



Lindheimer Chapter Texas Master Naturalist Newsletter Jul/Aug/Sep 2018

Photo©Darlene Varga

President's Quarterly Update by Rich Nielson

I would like to provide an update on the theme that was selected for this year: **Communication - Promotion - Education.**

Communication: We have begun using social media to help supplement the website. It is easier and faster to update Facebook and give the chapter an opportunity to share their pictures and comments. We realize not all of the members use Facebook but while we continue the development of a backup person for the website it is the best alternative we have. We continue to use Out & About for posting opportunities. We are aware of only one member of the chapter that does not use email so it is the most effective way to communicate to the chapter.

Promotion: We began the Program of Assistance to Landowners (PAL) at the beginning of the year. This program advises home /property owners on how to care for their property and stay as close as possible to using native plants and proper techniques for managing their property. This program was inspired by Arthur Williams to assist the AgriLife office with requests for assistance to people moving into the Hill Country from other parts of the state and the nation. We have completed 31 visits since the beginning of the year under this program.

We have recently submitted to the State Office a marketing document so we can begin soliciting funds at the outreach activities we participate in using the marketing document instead of the information pamphlet we had been using in the past. There are a number of different donation levels from \$25 to \$500 dollars for various levels of support. If we use the marketing document to

raise funds and provide more opportunities to the chapter then we can defer any discussion of dues.

Currently 43 of the 49 chapters currently charge dues. The funds or revenue we have today were all generated from the dues we charge for the education of new members.

We have set the chapter up on Amazon Smile and received \$14.32 so far this year.

This is and one-half of a percent of chapter member purchases. This means individuals have spent almost \$3,000 on Amazon. Thanks for your support.

We have designed a chapter specific logo that can be used on shirts, hats, or window stickers. It allows the chapter to have a unique branding.

Education: The Board approved \$250.00 to be used for chapter members education. No one has requested reimbursement for the classes they have taken this year.



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Lindheimer Chapter Texas Master Naturalist: Volunteers in Action

LMN Members Submit Nature Photos to 2018 Texas Master Naturalist Annual State Meeting

This is the second year that the Lindheimer Chapter has submitted entries into the state photo contest. Categories are: 1) Wildlife; 2) Bird; 3) Scenery; and 4) Plant. In 2017 we had 27 photo entries and a painting, a sculpture, our newsletter and our scrapbook (1st Place). This year, 19 members contributed 39 photos, and two paintings. Below are our entries. Enjoy the brilliant photography of our members! All photos copyrighted. Photo show in January 2019!



WILDLIFE CATEGORY (13)



Clockwise from left:

"Kermit" by John Davis;

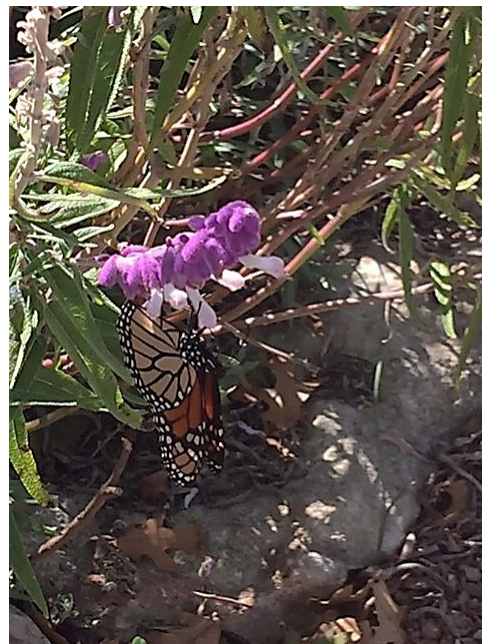
"The Baffled Squirrel" by MJ McFarland;

"Andy the Anole" by Teresa Turko;

