

The Lindheimer Quarterly

A Publication of the Lindheimer Chapter, Texas Master Naturalist Program™

4th Quarter 2020



"Bat Moon" by LMN Member Edith Bergquist



**Lindheimer Chapter
Texas Master Naturalist™**

**20th Anniversary
20 Years of Service, Outreach and Education
2000 - 2020**



“Deer in the Morning Light” by LMN Member Joel Dunnington

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“Canyon Lake Gorge” by LMN Member Haley Faver





Chapter Information Page



CHAPTER LEADERSHIP

OFFICERS

PRESIDENT	Rich Nielson
VICE PRESIDENT	Arthur Williams
SECRETARY	Rob Kyrouac
TREASURER	Stephen Jones



COMMITTEES

Standing Committees

Education - Joe Finneran, Debra Eanes, Rick Corbell
 Membership & Records – Brian Trock, Cheryl Trock
 Outreach – Debbie Kyrouac, Jane Schnell
 Projects & Opportunities - Jeanie Springer

Subcommittees

Trunks – Deb Kyrouac & Jane Schnell
 Program to Assist Landowners – Art Williams
 Community Recognition (VP) – Art Williams
 Hospitality – Recruiting
 New Class – President, Christy Martinez
 Photographer, Steve Dockal

Ad Hoc Committees

20th Anniversary Committee – Art Williams
 Big Give SA – Susan Bogle, Jane Schnell, MJ McFarland



COMMUNICATIONS

Director – MJ McFarland
 Out & About – Sara Riggs

CHAPTER ADVISOR

Craig Hensley, Texas Parks & Wildlife, Wildlife Tracker

The Lindheimer Quarterly Newsletter
 MJ McFarland, Editor

Newsletter published quarterly by the Lindheimer Chapter, Texas Master Naturalist™ to communicate, educate & inform chapter members & the Hill Country Community. Current and previous issues of The Quarterly are posted on the website www.txmn.org/lindheimer.



CONTACT

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 325 Resource Dr.
 New Braunfels, TX 78123



2020 MONTHLY CHAPTER MEETINGS

January 16
 ‘Dark Skies’ - Ranger Holly Platz

February 20
 ‘Drought Proof Texas’ - Pete Van Dyck

March 19 - Cancelled
 ‘Rangeland Grasses’ – Dr. Baron Rector (COVID-19)

April 16
 ‘State of the Chapter’ – Rich Nielson (no AT)
 Online via Zoom

May 21
 ‘Geologic Formation Guad Valley’ - Joe Finneran

June 18
 ‘Outdoor Safety for Nature Lovers’ - MJ McFarland

July 16
 ‘Ferdinand Lindheimer’ - Susan James

August 20
 GBRA Plans for the Gorge – Nathan Pence

September 17
 ‘Pollen Trackers’ - Dr. Dan Katz

October 15
 ‘Honey Creek Issues – Annalisa Peace

November
 ‘Hot Birds’ -Patsy & Tom Inglet

December 17th
 Elections



2020 Board of Directors Meetings

Every 4th Monday at 5:00 PM
 On-line via WEBEX

- January 27 ● February 24 ● March 23 ● April 27
- May 25 ● June 22 ● July 27 ● August 24
- September 28 ● October 26 ● November 23
- December 28

WEBEX: <https://txmn.org/lindheimer/members-area/>

Board Minutes available at:
<https://txmn.org/lindheimer/chapter-info/lmn-board-members/lmn-board-minutes-archive/>

Community Science: CoCoRaHS

by MJ McFarland



If this is your idea of how rain is measured, let me tell you about CoCoRaHS! The “**C**ommunity **C**ollaborative **R**ain, **H**ail and **S**now Network” is a non-profit, community based, network of volunteers who measure and report rain, hail and snow in their backyards. CoCoRaHS came about as a result of a devastating flash flood that hit Fort Collins, Colorado in July 1997. A very localized storm dumped over a foot of rain in several hours while other portions of the city had only modest rainfall. The ensuing flood caught many by surprise, caused \$200 million in damages, and resulted in five deaths. CoCoRaHS was born in

In 2020, Lindheimer MN Chapter has a total of 51 members contributing to the CoCoRaHS database! Wow!

