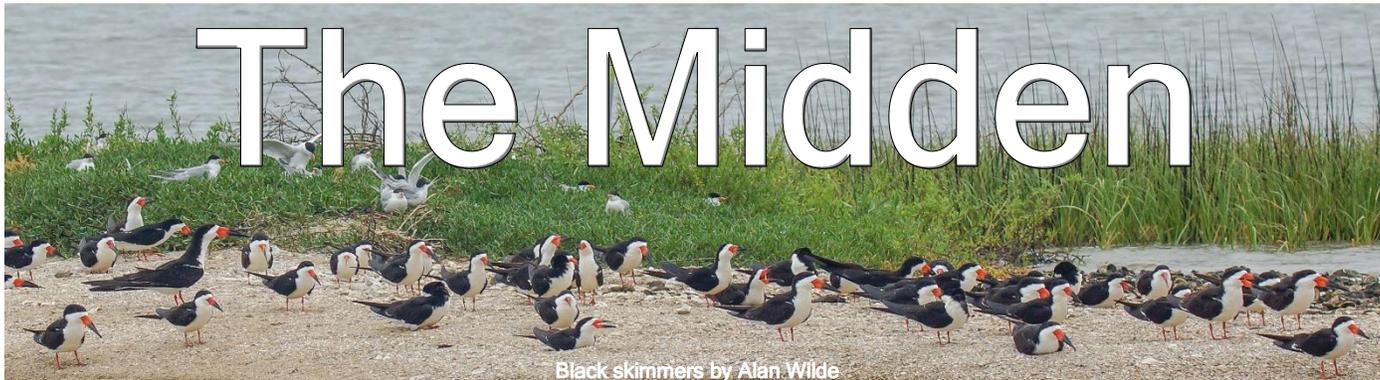


# The Midden



Black skimmers by Alan Wilde

Galveston Bay Area Chapter - Texas Master Naturalists

August 2019

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## President's Corner by George Kyame

Greetings fellow naturalists,

And here I shall ramble on through the doldrums of an Upper Texas Coast July and August. Following are my takes on the happy happenings of the present and recent past regarding our beloved chapter.

A lovely advanced training was enjoyed by all in attendance at the June chapter meeting. I particularly liked the new information on oyster beds and habitat influence. Thanks to Laura Jurgens, wonderful knowledgeable presenter with an impressive and growing resume. And thanks to her lab assistant MC Hannon as well. Remember to be on the lookout for polychaete swarms while boating the west bay!

Camp Wild persevered through challenging wind and rain, but finished strong with cheery campers and dedicated volunteers. Thanks to all.

The North American Prairie Conference was a huge hit with visitors from as far as Wisconsin and Saskatchewan and as near as our neighboring TMN chapters. The diversity made for a lovely exchange of ideas and for the camaraderie of everything continentally prairie. Thanks to all that helped at this enriching endeavor.

Hurray for the finally reinstated Treasures of the Bay Educators Workshop. Our elementary, middle school, and high school teachers soaked up 3 full days of jam packed master naturalist training. I was impressed. More importantly, these lessons will be multiplied many times over for years to come! Thanks to all the volunteers that made this "second training class" so successful.

I would like to wrap with some chapter tidbits. Chapter leadership has been identified as an apex priority at the board's long-term strategy Day Away Retreat. Elections take place at our December Gala. If you or someone you know is interested in chapter leadership duties, please do not be shy, and contact any board member.

Lastly, State has put together a Curriculum Evaluation Test. Sounds fun to me. Note, it is not a requirement. I will be one of the first test takers, so that I may evaluate it! Oh joy! More on this next time.

See you at the August 1 Chapter Meeting.



## Next Chapter Meeting

August 1

Beach Nesting Birds of Texas  
By

Taylor Bennett  
Gulf Coast Bird Observatory

At  
Extension Office\*

## Wetland Wanderings: Changing Landscapes by Lana Berkowitz

Have you thought about getting muddy with a wetland crew? This could be a good time to meet Colleen Ulibarri and Christie Taylor, who run programs for Texas Community Watershed Partners (TCWP) through Texas A&M AgriLife Extension Service.

They welcome volunteers in whatever capacity you're willing to get involved, Colleen said. Equipment is provided on workdays. Crew swag is awarded as you accrue more hours and training, and break time is usually enhanced by sweet treats. Volunteer locations range from Anahuac National Wildlife Refuge to Discovery Green in Clear Lake.

"Join us and come learn about a highly impactful method of ecological restoration along the Texas Gulf Coast," Colleen said.

Colleen was hired in May as the ecological restoration program coordinator as a part of the Green Infrastructure for Texas (GIFT) Team.

