

# The Midden

Sunrise by Verva Densmore

Galveston Bay Area Chapter - Texas Master Naturalists

October 2021

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## President's Corner by Pam House

When the heat and mosquito swarms permit it, I like to sit on my deck with a cup of black coffee, relax, and listen to the dawn. Listen and look, of course, but since my deck faces west, the listening gains primacy. Usually, the final chirping of the frogs can be heard mixed with the song of the cicadas; individual voices from different directions, sometimes synchronizing into a full chorus. As the pink and blue begin to lighten the sky, then the bird song begins. The doves predominate in my neighborhood most of the year. But they are joined at different times of the year by cardinals, blue jays, little brown jobbies, and others which this non-birder cannot identify. All those different melodies come together and create a beautiful symphony. My husband and I like to think the birds are shouting "I am alive! I am alive! I survived the night!"

Many of us thought last July that we had reached the dawn after the long night of COVID and were ready to shout, "We survived!" But with the advent of the Delta variant and the resurgence of infection and hospitalization, it was a false dawn.

For our chapter, it meant that the planning and effort expended to make our August chapter meeting a hybrid event was set aside as we yielded to the realities of the renewed health risks. Some did not receive the decision to cancel the in-person part of the meeting. To those, I humbly apologize for the efforts you made to be there only to find the doors locked without explanation. I will do better.

For now, we will go back to fully virtual meetings and advanced training (AT). October's meeting will definitely be only on Zoom. While we continue to plan for a hybrid meeting in December, the decision will be made based on our assessment of the health risks to anyone attending in person. It will be great to get together again, whenever circumstances allow it.

At the risk of overloading you with metaphors, let me close with one that has proved useful to me many times. Some of us may hope that if we just got things together that life would smooth out and the troughs and valleys would become a long tranquil rise. Instead, think of your life like an EKG. A straight line is not a good thing. Celebrate the ups and downs of life as the sign that you are living healthily and in tune with the rhythms of nature.



Photo by Verva Densmore

## Next Chapter Meeting

October 7

Galveston Bay Report Card

By

Sasha Francis  
Galveston Bay Foundation

Via Zoom

## Wetland Wanderings: Invasive Water Clover by Lana Berkowitz

Sheldon Lake State Park recently earned the dubious distinction of being the first location in Texas where invasive species *Marsilea minuta* was found.

The water clover was discovered by Alison Northup, who received her PhD this year in plant ecology from the University of Texas at Austin. She is an avid contributor to iNaturalist, with more than 10,000 reports to her credit, and often monitors that site for interesting distributional records of plants in Texas.

The plant was found in Phase 5, the restoration area near the entrance, which unfortunately is an easy dumping ground for aquarium fish and plants. *Marsilea minuta* is popular among the aquarium enthusiasts due to its striking greenish coloration and hardiness.

Andy Sipocz, biologist and natural resources coordinator for Texas Parks and Wildlife Department, suspects dumping is how the plant native to Australia and Southeast Asia found a home at Sheldon Lake. A second population of *M. minuta* has been found at the Houston Arboretum.

The invasive species looks very similar to our native water clover, *Marsilea vestita*, also known as hairy water clover. True to its name, *M. vestita*'s four clover-like leaflets are hairy. *M. minuta*'s leaves are smooth.

*Marsilea* species are found in ponds, swamps and lowland rice fields. *M. minuta* can grow under water and is a very troublesome weed in lowland rice fields in its homeland.

Andy says in our area *M. minuta* is not very aggressive except in situations where the wetlands are fairly shallow and frequently dry out and the native wetland plants are frequently disturbed.

For the most part these conditions only occur in two situations: 1) Edges of newly restored wetlands where native plants haven't yet covered the ground. 2) Mown edges of wetlands (where we have wetland ponds around buildings as demonstrations or as a water garden).

"I don't think this plant will be a problem in our natural wetlands. Probably the best management for it in natural situations is to reduce disturbance to a minimum," Andy said. "Herbicide works to control it in rice fields, but in natural wetlands it would just open up more area to invasion.