1998 with the intent of doing a better job of mapping and reporting intense storms. CoCoRaHS became a

nationwide volunteer network in 2010 and is now international with observers helping provide critical precipitation observations, benefiting their country’s needs. Volunteers of all ages welcome!

Brian Trock: “The reason I do CoCoRaHS is to help track what is going on with our property; but it’s also being part of a community science project. My first CoCoRaHS report was February 1, 2013, after spearheading a large purchase of rain gauges for our LMN training class, Wildscapers” Some advice from Brian on entering hours into VMS: “Everyone should remember that we report our hours for CoCoRaHS on the last day of the month, and not before, as the State audits our chapter in the VMS for entries that are submitted by members before the completion of an activity.” Brian has over 2,560 database entries.

Individuals and family volunteers of all ages and all walks of life are the foundation of the CoCoRaHS network. *Anyone can help. It only takes a few minutes to check the rain gauge and report your observations.*

“What does a volunteer do?” “Volunteers submit their observations using the CoCoRaHS website or apps. Observations are immediately available to the public via maps and data analysis tools, and to data users via the CoCoRaHS Web API. It is important that all CoCoRaHS precipitation reports be accurate and consistent. Training is provided on how to install gauges, properly measure precipitation and transmit reports. CoCoRaHS precipitation reports are accurate and very useful. *Data users such as scientists, resource managers,*

Teresa Turko: “I enjoy being involved in weather research on a daily basis. Not only does reporting assist the local National Weather Service in “real time” (I have been contacted by NWS during a major weather event) but due to CoCoRaHS interactive web site I can also access the data on my own property for the past 5 years.” Teresa became a Cocorahs weather observer officially in June 2015. Her total of 1,859 database entries includes all types of reports - 0, Trace, Measurable precip and Multi day reports.

decision makers and others have come to rely on the high density, high quality measurements provided by CoCoRaHS observers. Join CoCoRaHS Today!

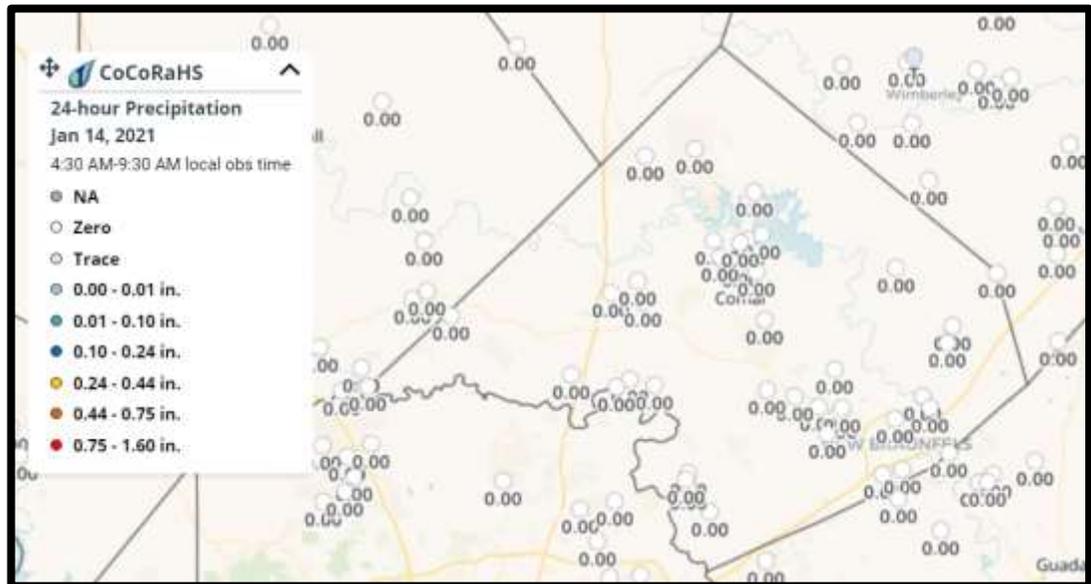
CoCoRaHS is a practical, enjoyable and useful activity. If you have an interest in weather and would like to help your local community, as well as scientists and others interested in precipitation, then CoCoRaHS is for you. It only takes a few minutes a day and gives you the chance to participate in real hands-on science. *You’ll be amazed at what you learn as you become more aware of the variable weather that impacts you, your neighbors, your state and our entire country.* CoCoRaHS is supported by many sponsors and collaborators. To view a full list please visit the CoCoRaHS Web page. For more information go to <https://www.cocorahs.org/> .