"Transforming large undeveloped areas to productive wetlands is the primary focus of my current projects as well as heading up the Wetland Restoration Team," Colleen said.

The team, formed in 2000, is in a transition phase. The largest project to date has been at Sheldon Lake State Park - both in size and time commitment. The team has been planting in the park since 2005. This work is now ending and the next work site will be at Anahuac National Wildlife Refuge.

"This is an outstanding opportunity to get involved in Step 1 of a project that will be as transformational and inspirational as those home renovation shows," Colleen said.

In the coming months, the need for volunteers will vary with plans to establish a nursery by the end of summer. Some possible activities to get involved with are constructing grow-out ponds, collecting plants, propagating and tending in the nursery until the time comes to plant. We will have a weekly volunteer day and provide a vanpool to and from the Clear Lake area.

Colleen, from Tucson, Ariz., received a bachelor's degree in conservation biology and a master's degree in natural resources from the University of Arizona. She lives in League City with her husband.

Colleen moved to Texas in December 2016 when her husband was hired by the U.S. Fish and Wildlife Service as a fish biologist for the Texas Gulf Coast.



Photo courtesy of Texas Community Watershed Partners

Most recently, she worked at the nonprofit Greens Bayou Coalition on projects involving parks and trails development, community greenspace enhancement and flood mitigation strategies. She also has worked for U.S. Natural Resources Conservation Service and as a wildland firefighter with the U.S. Forest Service.

"Given my work at the Coalition, I was interested in exploring concepts of green infrastructure beyond what my current position allowed. I jumped at the opportunity to apply with Texas Community Watershed Partners and for the chance to conduct projects on the ground that I had been advocating for to improve water quality and mitigate flooding," Colleen said.

Contact: [culibarri@tamu.edu](mailto:culibarri@tamu.edu).

Christie, who joined TCWP in December, is the specialist for the Stormwater Wetland Program who promotes and constructs green infrastructure.

"My program goal is to have a demonstration stormwater wetland in each of the sub watersheds of Galveston Bay and promote storm water wetlands as best management practice for water quality and flood control around the state," she said.

Throughout the summer the Stormwater team will meet for regular Thursday workdays to collect and propagate plants.

"Currently, we have two large projects: Exploration Green in Clear Lake and the Houston Botanic Garden on Sims Bayou. We plan on having several volunteer workdays in the fall to begin planting at both of these locations," she said.



Photo courtesy of Texas Community Watershed Partners

Christie was a self-employed environmental contractor doing wetland delineations and biological monitoring around Texas for about 15 years. Most of that time was around the greater Houston area.

“A friend of mine who formerly worked for TCEQ (Texas Commission on Environmental Quality) saw the job posting at AgriLife and recommended the position to me. I was looking for a more full-time position now that my son is in high school and will be going to college soon.” Her family lives in Alvin.

Christie, from Manvel, has a bachelor’s degree in marine biology from Texas A&M University at Galveston and master’s in rangeland ecology and management from Texas A&M University.

Contact: [cctaylor@tamu.edu](mailto:cctaylor@tamu.edu).

## Prairie Ponderings: NACP 2019 Snapshot by Diane Humes

From June 2 - 5, 2019, chapter members helped host the 25th North American Prairie Conference at the University of Houston-Clear Lake and we had the opportunity to learn from the 300+ attendees hailing from as far away as Saskatoon. With 60 scheduled presentations and 6 field trip locations, it was impossible to see everything, but we could all absorb the passionate energy of invited speakers Carol Davit, Dr. John Jacob, Chris Helzer, Dr. Reed Noss, Dr. Dwayne Estes, and Dr. Kelly Kindscher.

Around us, we know that most remaining prairies are small, isolated patches, but learned that southeastern U.S. grasslands effectively disappeared generations ago, and that small remaining sites often contain many endemic species - rare and particular to their substrates and adapted to frequent fires. In contrast, on the much more recently settled Canadian prairies, people recall their parents “plowing down” the prairie.

Texas Parks and Wildlife researchers are creating a new state vegetation map for Texas' 18 million acres and are successfully using specific forbs as reliable indicators of prairie. The map is incomplete, but, so far, 34% of Texas is grassland! In Louisiana, where prairies were thought largely extirpated, mappers have found several large tracts of original prairie, giving them hope for the future of prairies. In the Houston area, eight coastal prairie parcels, each greater in size than 10,000 acres, remain to be protected or developed.