"It's actually most dominant where wet areas are mown as the plant can grow in soil that dries out. In other areas it's eventually displaced by taller, native marsh plants."



## Nominating Committee 2021 by Verva Densmore

Thank you Susette Mahaffey, Chris Anastas, and Lynn Wright for agreeing to serve as the Nominating Committee for our 2022 officers of the board. The committee will present a slate of officer candidates 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. Therefore, if you are considering an officer position for 2022, please contact a member of the Nominating Committee before November



22, 2021. Contact Susette at [popptx@yahoo.com](mailto:popptx@yahoo.com), Chris at [chrisk775@gmail.com](mailto:chrisk775@gmail.com), or Lynn at [lynn-](mailto:lynn-)

[wright@comcast.net](mailto:wright@comcast.net), if you would like to submit a nominee.

## Prairie Ponderings: Welcome Prairie Dawn by Diane Humes

Prairie Dawn is a sensible and level-headed little girl from Sesame Street. The Texas prairie dawn (*Hymenoxys texana*) is the main character of an exciting botany mystery involving a rare Texas species thought to be extinct only to be rediscovered in our own backyard. Everyone should hear about the who, what, when, where, and why - especially how did Julie Massey end up in this story?



Photo courtesy of the National Museum of American History

The first specimens of prairie dawn were collected near Hockley, TX, in Harris County, famous for the Hockley Salt Dome, by F. W. Thurow in 1889 - 1890. Perhaps nobody went out looking, but the plant vanished from the world of botany for almost 100 years. Listed in botany books as extinct or not listed at all, prairie dawn re-appeared in 1981 when James W. Kessler discovered three populations in Harris County. The hunt was on and populations were found in 1986 within the Barker and Addicks reservoirs, then on the Katy Prairie, near Mercer Arboretum and also near Ellington AFB.

Total known populations of prairie dawn reached 60 locations centered around Harris and Ft. Bend counties, but due to rapid development, only 11 sites remain with outlier populations in Gregg and Trinity counties. This endangered species is protected by federal and state governments and land is set aside to safeguard its future. Mercer Arboretum and Botanic Garden is managing a Prairie Dawn Preserve and cultivates an endangered species garden where you may see this and other plants.

Prairie dawn is a tiny plant only known from the Gulf Coast of Texas. It is an annual, 3.5 - 18 cm tall with a 4-7 cm wide rosette of paddle-shaped leaves. Leaves are lobed and persist after the flower blooms. The flower stalk is thin and carries a tight flat-topped disc of 40-75 yellow florets surrounded by a double row of sepals; inner sepals have a purple dot. Fruits are cylindrical to pyramidal and very tiny - 2 mm or less. The plant grows in spring from February to April, blooms in March, then withers and disappears, leaving only seeds in the soil.

Prairie dawn lives in depressions - "buffalo wallows" - and at the base of mima mounds. Associated with salt domes, poorly drained infertile soil and sparse vegetation, it

prefers direct sun. Other rare endemic plants that grow with prairie dawn are: coastal gayfeather (*Liatris bracteata*), Houston daisy (*Rayjacksonia aurea*), Texas windmill grass (*Chloris texana*), and threeflowered broomweed (*Thurovia triflora*). Therefore, each conservation success for prairie dawn benefits one or more additional globally rare plants.



Photo by Carolyn Fannon

Prairie dawn's genus, *Hymenoxys*, is a fairly small one within the sunflower family (Asteraceae). All 27 species contain terpene chemicals which are toxic to sheep, so they are called bitterweeds and rubberweeds. Native to the Americas, this genus was named in 1828 by Count Alexandre Henri Gabriel de Cassini (1781 - 1832) a French naturalist and botanist who specialized in the sunflower family, then called the Compositae. Peripheral to prairie dawn's story, but interesting, Cassini's father and grandfather were directors of the Paris Observatory and his great-great-grandfather, Giovanni Domenico Cassini, discovered Jupiter's Great Red Spot and the Cassini division in Saturn's rings.

The name Texas bitterweed did not resonate with the public, so in 1989 the U.S. Fish and Wildlife Service held a contest for school children to choose a new name and this is where Julie entered the story; she organized and collected the votes! Thank you, Julie! Prairie dawn is a fitting name.