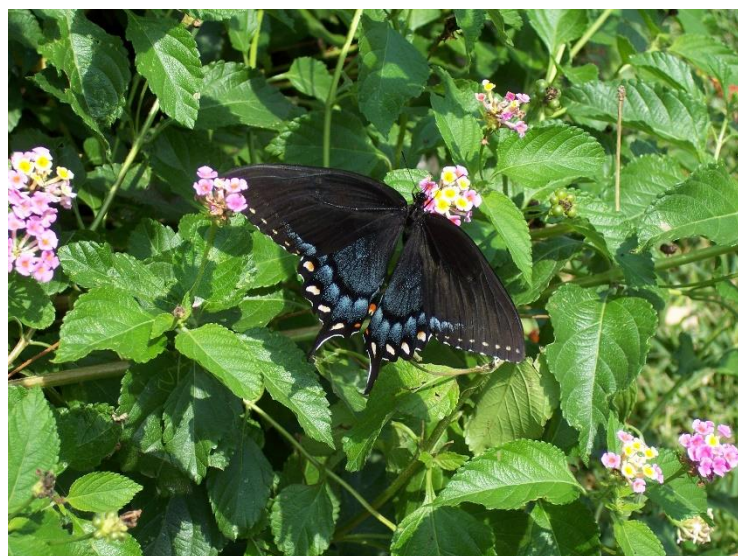
"Getting a Drink" by Joel Dunnington;

"Diamond Necklace" by Don Bergquist.

WILDLIFE CATEGORY - continued



Clockwise from left:
"A Garden Afternoon" by Edith Bergquist
"Living Emeralds" by Jane Schnell;
"Buckeye for Breakfast" by Dottie Green;
"Love is in the Air" by Darlene Varga
"Perfection" by Jeannie Springer;
"Time for a Drink" by Nancy Hammack;
"Butterfly and Flower" by Cheryl Walthour



WILDLIFE CATEGORY - continued



"Grey Fox" by Glenna Dunnington - 3rd Place

BIRD CATEGORY (8)



Clockwise from top left:
"Circle of Life" by Brian Trock - 2nd place
"Hill Country Hideaway" by Nancy Hammack
"Triplets" by Cheryl Walthour
"Angel Ascending" by MJ McFarland



BIRD CATEGORY - continued



Clockwise from left:

“Hawkeye Fierce” by Darlene Varga - **3rd Place**

“Waiting” by Teresa Turko

“Yellow Crowned Night Heron” by Holly Emrie

“Majestic Red” by Dick Scarbrock



SCENIC CATEGORY (10)



Clockwise from left:
"Big Bend Window at Sunset" by Holly Emrie
"Hill Country Sunrise" by Sara Riggs
"Honey Creek" by Debbie Kyrouac
"Icicles at Canyon Lake Gorge" by Brian Trock
"Serenity" by Nancy Hammack

SCENIC CATEGORY continued



Clockwise from left:
"Rushing Waters" by Darlene Varga
"Landa Lake Snowfall" by John Davis
"Old Swimming Hole" by MJ McFarland
"Canyon Lake Gorge" by Cheryl Walthour



PLANT CATEGORY (9)

From left to right:
"Hot Pink" by Rick Corbell
"Cactus Flower" by Cheryl Walthour
"Prickly Poppy" by John Davis



PLANT CATEGORY continued



Clockwise from upper left:

"Sunny Show after the Rain" by Nancy Hammack

"Texas Bindweed" by MJ McFarland

"The Fish Bait Tree" by Mark Henderson

"Lindheimer's Senna" by Carmen Horn

"Pink Prickly Pear Cactus" by Holly Emrie

"The Oak and Prickly Pear" by Brian Trock

PAINTING CATEGORY (2)



“Hummingbird” by Holly Emrie



“Autumn Birch” by Evelyn Nielson

PHOTO ART & MEDIA CONTESTS at the TEXAS MASTER NATURALIST ANNUAL MEETING

Rules

- Entries must be submitted by 9:00 PM on Friday, October 26th (the opening day of the Annual Meeting). The entries must be labeled with the owner's name, chapter, cell phone number, category & title.
- All entries must be the original work of and submitted by a Master Naturalist volunteer. Entries are limited to one per category per individual.
- Photos must be Texas-specific (i.e. taken in Texas). Photographs should be 8x10 and mounted on a stiff backing for display purposes. Photos can be color or black and white. The photos must be unframed and have no unnatural/extreme digital enhancements.
 - ***New rule*** Photos must be matted with either black, white, or gray single layer; or two layers of the previous colors. Mats can be no larger than 11x14.
 - ***New rule*** Contest Committee reserves the right to place an entry in another category if deemed appropriate.