Jeanie Springer: "I have always enjoyed tracking the weather, especially rainfall; and doing monthly and yearly comparisons. Since I joined CoCoRaHS in 2015, I now have a daily purpose to monitor and compare our rainfall or lack thereof." Jeanie began participating in June 2015 and has 1,893 database entries.

CoCoRaHS is Educational. CoCoRaHS offers learning opportunities too. In addition to training materials, newsletters and the 'Message of the Day', members also enjoy opportunities to attend Webinars featuring experts in weather, climatology and other pertinent disciplines. CoCoRaHS offers classroom resources for K-12 teachers. Students get to collect and submit real scientific data - all while meeting State and National

Standards in science, math, geography and more!"

Rainfall at a glance: Each of the "dots" represents a CoCoRaHS station. The legend coordinates the color with the amount of rain. You can instantly tell where rain was or wasn't. The map below shows Comal County CoCoRaHS stations on January 14, 2021- no rainfall anywhere!



If you are interested in Community Science and the Weather, this project is for you!

- One requirement is to purchase the approved rain gauge which is about \$35 and then set it up on your property (you can purchase through CoCoRaHS, Amazon & other online stores).
- Complete the online training, either as a slide show or video on youtube <https://www.youtube.com/watch?v=LZnAWXR-S2c>
- Record precipitation in the CoCoRaHS database.
- If you record daily, Lindheimer Chapter awards you 5 minutes per observation, up to 2.5 hours VH monthly (30 hours annually!).
- If you have any questions, contact the chapter at LindheimerMNContact@gmail.com or CoCoRaHS at <https://www.cocorahs.org/>





Raccoons

Photos & Article by MJ McFarland

If you live in the hill country, you've seen *Procyon lotor* - the raccoon, aka "bandit", "dumpster diver", and "trash panda". These mammals are **extremely intelligent, adaptable, and dexterous**, and the more they're around humans, the smarter they get at overcoming obstacles to obtain food from us.

Here is a very short article on the basic raccoon facts.

Activity Nocturnal in nature, raccoons are **mostly active at nighttime**. They are most active in spring, summer and fall, and will sleep in their dens for most of the winter. Reproduction Begins in late winter. Females, or sows, usually give birth to 1-6 baby kits in April or May. **Mothers are very protective** of their young until they separate after about a year.

Social Interaction Raccoons are independent after 12-14 months of age. Adults live in loose knit communities of 4 - 5 raccoons for better protection against predators. A **group of raccoons is called a nursery**.

Although raccoons only live 2-3 years in the wild, a

raccoon can live up to 20 years in captivity. Communication Raccoons **communicate with each other using over 200 different sounds** and 12-

15 different calls. Skills Raccoons possess amazing dexterity that gives them the ability to open doors, jars, bottles and latches, even zippers! They are also **great climbers**, which allows them to better access food and shelter. Food Raccoons are "**omnivores**" which means they will eat anything that's edible. A raccoon will rinse its food in water prior to eating it. When there is no water close by, a raccoon will still rub its food to remove debris. Some hypothesize that the purpose of a raccoon's black mask "bandit" is to reduce glare, helping it to see better in the dark.

Here is a link to a Nat Geo documentary on urban raccoons:

<https://www.youtube.com/watch?v=gzioRuXObOM>

From Tim Traver: "Raccoons have remarkably sensitive hands, with five long, tapered fingers and long nails.