**The Midden Deadline**  
for the next issue

**October 25**

## Prairie Dawn - The Naming of an Endangered Species by Julie Massey

(excerpted from The Midden August 2009)

(The following was written in the vein of Guy Noir, Private Eye, from the radio program, *A Prairie Home Companion*. The Guy Noir theme was running through the author's head as she was writing: she hopes you can hear it too!)

"A dark night in a city that knows how to keep its secrets, but on the second floor" of the U.S. Fish and Wildlife Service, Julie Massey, ace endangered species biologist, sat at her desk. Suddenly the phone rang! Something was up in the endangered species world!

On the phone was a friendly voice - Dr. Larry Brown - who introduced himself and asked if Massey had ever heard of *Hymenoxys texana*. She was not familiar with the plant ... so Dr. Brown began to fill her in.

Many people believed that *Hymenoxys texana* was extinct, since the last plant had been found in the early 1900's. Well, Dr. Brown thought he had located several populations in Harris County. He wanted to have the populations confirmed and perhaps have the plant listed as an endangered species!

This phone call began the amazing process that brought agencies, schools and botanists together to protect this small plant that is best seen while lying on your belly in the prairie.

Often when species are listed as endangered, the habitat is endangered. In the case of *Hymenoxys*, the plant is found on the edges of pimple mounds\* in prairie habitats. The sites found by Dr. Brown were close to roads and threatened by road expansion projects.

The plants were confirmed to be *Hymenoxys texana*. It was not extinct but threatened by planned road development! The paperwork began to list the plant!

Sounds simple but ... during the public comment period of the process, ranchers from across the state became enraged. Massey received phone calls from ranchers wondering if the federal government had lost its collective mind! How could they list a species that they had been trying to eradicate - a plant that made their cattle sick?

Well, after much investigation, Massey discovered that actually a relative of *Hymenoxys texana* was causing the ranchers' woes. The listing process continued.

In the meantime, it came to light that *Hymenoxys texana* did not have a common name. A common name is not required to list a species, but it is helpful in making the species warm and cuddly to the general public. (Massey

was not sure how a plant that required you to get on your belly to see could ever be considered cuddly.)

A committee of agency representatives (U.S. Fish and Wildlife Service, Mercer Arboretum, Texas Parks and Wildlife Department) decided to host a contest for school children to name the plant. In addition, the kids could learn about endangered species.

Posters were distributed to schools advertising the contest. Then came the calls from schools - everyone wanted the chance to "Name that Species!"

Massey visited schools across the Houston area teaching more than 600 students about endangered species and promoting the contest. The kids were excited and so were their teachers, who used the contest for class projects and extra credit.

The contest deadline arrived, and posters flooded into Mercer Arboretum - a co-sponsor for the contest - with more than 60 posters with drawings, stories and ideas for a common name. Students submitted amazing names such as yellow phoenix - rising out of the prairie - lazy daisy, yellow bonnets and Texas sand flower.

Finally, the judges decided that *Hymenoxys texana* would forever be known by the common name "Prairie Dawn!"

The fifth grade winner of the contest received a season pass for her family to AstroWorld, a savings bond and the distinction of naming a federally listed endangered species!

Later ... back at her Fish and Wildlife Service office, Massey sent the last of the reports and paperwork to Washington, D.C. completing the listing process. Prairie dawn (*Hymenoxys texana*) was listed as endangered under the Endangered Species Act in 1986. It continues to receive protection under the Act.

As she closed the file on *Hymenoxys texana*, Massey wondered what was in store next in the world of endangered species! Stay tuned for more!

### \*Pimple Mounds

Pimple mounds in the Gulf Coast region, referred to elsewhere as "mima" or "prairie" mounds, are circular to elliptical hillocks ~ 20 to 150 feet (~6 to 45 m) in diameter and up to 4 feet (~1.2m) in height." from, Saul Aronow.