We may not be farmers, but conservation incentives included in the Farm Bill can benefit wildlife, clean water, and conservation on a very large scale, because 60% of land in the U.S. is privately owned, and, of that, 50% is cropland, pasture, or rangeland. The 2018 Farm Bill



(Congress just passed!) contained continued conservation and increased wildlife funding, new incentives for grassland and grazing lands, native vegetation recommendations, plus expansions and changes to the Conservation Reserve Program (CRP). The Sod Saver Program had reduced subsidies for prairie land converted to crops, but was not expanded beyond its original 6 states.

The Farm Bill renews every 5 years and it is not too early to begin thinking about future improvements. Help the environment; join your State Technical Committee. Contact the NRCS to be notified of meetings and be part of the next bill's updates.

Plant species may now be rare because no one eats them. Ethnobotanist Kelly Kindscher suggests harvesting and replanting edible native prairie species, such as the prairie turnip, to further prairie restoration.

Remnant prairies do not remain static and a diverse prairie requires diverse management. Managers at the Curtis Prairie, University of Wisconsin Arboretum, the

oldest prairie restoration anywhere, no longer plan to restore the land back to pre-settlement times and, mindful of climate change and urbanization, are instead considering a wait-and-see approach to managing a very different environment.

Maximum resilience for our land's flora and fauna in the future requires species diversity, sufficient habitat size, redundancy, and connectivity. People can help. Prairies and other wild spaces - some sizable - persist within urban centers - where people live. (Remember those 80,000 acres near us!) Prairie enthusiasts can creatively enlist their fellow citizens to learn to value these places. Personal experience leads to love and love leads to action.

Chris Helzer observed, photographed, and wrote about the life in one square meter of prairie. See: [prairieecologist.com](http://prairieecologist.com). He asked, "This is my project, what's yours?"

Called the Midwest Prairie Conference, the first prairie conference convened in 1968 at Knox College in Galesburg, IL - two full years before the first Earth Day! Organized by Dr. Peter Schramm, an enthusiastic restorer of prairies for decades, it attracted over 100 attendees, who were then, as now, a broad mix of participants - amateur naturalists, teachers, students, government employees, landowners, and academics.

Schramm credited his parents for his love of nature, and also his father's friend, Aldo Leopold, whom he met as a teenager. He learned wildflower identification and got career advice from Leopold. We all learned from our teachers; it is part of our intellectual and cultural lineage. Schramm retired from Knox College in 2016 and advertised his seed drill for sale; I wonder which prairie enthusiast was the lucky recipient!

Mark your calendars for the 26th North American Prairie Conference in Lincoln, Nebraska, August 7 - 22, 2022. Travel the world of prairies!

**Coastal Corner: Camp Wild Fun**



Photo by Chuck Snyder



Photo by Frank Bowser



Photo by Lori Passmore



Photo by Frank Bowser



Photo by Frank Bowser



Photo by Chuck Snyder

## Treasures of the Bay Educators Workshop by Madeleine K. Barnes

Fifteen educators attended a mini master naturalist class June 18-20 that was planned, developed and coordinated by the awesome duo of Julie Massey and Sara Snell.

The 18-hour continuing education course focused on engaging the teachers and providing them with training and tools to share with their students.

Starting at the AgriLife office, Julie taught the teachers Galveston Bay Estuary and Fish and Their Amazing Adaptations. Dr. Cindy Howard led the session, Field Observations as a Teacher Naturalist. The teachers also had activities, one outside to refine their nature observation skills and to record them in journals and then, inside fun and creativity with gyotaku - fish printing. Turns out there were many artists in the group so there were many creative and colorful masterpieces.

The following day, the class was convened at Armand Bayou Nature Center and the group learned about bayou ecology aboard the pontoon boat *Bayou Ranger* with Mark Kramer and Prairie Ecology and Restoration with Jim Duron and George Kyame in the morning. In the afternoon, Charriss York presented Watersheds and Why They Matter followed by a build your own watershed (bay box) activity.



Photo by Chris Anastas

On the last day, the class met at Galveston Island State Park where they experienced a Discovery Beach Walk with Leticia Knipe, learned about Bay Shore Habitats with Cindy and Estuarine Ecology in Galveston Bay with Dr. Steve Alexander.

Feedback from the teachers was very positive as to the training sessions and all of the materials and tools that they received. Many thanks to all of the members that helped make this event possible by providing support during this workshop.

## Making Hearts Sing by Anne Hecht

May 29th! The last day of school. How poignant to see "our" second graders at Morgan Elementary, dressed in their finery, having their pictures taken beside their Beach Heroes art and excitedly showing their proud parents what they had learned. We looked at each other as if to say, "This is what it's *all* about."