PHOTO, ART & MEDIA

- Photo Categories: (1) Plant Life (w/no wildlife), (2) Wildlife, ***new category*** (3) Birds, (4) Scenic, and ***new category*** (5) Historical Photos of Chapter at work/play (i.e. inaugural chapter class, charter members then and now, early projects in chapters' history)
- Art Categories: (1) drawings & paintings, (2) sculpture & carvings and (3) sewing and stitchery.
- Media Categories: (1) scrapbooks, (2) chapter newsletters and (3) chapter brochures each compete in separate categories.
 - ***New rule*** If your chapter's scrapbook has won in the past three years, it is not eligible for entry. (Lindheimer Chapter won the Scrapbook Contest in 2017.)
- Judging may be done by: (1) by a panel of judges where available and (2) popular vote of the attendees. Awards may be given for both judging types. Ballots for the popular vote are found in your registration welcome packet upon Annual Meeting check-in. Winners will be announced during the Awards Ceremony on Sunday morning. If there are less than five entries in a given photo or art category, a placement ribbon may not be awarded.

Shared from the Texas Invasives website www.texasinvasives.org

What are "invasive species"? An "invasive species" is defined as a species that is non-native (or alien) to the ecosystem under consideration and whose introduction causes or is likely to cause economic or environmental harm or harm to human health. (Executive Order 13112).

Invasive species grow, reproduce and spread rapidly, establish over large areas, and persist. Species that become invasive succeed due to favorable environmental conditions and lack of natural predators, competitors and diseases that normally regulate their populations. This includes a wide variety of plants, insects and animals from exotic places. As invasive species spread and take over ecosystems, they decrease biodiversity by threatening the survival of native plants and animals. In fact, invasive species are a significant threat to almost half of the native U.S. species currently listed as federally endangered. In addition to negatively impacting ecosystems, invasive species are also costly. It is very expensive to prevent, monitor and control the spread of invasives, not to mention the damage to crops, fisheries, forests, and other resources. Invasives cost the US **\$137 billion annually**. Some of the most harmful species cost in excess of \$100 million annually.



Sometimes you will see invasive species referred to as exotic, alien, or non-indigenous species. The problem with these names is that they only refer to the non-native part of the definition above. Many exotic or alien species do not cause harm to our economy, our environment, or our health. In fact, the vast majority of "introduced" species do not survive and only about 15% of those that do go on to become "invasive" or harmful.

How do invasive species spread? When a species ends up in a new ecosystem, it is considered "introduced". Often, invasive species are spread by humans who do not realize that these plants, animals and insects are highly destructive. This may happen, for example, when people plant garden ornamentals, range forage plants for cattle, or plants used for erosion control and habitat enhancement for wildlife. This can also occur when animals and insects are introduced to be used to control other organisms (particularly in agriculture). Other species are introduced accidentally on imported nursery stock, fruits, and in ship ballast waters, on vehicles, in packing materials and shipping containers, through human-built canals, and from human travel. Dumping aquarium exotic fish and unwanted exotics into the water or wild are other common ways invasive species spread.

Why should I care? Everyone who lives in Texas should care because unless we can reduce or stop their spread, invasive species will continue to require significant dollars to treat, control and to remedy damage that is caused to public resources. Also, if you love the Texas outdoors, recreate in the outdoors or are in a business that depends on the health of the natural resources of Texas, you should care about invasive species. Whether you are a hiker, biker, camper, bird watcher gardener, fisherman, boater, hunter, logger, forester, rancher or farmer, invasive species can have a negative impact on you. For example, species like giant Salvinia and zebra mussels can take over lakes and make boating, fishing and general water recreation less than enjoyable. Zebra mussels can clog water pipes, which can cost millions to replace or repair. Terrestrial species like king ranch bluestem and buffalo grass can take over prairies and make the land uninhabitable for many plant and animal species.

Eco-alerts for the Edwards Plateau/Texas Hill Country: The Edwards Plateau region comprise an area of central Texas commonly known as the Texas Hill Country. It is a land of many springs, stony hills, and steep canyons. The region is home to a whole host of rare plants and animals found nowhere else on earth. The limestone of the Edward's Plateau is honeycombed with thousands of caves. Beneath the eastern edge of the Plateau lies a hidden world of underground lakes known as the Edwards Aquifer. This precious water resource also is home to a number of curious creatures, such as the blind salamander.

If you need any more validation of the toll of invasive plants, just ask our members who help out other organizations with clearing trails and removing invasives. It's very hard work and never-ending!