They lack thumbs, so can't grasp objects with one hand the way we can, but they use both forepaws together to lift and then acutely manipulate objects. Thanks to this



tactile intelligence, **raccoons are problem solvers** that adapt easily to cities, suburbs, and other manmade habitats.

“**There’s a myth that raccoons wash their food.** (Our North American raccoon’s species name, *lotor*, means *washer* in Latin.) But what they’re doing when they wet and rub an object is “seeing” it; it’s thought that water contact increases a raccoon’s tactile ability. **When a raccoon wets and handles a crayfish, stone, worm, or clam, he’s gathering information:** nearly two thirds of the sensory data that he’s processing comes from cells that interpret various types of touch sensation. In other words, touch for the raccoon is as important a sense as hearing, smell, and sight.

“**Raccoons are omnivorous, which many researchers believe has pushed**



raccoon brain development. Every object they come across has the potential to be food: this drive to acquire a wide variety of foods, scientists believe, has driven human brain development as well. As every teacher knows, children learn by touch, whether it’s building blocks or bouncing balls, and in cognitive development the sense of touch is vital to developing abstract understanding.

“**How did raccoons develop those incredible hands?** They evolved around river and lake banks in South America where they had to use their forepaws to find food hidden under water or buried in mud and silt. The fingers of a raccoon’s forepaws are well-padded. Each has some four to five times more mechanoreceptor cells (cells adapted to detect mechanical stimulus, such as changes in pressure) than are found in most mammals. Only humans and other primates have similar numbers.

“So raccoons have this enormous ability to sense with their forepaws and a

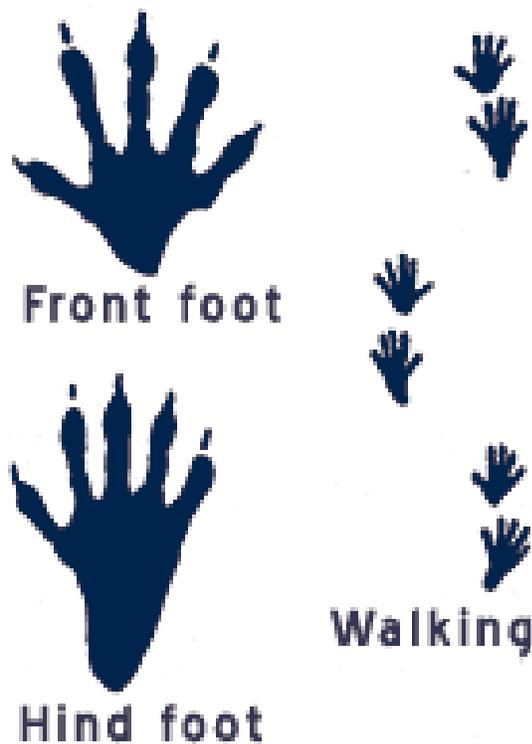
brain that’s able to interpret and store vast amounts of touch sense information. They’re omnivorous, curious, smart, practically fearless, and **they have great memories.**”

[Raccoons: It’s All in The Hands | The Outside Story \(northernwoodlands.org\)](http://northernwoodlands.org)

<http://www.naturetracking.com/raccoon-tracks/> Forepaw tracks most resemble tiny human handprints, with five fingers splayed out from the palm. Hind paw tracks are similar but have elongated heels that sink deep into the ground because

raccoons carry most of their weight on their back ends.

And remember, no matter how cute they are, they are **wild animals!**



Overwinter Care of Backyard Birds

Photos & Article by MJ McFarland



The Texas Hill Country is home to many overwintering birds. Some of the more common birds you may see in your backyard are: Northern Cardinal, Northern Mockingbird, Black-crested Titmouse, Mourning Dove, White-winged Dove, House Sparrow, Blue Jay, Carolina Wren, Carolina Chickadee and European Starling. You can help them through the winter and meet spring in good shape with proper feeding. From The Spruce: "Most birds that visit backyards in cold weather thrive on seeds since insects and fruit are harder to find naturally during the winter. The best foods for colder weather have a high

fat or oil content that will provide abundant energy for winter survival. When choosing birdseed and other foods for winter feeding, take into consideration which bird species are present in the winter and what foods they prefer to avoid excess wasted seed. Many birders also prefer to use no-waste or no-mess seed mixes such as hulled sunflower seeds to avoid several months of hull accumulation beneath feeders in the spring."