As part of our Education Outreach program, over a dozen master naturalists came together to create a one-time flash presentation for students at Oppe and Morgan elementary schools. The show was short, in keeping with the attention span of second and third graders, and in two parts. First we demonstrated what WE do to keep our beaches pristine, then we asked the students to

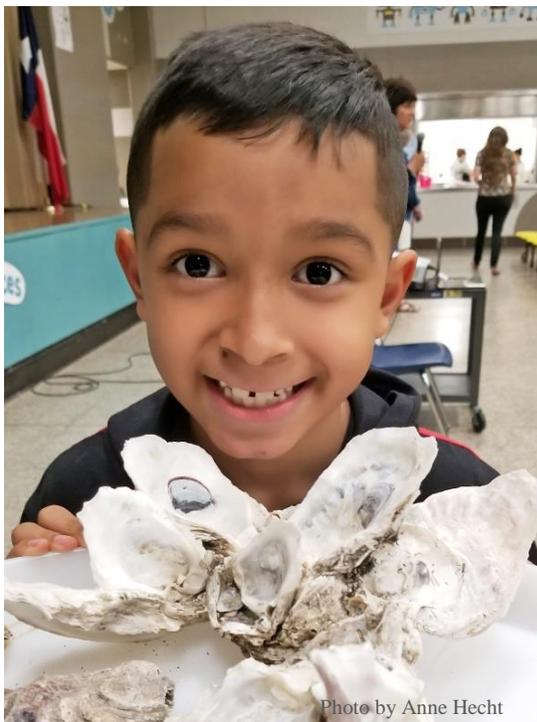


Photo by Anne Hecht

demonstrate, via a piece of art, how THEY would care for our beaches. When we studied the drawings, our reactions were, "This one bring tears to my eyes" and "These are making my heart sing!"

Motivation is a powerful tool for student success in learning, so we delivered our presentations with energy and enthusiasm and kept them exciting. For bilingual students, visual and tactile opportunities were especially appropriate. We could see by the students' behaviors that they loved putting on capes to be Action Heroes for

Galveston Beaches. So much so, the principal at Morgan has requested thirty more capes.

A second grade class at Morgan Elementary asked us to come talk about plastic pollution, which they had, in fact, just received a grant to help them study. This remarkable group of kids decided to give up plastic straws at mealtime. Next the class decided that they didn't want any plastic at all in the cafeteria and asked the GISD food services director to work with them to eliminate single use plastics. The school anticipates saving over 90,000 pieces of plastic this year. What amazing young children!

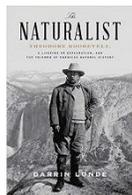
Our next topic was "oyster gardening". How surprised the children were to learn that oysters could be grown in a garden! The team used the same format as before, presenting what goes into oyster gardening. We told interesting facts about oysters and boggled their minds when we told them that our 50-gallon drum held the amount of water an oyster could clean in one day. We left oyster shells for the students to write messages and decorate. The Tiki community will be using these shells in its oyster gardens. Our plan is to document the "spat" growing season and then, in the fall, as a bridge to the 2019-20 school year, send pictures to the school for the children to see how their wishes turned into baby oysters.

The excitement in the schools has been contagious and other principals have shown an interest. Come and work with us. Our schedule is fluid and different tasks take different days and times. There are many benefits to becoming involved. Besides the educational outreach, there is the camaraderie of getting to know chapter members outside your usual circle. We tell stories, and we laugh a lot! Each of us can make a difference. All you need is passion.

## Heritage Book Study - Review of *The Naturalist: Theodore Roosevelt*

by Madeleine K. Barnes

When you think of Theodore Roosevelt, do you think of him as an ardent naturalist or do pictures of him as a big game hunter come to mind? Perhaps this larger than life character, our 26<sup>th</sup> U.S. President, was actually multi-dimensional and requires in-depth study in order to gain more insight into his perspectives and motivations.



The author of *The Naturalist: Theodore Roosevelt*, Darrin Lunde, draws upon his own experience as a museum naturalist. He has led expeditions around the world, collecting specimens for scientific institutions, and currently is a Supervisory Museum Specialist in the Division of

Mammals at the Smithsonian's National Museum of Natural History. Lunde has named more than a dozen

new mammal species and gathered scientific data on numerous others. Who better to examine Theodore Roosevelt's role as museum naturalist and collector than someone who performs this role in today's world?

Lunde points out, "To really understand Roosevelt the naturalist, we need to locate him in the naturalists' world that he knew – a world that wholeheartedly embraced guns, hunting, and taxidermy as equally important to the naturalist's craft." Born in 1858 to financially well-off parents living in New York City and an asthmatic child, T.R. was encouraged to be physically sturdy and to spend time outdoors. His father was his role model and he strongly emulated him. He was very determined to become a man of courage and vitality. In that time, natural history collecting was valued for the virtues of

manly struggle that it personified. T.R. exhibited tremendous curiosity about nature and the desire to explore and experience the wilderness first hand remained with him throughout his life.