For more information about Prairie Dawn:

[https://www.fws.gov/southwest/es/Documents/R2ES/TexasPrairieDawn\\_5YrReview\\_Aug2015.pdf](https://www.fws.gov/southwest/es/Documents/R2ES/TexasPrairieDawn_5YrReview_Aug2015.pdf)

## Women in Nature: Enid Michael by Meade LeBlanc

There was a time, about 100 years ago, when national parks were considered playgrounds and amusements for tourists, with activities like dancing bears, trash pits where people could feed the wildlife, and nightly fire-falls where big bonfires were thrown off the cliff to amuse the paying customers.

This was also a time when only men were park rangers. But it didn't take long for the National Park Service to find out that the men were lonely, and they could attract more of them if they hired their wives to help out during the season.

The first such woman ranger-naturalist in National Park Service history was Enid Michael. She and her husband worked at Yosemite National Park from 1921 to 1942.

Not much is documented about Enid's early life. She was a public school teacher in Pasadena, California, and enjoyed the outdoors, participating in many Sierra Club activities. She met her future husband Charles on such an outing to Yosemite Valley, and at the age of thirty-six, she married him at a ceremony there. Charles was the assistant postmaster.

Enid initially received recognition as a volunteer who assembled a plant exhibit, and that effort led to her hiring as a temporary seasonal ranger in 1921 where she gave nature walks and lectures and collected plant specimens. She became known as the Flower Ranger of Yosemite and continued her work with flowers and plants. After several years, she lobbied to become a full-time park naturalist or park botanist, even soliciting letters of support from women's clubs, but the National Park Service was not interested in hiring a full-time woman. In fact, during her two decades plus, she never received a full-time position.

She did, however, collect and mount over 1,000 plant species and record over 130 bird species by the end of her first decade at Yosemite. In 1930, the park superintendent asked her to establish a wildflower garden near the Yosemite Museum. She was also a prolific writer--publishing more than 500 articles on the park's flora and fauna, nearly 180 of which were published in the Park Service publication entitled *Yosemite Nature Notes*. These articles are the single largest collection of writings on the subject by one author.

From the beginning, Enid and Charles took their outdoor lifestyle to heart, forgoing the park-issued cabin to live in a tent near the river. On his days off, they explored the park together. Enid loved botany, Charles loved birds,

and both were avid rock climbers. They climbed with nothing more than sneakers for gear. They climbed without ropes because, as Enid would later explain to a young protégé, "a rope would be an insult to the mountains." Some experts are of the opinion that they climbed in areas that have not been climbed since. It wasn't until the 1930s that some avid Sierra Club members developed techniques with gear and hardware to make climbing safer.



Photo courtesy of National Park Service

Her idyllic days with her partner were short lived, however, because Charles developed a heart condition in 1934 and was forced to retire. Then, in 1941, he died, and soon after, the park activities were shut down because of World War II. Nearly 20 years would pass before the Park System would hire another female ranger.

Nowadays, of course, we do not see dancing bears or bonfires. The parks have embraced a focus on sharing nature with visitors, who surpassed four and a half million at Yosemite in 2019. While the profession is still dominated by men, nearly 40% of rangers are women. There are no memorials, statues or plaques dedicated to Enid, and a search of information about the museum has no mention of a wildflower garden, but the beloved flora and fauna endure in the wild.

Note: For those interested in reading a copy of the *Yosemite Nature Notes* you can view one on line at [https://www.yosemite.ca.us/library/yosemite\\_nature\\_notes/10/10-7.pdf](https://www.yosemite.ca.us/library/yosemite_nature_notes/10/10-7.pdf)



## Green Team: Surprises Within Sustainability by Robin Kendrick-Yates

The first day of our master naturalist training is quite memorable, by intention. Many “firsts” take place on that often long-anticipated day. I can remember being told to be willing to try new things, new activities that I wasn’t familiar with. Little did I realize what wisdom lay hidden in those words. I entered the class with a newly found love for prairie restoration ecology that I developed under the oversight of Jim Duron, during Prairie Fridays at Armand Bayou Nature Center. I thought I already knew what my passion was. I would come to learn so much more.