INVASIVE PLANTS in the Edwards Plateau ecoregion: Glossy privet, Chinese tallow tree, Johnson grass, heavenly bamboo, chinaberry tree, Japanese honeysuckle, giant reed, golden rain tree, elephant ears, paper mulberry, tree of heaven and King Ranch bluestem (var. songarica)



INVASIVE ANIMALS: Zebra mussels, feral pigs, Mediterranean house gecko, European starling, nutria, bighead carp, grass carp, armored catfish (Plecostomus), quilted melania snail, red imported fire ants.



Some LMN members fighting the good fight against invasives.

HELLO ZEBRA MUSSELS. GOODBYE TEXAS LAKES.

Zebra mussels are a destructive invasive species that can spread across Texas by hitching a ride on boats and trailers.

Boats are the primary carrier of zebra mussels.

Zebra mussels can easily attach to a boat's hard surfaces and trailers travel frequently between water bodies. Surveyed boaters planned to visit more than 50 Texas lakes in the next 30 days.

8 Texas Lakes Infested IN ONLY 6 YEARS:

Travis, Lanes, Roy Roberts, Waco, Lewisville, Brown, Bridgeport, Dean Gilbert

Zebra mussels size range from microscopic (forward up to 1.5 inch long shells).

1,000,000 Zebra mussel eggs spawned every year by 500 females.

RECREATIONAL IMPACT: Attached zebra mussels can decrease boat fuel efficiency, damage a boat's fish and dog water pumps.

DAMAGE TO THE ECOSYSTEM: Algal bloom: Zebra mussels caused an algal bloom that led to a "die off event" earlier this fall a million Lake Erie residents.

FINANCIAL IMPACT: Cost to taxpayers: Zebra mussels can completely clog an entire municipal pipeline up to 12" in diameter.

Decreased property value: Up to 10% in some areas infested with aquatic invasive species.

Stop the spread! 1 Clean 2 Drain 3 Dry

texasinvasives.org/zebramussels

Chapter Meetings



July 19, 2018

**"Hill Country Growth and Land Conservation" with
Daniel Oppenheimer
Landowner Outreach and Development Manager**

Sixty-one members & guests enjoyed the talk by Mr. Oppenheimer on conserving land in the face of increasing population. He also discussed supporting conservation strategies and best management practices for riparian restoration. Much information new to many of the attendees was explained. Many thanks, Daniel!

August 16, 2018

**"Phenology" with
Jon Zeitler, Science & Operations Officer
National Weather Service,
Austin/San Antonio Weather Forecast Office**



Fifty-two members & guests spent their evening learning about Phenology, the study of key seasonal changes in plants and animals from year to year - such as flowering, the emergence of insects, and migration of birds - especially their timing & relationship to weather and the climate. Many thanks to Jon for a very thought provoking and interesting discussion!



September 20, 2018

**"History of the Lindheimer Chapter: A Video" with
Art Williams, Lindheimer Chapter Member**

Art Williams screened a video two years in the making for fifty-three members & guests at the September meeting. It was fascinating to discover how we were founded and see & hear the founding members tell their stories. Lindheimer Chapter is a strong and vibrant chapter because of the leadership of our founding members. Thank you, Art, for making and showing us the video!



Recertifications & Volunteer Hour Milestones

Thank you for your contributions!

June 2018

Recertifications - Ocelot Pin
Don Fletcher, Earl Dittman, Kim Wright,
Peggy Haley, Sherry Reel
Volunteer Hour Milestones
1,000 hours - Cheryl Trock
2,500 hours - Rich Bradley



July 2018

Recertifications - Ocelot Pin
Elizabeth Bowerman, Pat Fletcher,
Stephen Jones, Jane Miller, Debbie
Subke, Jim Teeling
Volunteer Hour Milestones
250 Hours - Don Epps, Jennifer Hendren
500 Hours - Carol Ingham



August 2018

Recertifications - Ocelot Pin
Andrew Cummings, Jennifer Hendren,
Nancy Gray, Denise Miner-Williams,
Dave Wright
Volunteer Hour Milestones
2,500 Hours - Edith Bergquist



Lindheimer Chapter Texas Waters Specialists Certification 2018

Left to right: Jim Doyle, Martha Bersch, John Davis, Joyce Doyle, Don Epps, Jane Finneran, Joe Finneran, Jensie Madden. Not pictured: Dan Madden, Craig Dillon.