Roosevelt applied himself and became a self-taught naturalist and taxidermist, building up his own natural history collection. He modeled himself on the pioneering biologists who developed their taxonomy of the natural world based on their experiences and observations in nature. He was fortunate in having an uncle who was an ornithological expert and he was introduced to other naturalists during his life that influenced his own conservation ethic. In 1869, T.R. watched his father play a lead role in the founding of the American Museum of Natural History, which began during meetings in their living room.

Lunde wrote that, "Roosevelt described himself as a hunter-naturalist, meaning he applied the skills of a hunter toward being a better naturalist." While Roosevelt wanted to continue as a naturalist, he was faced with the hard fact that if he wanted a spouse and family, he would need to pursue a different career path. Recommended for all naturalists, this is a very readable documentary of Roosevelt's life and work and it is well worth your time to learn more about one of America's iconic figures.

Concerned for the future, Roosevelt said, "We have become great because of the lavish use of our resources. But the time has come to inquire seriously what will happen when our forests are gone, when the coal, the iron, the oil, and the gas are exhausted, when the soils have still further impoverished and washed into

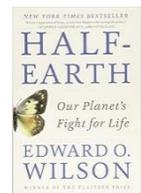
the streams, polluting the rivers, denuding the fields and obstructing navigation."

Roosevelt's legacy as a conservationist includes the establishment of federal protection for almost 230 million acres of land, 150 national forests, 51 federal bird reservations, five national parks, and 18 national monuments. His lifelong passion for the natural world sets the stage for America's wildlife conservation movement.



We will meet on Monday, August 9, 2019, to discuss the entire book *Comanche Marker Trees of Texas* by Steve Houser, Linda Pelon, and Jimmy W. Arterberry. Join us in learning about the Native American practice of creating, designating, and making use of marker trees.

Due to the Labor Day Holiday, we will meet on **Monday, September 9**, to discuss the first half, pages 1-106, of *Half Earth, Our Planet's Fight for Life* by Edward O. Wilson.



We welcome your participation each month for two hours on the first Monday of the month starting at 10am at the \*Extension office. Please note that we welcome anyone 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!

## AT: Why Ecology Still Matters, Part 3 by Mary Christian

What's the big deal about biodiversity? How many species are there on earth? Is it important to know the number of species? And, should we be concerned about species' extinctions? These are some of the subjects we covered with Dr. Cindy Howard, as master naturalists and teachers gathered Saturday morning June 22.

By definition, biodiversity is the variability among living organisms from all sources (terrestrial, freshwater, and marine) and the ecological complexes of which they are a part.

A species is a group of actually or potentially interbreeding naturally occurring organisms, which is reproductively isolated from other such groups, and which produces viable offspring. How many species are there?

The actual number of species in the world is not known and estimates vary widely. As of 2019, approximately 1.8



Photo by Chuck Snyder

million species have been identified and new species are discovered all the time. The uncertainty of numbers

conveys two fundamental truths. First, the number of species that may ultimately be at risk for extinction is huge, but, second, how can we understand what's at risk for extinction if we don't know what we currently have?

Extinction is a normal process and the average lifespan of a species is 1 to 4 million years. In the millions of years since life evolved on Earth, five notable mass extinction events, visible from the geological and fossil record, have occurred. But now, additionally, there are anthropogenic (human caused) extinctions.

Wildlife trade, predator and pest control, overexploitation and introduction of exotic species, have all reduced Earth's flora and fauna, but habitat alteration and destruction have been major causes of extinction since the mid-20th century.

So, again, what's the big deal about biodiversity? According to the WWF Living Planet Report of 2014, between the years 1970 and 2010, world human population doubled from 3.7 to 7 billion. During that time

frame, 52% of the world's biodiversity was lost; wildlife population sizes decreased by 83% in the tropics, 35% in the temperate zone, and 18% in parks and reserves, with declines in 76% of freshwater wildlife species, 39% of terrestrial species, and 39% of marine species.

In Texas 213 plant and animal species are listed as threatened or endangered.

Human population in 2019 is now 7.7 billion. Anthropogenic contributions to climate change are making loss of biodiversity worse and two countries account for 1/3 of the world's ecological footprint: China (19%) and the U.S. (14%).

We may be in the midst of the sixth mass extinction event.

So, our work as master naturalists is very important. With our volunteer efforts, we help to preserve, conserve, and restore habitats for all species.