Less than 2 months into our training, during Turtle Patrol at the beach, I was shocked by all the shredded plastic bits, which I later learned were called microplastics. As a 5-year-old in 1960, I had played on this same beach. Back then, there was no trash on the sand. I naively viewed the ocean as limitless. But this day, it was saturated with our trash! I had a newfound passion -- fighting plastic pollution. This led to action: P3 Bayou Crew and the Green Team formed in 2018. There, I learned of Single Use Plastic (SUP) and began reducing my consumption.

By January 2019, I had eliminated SUP shopping bags, straws and Styrofoam (expanded polystyrene or EPS) and looked for other ways we could develop a more sustainable lifestyle. One of my wife Nancy's simple pleasures is her morning cup of coffee. She used a Keurig machine because it was quick and something she could grab on her way out the door. For some time, those pesky K-cups were the elephant in the room. While Nancy supported my quest to reduce our plastic use, she made it clear that her morning coffee was sacred. What to do? Google it!

My research revealed that recycling the plastic K-cups would be complicated and costly, but composting coffee grounds is easy. How could I do away with K-cups,

leaving coffee grounds as the only waste from her morning cup of joe? Research led to purchasing a French Press, a burr coffee grinder, and fresh-roasted, whole bean coffee. I then learned the basics of roasting coffee, purchased a home roaster, and ordered green coffee seed, grown in the Minas Gerais region of Brazil. I roasted coffee from all over the world and brewed two or more different roasts each morning to “dial in” what tastes best.

For over two years now, Nancy and I have been enjoying our morning coffee time together. The only waste is the composted used grounds, which will enrich our soil and nourish our wildflowers without adding to our landfill. I wonder how many other ways I have bought into the convenience-consumer lifestyle, and what else I may be missing? You can be sure that I am quite willing to try new things!



### 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](mailto:treimanhumes@gmail.com).

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La Marque, TX 77568

*The Midden* is posted on the GBAC-TMN chapter website: <https://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](mailto:julie.massey@ag.tamu.edu).

#### Midden Team

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# Top Ten Quiz

## Prairie Flowers by Meade LeBlanc



Photo by Mike Mullens

1. \_\_\_\_\_



Photo by Meade LeBlanc

2. \_\_\_\_\_



Photo by Meade LeBlanc

3. \_\_\_\_\_



Photo by James Reveal

4. \_\_\_\_\_



Photo by Sally and Andy Wasowski

5. \_\_\_\_\_



Photo by Joseph Marcus

6. \_\_\_\_\_



7. \_\_\_\_\_



8. \_\_\_\_\_



9. \_\_\_\_\_



10. \_\_\_\_\_

**Possible Answers**

- Aquatic milkweed
- Black-eyed Susan
- Blue mistflower
- Butterfly guar
- Gay feathers
- Green milkweed
- Gulf coast penstemon
- Indian blanket
- Purple coneflower
- Scarlet sage

(Answer key on the back cover.)



## Texas Master Naturalist Annual Meeting by Verva Densmore

The 22<sup>nd</sup> annual Texas Master Naturalist Annual Meeting will be a hybrid event, meaning participants can register for in-person attendance (\$325) or “virtual” attendance (\$100). The in-person event will be at the Dallas/Fort Worth Area Marriot Hotel.

The host area is part of the Blackland Prairie and Oakwoods and Prairies ecoregions. As you can imagine, field events are available only to those who attend in-person but the majority of advanced training sessions will be available for live streaming. Importantly, the live-streamed sessions can be viewed by registered attendees even after the event and can be recorded as advanced training service. Such advanced training credit

is not available to folks who are not registered for the Annual Meeting.

So, put your boots on and head to Dallas/Fort Worth, or just pull a chair up to your computer, and be part of the always enriching Texas Master Naturalist Annual meeting. For full details and registration go to [txmn.org](http://txmn.org) and click on “Annual Meeting”. Hope to see you there.



**Texas Master Naturalist  
2021 Annual Meeting**  
October 21st-24th

## Nature Daydream: Dragonflies by Rebekah Gano

Say “dragonfly”  
and I am drifting  
quietly  
through smooth waters,  
watching long, shimmery bodies  
zip through the air.