The best winter feeders are covered feeders that protect the seed from the weather and are placed in sheltered areas. For convenience, large capacity feeders mean less frequent filling as long as the seed is protected from moisture which may cause growth of mold or fungus. The feeders should also be easy to clean so that you can clean them frequently. Of course, what you feed is very important. What are the best foods for winter? Those with high fat or oil content. Here is a list of some of the foods that meet that requirement.

- Black oil sunflower seeds are by far the best food to offer birds in any season. These seeds have slightly thinner shells and higher oil content than other types of sunflower seeds, making them more efficient and nutritious food.
- For high calories, suet is one of the best foods to offer birds. While many birders prefer to avoid suet because it melts in warmer weather, it is superb winter food. In addition to suet cakes, chop suet into chunks or shred it so more birds will sample it.
- Peanuts are a high calorie, fat-rich nut that appeals to many backyard birds, including jays, titmice, nuthatches, and chickadees. Because the nuts don't freeze, they are perfect for winter feeding. Do not, however, offer birds flavored peanuts or any peanuts with candy or chocolate coatings.





- Peanut butter, both crunchy and smooth, is a great feeding option and can be smeared on bark, offered in small dishes or open trays or inserted into a suet log.

- Nyjer or thistle seed is a favorite food of winter finches. This is another oily seed that offers a lot of calories, helping birds store the fat they need to keep warm through the season. Offer Nyjer in a mesh or sock feeder that can



accommodate many birds, but keep it covered

with a wide upper baffle to prevent mildew.

- Fruit While a lot of birds that eat fruit will migrate in the winter, many other birds that stay in snowy areas year-round will enjoy the treat. Offer chopped apples, orange wedges, banana slices, halved grapes and melon rinds on platform feeders, spikes or nailed to trees.
- Seed Mixes For convenient and economical winter feeding, nothing beats a good quality birdseed mix. Choose a mix that features large proportions of sunflower seeds and millet, but avoid mixes with large amounts of unappetizing fillers such as wheat, milo, and corn.
- White proso millet is a favorite food of many small ground-feeding birds, particularly dark-eyed juncos and other types of sparrows, as well as many doves. This starchy grain is inexpensive and can be easily offered in hopper, tube or platform feeders. Sprinkling it on the ground will attract even more small birds.



There are many wild animals who enjoy what birds eat, so you may need to protect against squirrels, raccoons, opossums and foxes to name a few. Watch where you place your feeders & choose specialized feeders that resist predation.

- Position feeders several feet from natural cover where birds can hide if necessary, but not so close as to allow predators a place for an ambush.
- Consider placing temporary fencing or mesh around feeding stations to keep predators and pest wildlife away.
- Offer other food for pest animals, such as cobs of corn for squirrels, in a different location so they are less tempted to raid feeders. For more information, go to: [Tips for Feeding Birds in Winter \(thespruce.com\)](https://thespruce.com/tips-for-feeding-birds-in-winter)

December Monthly Chapter Meeting Officer Elected for 2021:

*President – Rich Nielson
Vice President – Michael Buley
Secretary – Rob Kyrouac
Treasurer – Steve Jones*

Congratulations!



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ELECTIONS

Monthly Chapter Meeting

When: Thursday, December 17, 2020 at 6:00pm
What: Chapter ELECTIONS (members only)
Where: Online via WEBEX
Members: Login to our Members Area for the link.
www.txmnp.org/lindheimer/members-area/
If you need the password, email LindheimerMNCcontact@gmail.com

Nominations

President	Rich Nielson
Vice President	Michael Buley
Secretary	Rob Kyrouac
Treasurer	Steve Jones

Send your nominations to Rich B at rmbrad@gvtc.com

2020 Recertifications & Milestone Awards

Thank you to our Volunteers!