## Summer of Naturalists - Then and Now by Diane Humes

Summer is here, cicadas are singing, the sun is shining and the temperature is hot, hot, hot. As Texas Master Naturalists, we like to go outside, but have our limits. So this could be a good time to go inside, cool off, and read about nature and a few of the greatest naturalists.

Probably, Charles Darwin (1809-1882) was the most famous naturalist in the world. Born in Victorian England, curiously he shares his birthdate with Abraham Lincoln. His family expected him to become a doctor like his father, or, perhaps, a minister, but he could neither stand the sight of blood nor shake his childhood love of natural history. He recalled his father saying, "You care for nothing but shooting, dogs, and rat-catching and you will be a disgrace to yourself and all your family."

Instead of disowning him, his father allowed him to join the expedition of HMS Beagle as ship's naturalist, a five-year journey around the world that changed the course of his life and, ultimately, modern biology. Returning home, he published the record of his travels in *Charles Darwin's Beagle Diary 1831-1836*, now *The Voyage of the Beagle* – an incredibly interesting read – earning him enough money to contemplate marriage to his cousin Emma Wedgwood. The couple settled at Down House outside London where they raised their children and Darwin performed endless experiments on barnacles, orchids, plant fertilization, leaf mold, and earthworms, often enlisting his children's help, gathering data for his most famous book, *On the Origin of Species*.

While Darwin was sailing on HMS Beagle, Texans were fighting for independence. As he patiently researched and wrote *Origins*, on this side of the Atlantic Americans fought the Civil War, opened frontiers, and moved west. Two notable Texas naturalists were Ferdinand Lindheimer (1802-1879) and Gideon Lincecum (1793-1874); they each have master naturalist chapters named for them.



Lindheimer, an immigrant from Frankfurt, Germany, is called the Father of Texas Botany. He collected >1,500 plant species; 48 species and subspecies and one genus are named for him, as is the Texas rat snake. His home and garden in New Braunfels, where he is buried, are a museum that you can visit – call for an appointment. Our 2003 recertification pin was the Lindheimer daisy. For a

fascinating summer read, look for *A Life Among the Texas Flora* by Minetta Altgelt Goyne, a collection of letters between Lindheimer and fellow German botanist George Engelmann.

Lincecum was born in Georgia, lived in Mississippi, then moved to the Texas frontier. He was a physician and naturalist, completely self-taught. He said, "Ignorance is such a terrible, stubborn, throat-cutting thing." He explored Texas geology, collected plants, recorded weather, and observed animal and insect life. Lincecum published in several scientific journals and corresponded with many other naturalists, including Darwin, who sponsored one of his papers for publication in the *Journal of the Linnaean Society* in 1862.

Edward O. Wilson, the greatest living naturalist, described Lincecum as "an American original, expansive passionate, and prone to make science out of what he could see with his own eyes. His life illuminates an important era, and mood, in Texas history, and he ranks as one of America's major pioneering naturalists." Find out more about Lincecum in two books by Jerry Lincecum: *Science on the Texas Frontier* and *Adventures of a Frontier Naturalist: The Life and Times of Dr. Gideon Lincecum*.

Edward O. Wilson, (1929 - ), born in Mobile, Ala., described his formative years in his memoir, *Naturalist*. "Most children have a bug period. I never grew out of mine." While in high school, Wilson discovered the first fire ant colony in the U.S. and continued his study of ants throughout his career at Harvard University. He coined many terms and concepts familiar today – biodiversity, biophilia, and sociobiology – and the theory of island biogeography, a cornerstone of conservation biology – basically a quantification of habitat size with species diversity.

Author of many scientific papers and books, since his retirement in 1996 Wilson has distilled his knowledge into about 18 books for general audiences; the latest, out on March 19 is *Genesis: The Deep Origin of Societies*.

He fears we are losing biodiversity. "Now when you cut a forest, an ancient forest in particular, you are not just removing a lot of big trees and a few birds fluttering around in the canopy. You are drastically imperiling a vast array of species within a few square miles of you. The number of these species may go to tens of thousands. ... Many of them are still unknown to science, and science has not yet discovered the key role undoubtedly played in the maintenance of that ecosystem, as in the case of fungi, microorganisms, and many of the insects." Definitely something to think about.

Aldo Leopold (1887-1948) thinker, researcher, wildlife biologist, conservationist, observer, and writer was born

in Burlington, Iowa, along the Mississippi River, five years after Darwin's death. His sister said, "He was very much an outdoorsman, even in his extreme youth. He was always out climbing around the bluffs, or going down to the river, or going across the river into the woods." Leopold became a forester, working in New Mexico and Arizona, before moving to Wisconsin. He was the first professor of Game Management at the University of Wisconsin and a director of the UW Arboretum from its inception.