Wings whir  
as they change direction  
in an instant.  
Some flying in tandem  
and some tap, tap, tapping  
the water  
as they create  
a new generation  
of dazzling helicopter insects.



Photo by Scott Buckel

## GINTC Guide Programs Up and Running Again by Chris O’Shea Roper

Before the pandemic, the Galveston Island Nature Tourism Council (GINTC)’s Nature Guide and Ambassador Programs were up, running and gaining momentum. Although they have been on hold for the last 18 months, they are again available to all who may be interested in the programs.

GINTC is dedicated to providing leadership for efforts to make Galveston’s resources accessible to people in a manner that will sustain those resources for current and future generations. Their vision is that Galveston residents and visitors will experience and appreciate the diverse natural environment that Galveston has to offer. The Nature Guide and Ambassador Programs create a certification mechanism to provide quality guides and

ambassadors to lead this effort. And some of the members of our own Master Naturalist chapter helped create and evaluate the content for these programs over the last few years.

In the past, GINTC has had inquiries about the programs from some of the Master Naturalists for a variety of reasons: people who were interested in an additional level of certification, other people who just love to learn, and still others who were interested in guiding visitors to the island. GINTC welcomes all inquiries.

There are two levels of certification:

- Nature Guide
- Nature Ambassador

Participants in both levels of training will learn about Galveston Island, its ecology, common animals, birds, fish, etc., as well as the Gulf of Mexico, its beaches, wetlands, and more!

Training includes online modules and an on-site session for the Nature Guide Program, with certification for a two-year period. If you are interested - or know someone who might be interested - check out the GINTC website for program information at [www.gintc.org](http://www.gintc.org)

**Extension Office Dedication** by Julie Massey

The Galveston County Extension Office is being dedicated to two remarkable County Extension Agents - Dr. William M. Johnson and Mr. Preston E. Poole.



Future "Dr. William McCray Johnson Discovery Gardens Classroom"

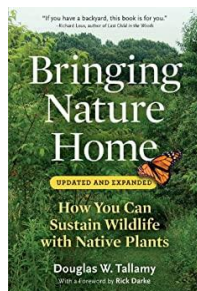
Dr. William McCray Johnson  
Galveston County Extension Agent -  
Horticulture  
32 years, 1989-2021  
March 17, 1950-February 12, 2021



Preston E. Poole Therapeutic Garden at Carbide Park in La Marque.

Preston E. Poole  
Galveston County Extension Agent -  
Agriculture  
29 years, 1945-1974  
March 13, 1913-September 1, 1996

## Heritage Book Study - Review of *Bringing Nature Home: How You Can Sustain Wildlife with Native Plants* by Madeleine K. Barnes



Many of you may already be familiar with the author Douglas W. Tallamy either through reading one of his books or viewing his video presentations. On February 9<sup>th</sup> the #Tuesday AT session was with Tallamy as he spoke about his work. He reviewed the scientific principles and discussed his books. As he says, "You are nature's best hope." These #Tuesday AT sessions are recorded and, if you were unable to join in for the webinar on the scheduled dates/times, you can view them later for AT credit. In addition to reading his books, this is one of the best ways to learn more about Professor Tallamy and what he shares about native plants and wildlife.

To access this presentation, go to the Texas Master Naturalist webpage <https://txmn.tamu.edu/> and click on the link, #TMNTuesdays, click on the date - February 9 or just arrow down until you see the large February and then the YouTube screen with an arrow to start the video for viewing to earn 1.5 AT hours. You can record those AT hours under the opportunity: TMN Tuesday: TMN AT Report Hours.