What are "Texas Waters Specialists?" Texas Parks and Wildlife Department, the sponsor of the program, states: "Through this program, we want to develop a corps of well-informed volunteer specialists who provide education, outreach, and service dedicated to the beneficial management of aquatic resources and aquatic habitats within their communities for the state of Texas."

Program Requirements: Accumulate at least 8 hours of Advanced Training utilizing the Texas Waters curriculum.

Annual Renewal Requirements

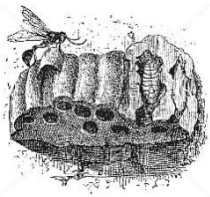
Participate in at least 10 hours of volunteer services in the area of water and watersheds. This is as part of your 40 hours for Master Naturalist annual re-certification.

Coming in 2019!
Lindheimer Chapter will offer classes on the
Texas Waters Specialist Curriculum
that will provide the training hours
required for certification.

Dates coming soon!

For questions, contact Marilyn McFarland

mcfarland1953@sbcglobal.net

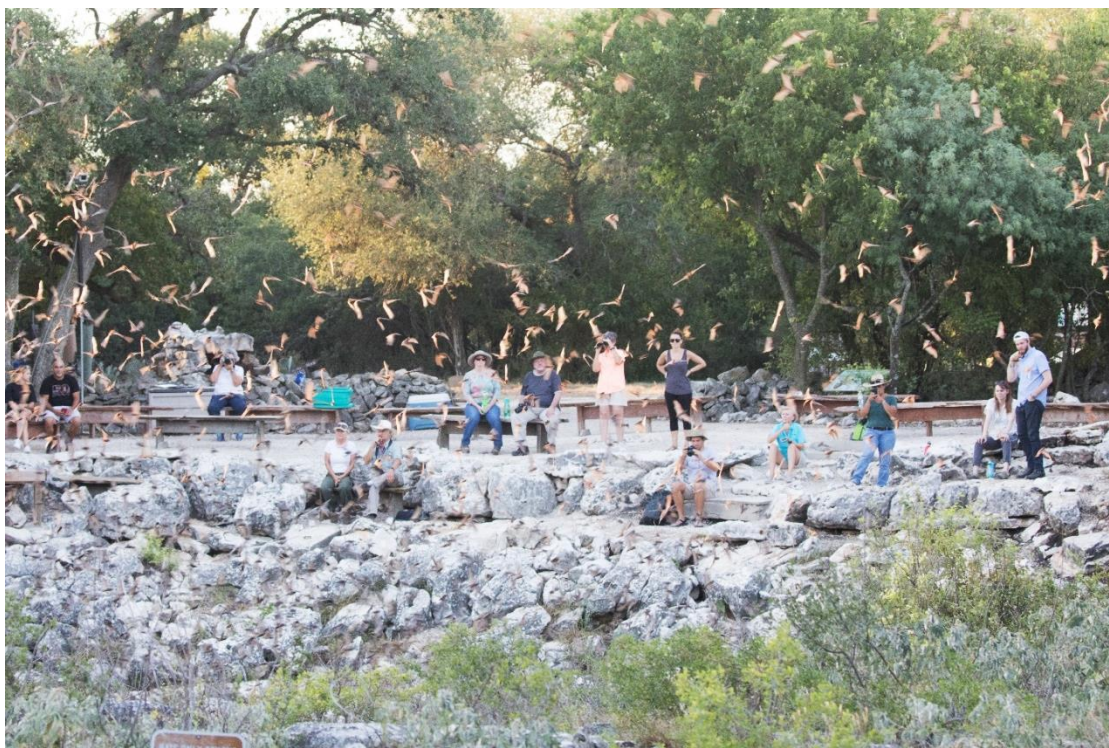


The Mud Dauber Journal



An Account of the Activities of the Lindheimer Chapter Texas Master Naturalist-in-Training Class 2017-2018

Holy Cow Batman – Look at All Those Bats! Story by Mike Hammack, LMN Educator Photos by Dick Scarbrock, LMN Master Naturalist-in-Training



The Mud Daubers conducted their most popular class field trip yet when they visited the Bracken Bat Cave sponsored by Bat Conservation International on 26 August 2018. Our Lindheimer Chapter's own Batman and Batgirl, Don and Edith Bergquist, served as the guides and Nature Interpreters.