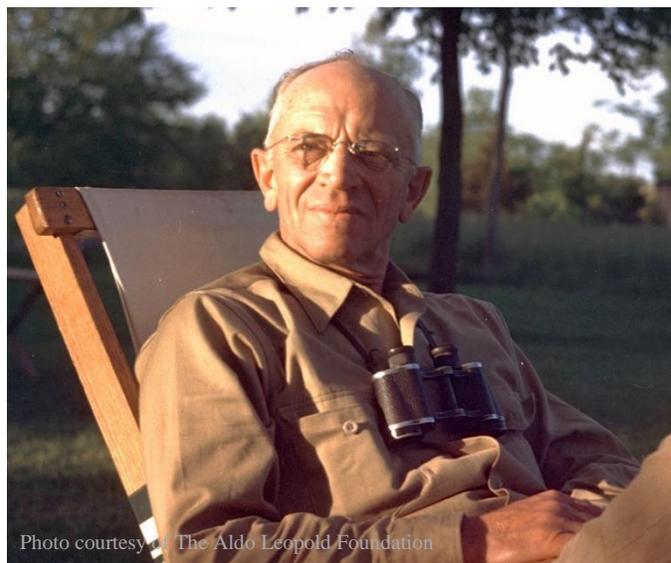


Photo courtesy of The Aldo Leopold Foundation

Leopold, founder of The Wilderness Society and pioneer in ecological restoration, is most popularly known for *A Sand County Almanac*, his collection of essays containing timeless and universal wisdom about his run-down 80-acre farm near the Wisconsin River, where he and his family practiced land restoration. This a "must read" for any master naturalist, especially before you attend the Green Fire event and AT on Aug. 14 about Leopold's life and work.

Leopold developed "the land ethic" and said, simply, "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise."

In our study of natural history, we have limitless topics – the physical world and life itself, from subatomic to cosmic. Naturalists will never run out of things to study and we can start with this small list. Enjoy!

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

**August 23**

If you have Advanced Training or Volunteer Opportunities, please submit information to Cindy Liening, [calieni272@msn.com](mailto:calieni272@msn.com).

## The New Green Team by Sally Pachulski

Over ten years ago, members of our chapter were led by Margaret Canavan and Mary Jean Hayden to create a Green Team. The purpose was to reduce and, hopefully, end the chapter's use of single-use plastics and to recycle whenever possible. They focused on replacing disposable plastic flatware and plates with reusables and encouraged a "pack it in, pack it out" philosophy. With their direction, we began finding it "normal" to bring our plates, silverware, water bottles and coffee cups to events. They did a fantastic job of driving home the difference we all can make. Once they felt they had been successful in bringing change, the group disbanded.



In the spring of 2018 a few chapter members had a conversation about the amount of single-use plastic being used at events. Styrofoam cups had made their way back into the supply closet along with plastic tableware. Plastic bags were showing up filled with "donated loot" and at many of our chapter meetings the trash barrels were brimming with recyclables. While we were, for the most part, still bringing our own plates, flatware, and drinking vessels, plastic was creeping back in. While single-use plastic may be more convenient, we want to be cognizant of the environmental impact of these products.

Chapter Board members were very responsive to the idea of a committee investigating how we could improve our chapter's relationship with plastic and the Green Team was reborn. You may have noticed us at recent events and chapter meetings. We have developed and continue to refine a waste disposal system and we are learning much as we work with you. The cupboards have been purged and reusable products have replaced single-use. The Green Team looks forward to a long relationship with our chapter members.

Interested in working with us to influence change? Contact Sally Pachulski at [pachulski@gmail.com](mailto:pachulski@gmail.com). Look for our upcoming articles on how you can help the chapter (and the planet) by reducing your single-use plastic usage.

## 2019 Annual Meeting by TMN State Organization

Join us for our 20th Texas Master Naturalist Program Annual Meeting, where we'll gather, learn and celebrate another year of the Texas Master Naturalist program. This year's event, taking place in Rockwall, Texas, will run from Friday, October 18th through Sunday, October 20th. The event will be hosted at the Hilton Dallas/Rockwall Lakefront Hotel on the shores of Lake Ray Hubbard just east of Dallas.

The year's Annual Meeting provides an opportunity for Texas Master Naturalist volunteers from around the state to gather, participate in hands-on educational seminars, and receive all of their Advanced Training requirements for the year within one weekend. It's also an opportunity for program participants and supporters to network, share new ideas/projects, and to learn from different chapters from different regions of the state. This year's meeting will also include day trips and training workshops to many local, state and even national refuges/parks, many of which will focus on the diversity of geography, flora, fauna and history this unique area of Texas.