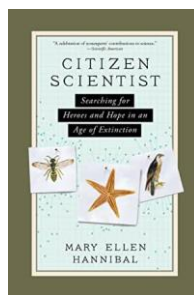
At this time, when we are spending more time at home, Tallamy offers us an opportunity to learn more about how we can benefit and sustain wildlife in our own yard space by creating pockets of native plants to support wildlife. Douglas Tallamy is a professor and chair of the Department of Entomology and Wildlife Ecology at the University of Delaware in Newark, Delaware. His main research goal is to better understand the ways insects interact with plants and how these interactions determine the diversity of animal communities. His goal in writing this book is to reach and inform the suburban gardener about the importance of native plants and their essential connections with wildlife. Tallamy states "By favoring native plants over aliens in the suburban landscape, gardeners can do much to sustain the biodiversity that has been one of this country's richest assets."

One of the key concepts that Tallamy identifies is that a plant is considered to be native to an area if it shares a historical evolutionary relationship with the other organisms in that area. This evolutionary relationship developed over time - hundreds, thousands or maybe even millions of years. Tallamy explains that as plants evolved, they developed numerous defenses to keep from being eaten. This prompted herbivores that co-evolved with those plants to develop the ability to

overcome those defenses in order to utilize the energy from these food sources and survive.

According to Tallamy, healthy, abundant and diverse insect populations support biodiversity at higher trophic levels, but these insect populations won't exist without a diverse community of native plants with which the insects share an evolutionary history.

I recommend this book for your reading list as a valuable addition for advancing our understanding of the relationship between native plants and the wildlife that depend upon them. The writing style that Tallamy uses is easy to read, practical and understandable without resorting to that of a textbook in discussing some complex scientific and ecological principles. While native plant species referenced in the book may be different from some of those in our area, the principles are still applicable. As he states, "We can each make a difference almost immediately by planting a native nearby."



Our next Zoom meeting will be on October 4, to close our discussion of *Citizen Scientist: Searching for Heroes and Hope in an Age of Extinction* by Mary Ellen Hannibal. We will be discussing the last third of this book, pages 261-392, on that date. On Monday November 1 we will discuss the first half of *Prairie Time: A Blackland Portrait* by Matt White,

including the Foreword, Acknowledgements, and pages 3-129. If you want to join us for either or both of these AT opportunities, please contact Madeleine Barnes at [Mad2Btmn@aol.com](mailto:Mad2Btmn@aol.com) 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 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!



## October and November Activities

### ADVANCED TRAINING OPPORTUNITIES

**Chapter Meeting** - October 7, Galveston Bay Report Card  
Presenter - Sasha Francis, Galveston Bay Foundation  
6pm Social, 6:15pm Meeting, 7pm Speaker  
Via Zoom; 1 AT hour

#### Nurdles

Monday November 1 at 2pm via Zoom  
Presenter - Jace Tunnell

#### Passing the Green Torch: Accelerating Diversity and Inclusion in the Texas Conservation Movement

Tuesday November 16 at 6pm via Zoom  
Presenter - Jaime Gonzalez of The Nature Conservancy

#### 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, see our chapter website, <https://txmn.org/gbmn/what-we-do/>.

### EDUCATION - OUTREACH OPPORTUNITIES

For a complete list of education - outreach activities see our chapter website, <https://txmn.org/gbmn/what-we-do/>.

**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.

### CHAPTER INFORMATION AND RESOURCES

**Calendar** - <https://txmn.org/gbmn/events/month/> Includes meetings, AT and volunteer activities

**Board** - <https://txmn.org/gbmn/board-of-directors/>  
Contact information for the Board of Directors. **Board Meetings** - usually first Tuesday of each month (via Zoom), verify on the calendar

**Committees** - <https://txmn.org/gbmn/board-of-directors/>  
Contact information for the Committee Chairs

**Volunteer Service** - <https://txmn.org/gbmn/volunteer-service/> Volunteer Opportunities

**Advanced Training** - <https://txmn.org/gbmn/advanced-training/>

**Midden Archives** - <https://txmn.org/gbmn/> Go to The Midden on the top menu.

**Facebook** - <https://www.facebook.com/gbactmn>



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#### Answers to Prairie Flowers Top Ten Quiz

1. Aquatic milkweed
2. Scarlet sage
3. Indian blanket
4. Black-eyed Susan
5. Blue mistflower
6. Gulf coast penstemon
7. Gay feathers
8. Butterfly guará
9. Green milkweed
10. Purple coneflower