As most of you know, Bracken Cave is the summer home of more than 15 million Mexican free-tailed bats, making it the world's largest bat colony and one of the largest concentration of mammals on earth. As the class members experienced, the emergence of these millions of bats, as they spiral out of the cave at dusk for their nightly insect hunt, was an unforgettable sight.

What even some Texas Master Bat Conservation International has

Naturalists might not know, Texas is home to the greatest number of bat species in the United States. Bat Conservation International has partnered with Texas Parks and Wildlife to create a useful guide for viewing some of the amazing bats that call Texas home. Three

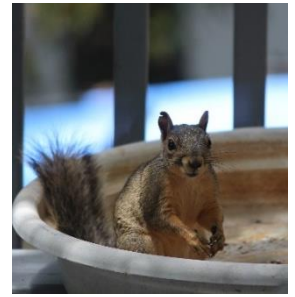
notable bat sites near us include: (1) Old Tunnel State Park is home to up to 3 million Mexican free-tailed bats and 1,000 to 3,000 cave myotis bats from May to October. The Texas Parks and Wildlife Department uses the abandoned Fredericksburg and Northern Railway railroad tunnel for the protection and management of bats; (2) The Congress Avenue Bridge, located in Austin hosts the largest urban bat colony in the world with an estimated at 1.5 million bats; and (3) the famous Bamberger Ranch near Johnson City has a purpose-built, home, the Chiroptorium, a maternity colony of over 200,000 Mexican free-tailed bats



As Robin said, "Holy Cow Batman – Go Look at All Those Bats!"

Contributing to Citizen Science: iNaturalist.org

"Citizen Science" is the participation of non-scientists in scientific research. As naturalists, many of us already participate in citizen science projects that contribute to the body of scientific knowledge about plants, animals & insects: butterfly surveys, bird counts, plant identification. AND we take pictures – LOTS of pictures! Each picture is an observation and represents an opportunity to increase the scientific knowledge of what, where & when. One of the largest citizen science projects is iNaturalist, a world-wide, on-line database of observations provided by citizen scientists like Master Naturalists.



From www.inaturalist.org : "From hikers to hunters, birders to beach-combers, the world is filled with naturalists, and many of us record what we find. What if all those observations could be shared online? You might discover someone who finds beautiful wildflowers at your favorite birding spot or learn about the birds you see on the way to work. If enough people recorded their observations, it would be like a living record of life on Earth that scientists and land managers could use to monitor changes in biodiversity, and that *anyone* could use to learn more about nature."

Here are the numbers as of 9/26/2018. Take a look at Comal County!!!

Location	Observations	Species	Identifiers	Observers
World	13,362,157	178,790	54,834	366,338
Texas	1,282,797	16,660	9,974	26,067
Comal County	5,775	1,495	899	700

How to get started? Go to www.inaturalist.org and sign up. You can pick a cool user name such as "sea-kangaroo" or use your name "SamSmith". Then go to "Getting Started" & follow the directions. If you have an iPhone or an Android & download the mobile app, it's really easy to submit your observations. The information you need to submit is: 1) Photo or sound; 2) date; 3) location; 4) your species identification (you can get help from the iNaturalist community on identification). It's that simple!

Within iNaturalist are specialty projects which usually have a much narrower focus – such as "Herps of Texas" or "Texas Monarchs and Milkweeds." You can join as many projects as you like and add your data to the appropriate projects. Here is what a sample observation looks like:

Photos/Sounds	Species/Taxon	Date	Place	Date Added	
	Western Diamondback Rattlesnake <i>Crotalus atrox</i>	September 11, 2005	Val Verde County, TX, USA (Google , OSM)	October 16, 2016 10:07 AM CDT	3 IDs Research Grade Edit View »

The data quality assessment in the far right column documents the observation's accuracy. "Research Grade" observations can be used by scientists (and citizen scientists!) for research.

- Upload sounds like bird songs, frog chirps, whale vocalizations and wolf howls
- Accepted are observations of dead animals and roadkill.
- You can search anywhere in the world for any species. Want to know how many & where a Western Diamondback has been sighted? Query the database!
- If you want to be a citizen scientist, iNaturalist is the place to start!