## Texas Master Naturalist



## 20th Annual Meeting

**It's Swarming Season!**

During the warm summer and fall months marine worms, called polychaetes, swarm by the thousands to reproduce.

**If you witness a swarm please report it!**  
Your account will support an ongoing study of the greater Galveston Bay area!

Visit the link or scan the QR code using your phones camera to access the online form:  
<https://www.surveymonkey.com/r/RK7CKCF>

Most marine worms live in the sediment the majority of their life.

Some species undergo a metamorphosis, where they develop enlarged eyes & swimming paddles.

Using the lunar cycle, animals will leave the sediment to reproduce. Once in the open water, they will swim in large swarms to increase reproductive success!

## 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 to this purpose or want to join the team, please contact Diane Humes, [treimanhumes@gmail.com](mailto:treimanhumes@gmail.com).

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*The Midden* is posted on the GBAC-TMN chapter website: [www.gbamasternaturalist.org](http://www.gbamasternaturalist.org) 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](mailto:julie.massey@ag.tamu.edu).

### Midden Team

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## Turtle Hatchling Releases by National Park Service

Did you know you can watch newly hatched sea turtles releases at Padre Island National Seashore?

Hatchling releases typically occur from mid-June through August. Most releases that are open to the public take place at 6:45 a.m. on Malaquite Beach in front of the Visitor Center at Padre Island National Seashore on North Padre Island in Corpus Christi, Texas. [NOTE: Please follow our [map and directions](#) to find the park and the public hatchling release site.]

**Not all hatchling releases are public, and hatchling releases do not occur daily or on a regular schedule** because we cannot predict exactly when a sea turtle nest will hatch. Like all babies, the hatchlings decide when they are ready. But like with a human pregnancy, each nest found is given an approximate "due date" - a range of dates during which we think that the nest will most likely hatch. Check our [Current Nesting Season](#) page to see how many nests have been found this year and when they are expected to hatch.

Your chances of seeing a sea turtle hatchling release are best when several nests are due to hatch at about the same time. If you can, plan to visit over a period of several days when multiple nests are due to hatch. Once those dates are near, **call our Hatchling Hotline (361-949-7163)**

or check our [Sea Turtle Program Facebook Page](#) or [Park Facebook Page](#) to find out the latest information about the next scheduled public release.

Hundreds of people may be at a public hatchling release. More people attend the first release, on weekends, and on holidays. However, the hatchlings usually take 20-45 minutes to make their way across the beach and into the water, affording time for everyone to get a good view.



For complete information go to the NPS website, <https://www.nps.gov/pais/learn/nature/hatchlingreleases.htm>

## August and September Activities

### ADVANCED TRAINING OPPORTUNITIES

**Chapter Meeting** - August 1; Beach Nesting Birds of TX  
Presenters - Taylor Bennett  
6:15 Social, 7:00 Meeting, 7:30 Speaker  
Extension Office\*; 1 AT hour

**Green Fire movie & discussion: Life & Work of Aldo**

**Leopold** - Wednesday, August 14

9:30-noon; 2.5 hours AT

Bring your lunch & stay for ice cream

Location: Extension Office\*

Presenter - Madeleine K. Barnes

Register with Emmeline Dodd [txdodd@aol.com](mailto: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 Pg. 6 for meeting dates and books.

### STEWARDSHIP OPPORTUNITIES

#### Ongoing Activities:

**Mondays** - Galveston Island State Park, Contact: Chatt Smith [chattsmith@gmail.com](mailto:chattsmith@gmail.com)

#### Tuesdays -

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

**Wednesdays** - Wetland Restoration Team, Contact:

Charriss York [cyork@tamu.edu](mailto:cyork@tamu.edu)

#### Thursdays -

- Stormwater Wetland Team, every Thursday, 9am - noon. Contact: Christie Taylor [cctaylor@tamu.edu](mailto:cctaylor@tamu.edu)
- San Jacinto State Park, Contact: Jim Duron [wishkad@yahoo.com](mailto:wishkad@yahoo.com)

**Fridays** - Prairie Friday, ABNC, 8:30 - 11:30am, Contact:

Chatt Smith [chattsmith@gmail.com](mailto: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](mailto:snellsw@verizon.net).

**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](mailto: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, 10-noon

Education/Outreach - Third Tuesday, 1-2:30pm

Communication - Meets quarterly, check calendar

Midden Team - Aug 26, Monday, 9-noon



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