- **What is AmazonSmile?** AmazonSmile is a simple and automatic way for you to support your favorite charitable organization every time you shop, **at no cost to you**. When you shop at smile.amazon.com, you'll find the exact same low prices, vast selection and convenient shopping experience as Amazon.com, with the added bonus that Amazon will donate a portion of the purchase price to your favorite charitable organization. You can choose from over one million organizations to support.
- **How do I shop at AmazonSmile?** To shop at AmazonSmile simply go to smile.amazon.com from the web browser on your computer or mobile device. You may also want to add a bookmark to smile.amazon.com to make it even easier to return and start your shopping at AmazonSmile.
- **Can I use my existing Amazon.com account on AmazonSmile?** Yes, you use the same account on Amazon.com and AmazonSmile. Your shopping cart, Wish List, wedding or baby registry, and other account settings are also the same.
- **How do I select a charitable organization to support when shopping on AmazonSmile?** On your first visit to AmazonSmile smile.amazon.com, you need to select a charitable organization to receive donations from eligible purchases before you begin shopping. To support us, select "Texas Master Naturalist Lindheimer Chapter."
- **How much of my purchase does Amazon donate?** The AmazonSmile Foundation will donate **0.5% of the purchase price** from your eligible AmazonSmile purchases. The purchase price is the amount paid for the item minus any rebates and excluding shipping & handling, gift-wrapping fees, taxes, or service charges.

Lindheimer Chapter on the Web

www.txmn.org/lindheimer/



Don't forget to visit our website frequently! We are in the process of updating.



Lindheimer Chapter on Facebook

Have you gone to our account on Facebook? There is a lot of chapter information is posted on Facebook – meetings, activities, educational links and also the activities of other groups in which you may be interested.

We highlight activities, photos and stories taken by our members.

Come see us! And "like" us!





CHAPTER INFORMATION



2018 CHAPTER OFFICERS

President Rich Nielson
 Vice President Jim Doyle
 Secretary Kim Wright
 Treasurer Evelyn Nielson
 Past President/TMN Rep Joel Dunnington

STANDING COMMITTEES

Communication - Marilyn McFarland
 Education - Deb Kyrouac; Mike Hammack
 Membership & Records - Brian Trock
 Outreach - Darlene Varga
 Projects & Opportunities - Jeanie Springer

SUBCOMMITTEES

Communication Subcommittees

Historian - Marilyn McFarland, Peggy Haley
 Newsletter - Carmen Horn, Editor;
 MJ McFarland, Asst.; Bill Suddith, Photography
 Out & About - Sara Riggs

Publicity - Marilyn McFarland
 Social Media - Jennifer Hendren
 Webmaster - Marie Miller

Outreach Subcommittees

Trunks - Darlene Varga
 PAL - Art Williams
 Speaker's Bureau - Darlene Varga

VP Subcommittees

Community Recognition - Jim Doyle
 Hospitality - Joyce Doyle, Salty Brady

Chapter Advisors

Craig Hensley
 Texas Parks & Wildlife
 Guadalupe River State Park

Troy Luepke
 Texas A&M AgriLife
 Extension Service



LMN Board Meetings
 4th Monday 5:00-6:00
 AgriLife Building

Chapter Meetings - 3rd Thursday

5:45 Social, 6:15 Speaker
 Tye Preston Memorial Library

October 18
 Graduation & Awards

November 15
 "The Mysterious Inhabitants of
 Caves & Aquifers in
 the Texas Hill Country"
 by Dr. Benjamin Hutchins,
 TPWD Invertebrate Biologist

December 13 (this is a date change)
 Elections & Awards



LMN HOSPITALITY

Many thanks to Joyce Doyle, Hospitality Head, and the LMN members who volunteer to feed us such delicious food.

**Wow! Earn 1 VH by
 Bringing refreshments!**
 Sign up with Joyce Doyle
 at the next meeting!



July
 Bill Suddith, Brian Trock, Cheryl Trock,
 Marilyn McFarland, Jennifer Hendren

August
 Don Epps, Sara Riggs, Joyce Doyle,
 Kim Wright, Denise Miner-Williams,
 Gloria Glass, Joel Dunnington

September
 Martha Bersch, Beth Jameson,
 Jane Finneran, Cindy Millichamp,
 Sherry Reel, Lois Ricci