	Recertifications - American Bumblebee Pin	Milestones
January 2020	Ellen Anderson, Susan Bogle, Lois Ricci, Brian Trock, Art Williams	<u>4,000 Hours</u> Brian Trock <u>500 Hours</u> Ed Finger
February 2020	Rich Bradley, Steve Jones, Darlene Varga	
March 2020	Don Bergquist, Edith Bergquist, Coco Brennan, Ron Butts, Joe Finneran, Laird Ingham, Jim Jameson, Deb Kyrouac, Dan Madden, Marilyn McFarland, Rhonda Neel, Sara Riggs, Jeanie Springer	
April 2020	Julie Crouch, John Davis, Jim Doyle, Jim McCullough, Rich Nielson, Cathy Oberkampf, Cheryl Trock	
May 2020	Harry Ferrell, Jensie Madden	<u>500 Hours</u> Steve Jones Cheryl Walthour
June 2020	Mary Barr-Gilbert, Nancy Fitzpatrick, Brenda Stoeck	<u>2,500 Hours</u> Julie Crouch <u>1,000 Hours</u> Melissa Skasik <u>250 Hours</u> Craig Dillon
July 2020	Judy Brupbacher, Sandra Carson, Earl Dittman, Ed Finger, Don Fletcher, Pat Fletcher, Nancy Hammack, Lori Largen, Valerie Lefebvre, Holly McCoy, Jane Miller, Evelyn Nielson, Melissa Skasik, Teresa Turko	<u>500 Hours</u> Don Epps <u>250 Hours</u> Pat Carnes
August 2020	Pete Bryant, Marietta Diehl, Joel Dunnington, Marilyn Garrison, Gloria Glass, Gail Groves, Debbie Subke	<u>1,000 Hours</u> Nancy Fitzpatrick <u>500 Hours</u> Sandra Carson <u>250 Hours</u> Holly McCoy
September 2020	Debbie Armijo, Don Epps, Jane Finneran, Henry Hahn, Aleta Meyer, Kathy Ofsdahl	<u>500 Hours</u> Rhonda Neel
October 2020	Pat Carnes, John Corkill, Craig Dillon	<u>2,500 Hours</u> John Davis Rich Nielson
November 2020	Salty Brady, Ricky Corbell, Haley Faver, Gretchen Ferrell, Erin Harrison, Beth Jameson, Kristen Martinez, Denise Miner-Williams, Scott Ofsdahl, Mike Roberts, Valorie Robertson, Dave Skasik Double Certifications: Vanessa Brown, William Blake, Michael Buley, Heidi Case, Steven Dockal, Sue Huntsman, Karen Kimbell, Rob Kyrouac, Merril Mabon, Christy Martinez, Melina McLeod, Susan Sommer, Steve Verschoyle, Mary Williams	

4th Quarter Chapter Meetings – ONLINE

October 2020

November 2020


**Lindheimer Chapter
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Monthly Chapter Meeting

When: Thursday, October 15, 2020 at 6 pm
Who: Annalisa Peace, Executive Director
 Greater Edwards Aquifer Alliance
What: Honey Creek Development Issues
Where: Online Via WEBEX
 Members: Login to our Members Area for the link.
 Non-Members: Email LindheimerMNCContact@gmail.com



"Annalisa Peace holds an MS in Urban Administration from Trinity University and has over thirty years' experience working with government and non-profit organizations in a variety of capacities. Since 2004, Ms. Peace has been the Executive Director of the Greater Edwards Aquifer Alliance, which unites 22 organizations throughout a 21-county region in Central and South Texas behind a plan to protect the Edwards and Trinity aquifers, their contributing watersheds, and the Texas Hill Country."

<https://aquiferalliance.org/gsa-staff/>

Annalisa will be speaking on issues surrounding the development of Honey Creek and why that's important to the Lindheimer Chapter.




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Monthly Meeting

When: Thursday, November 19, 2020 - 6:00 pm
Who: Patsy & Tom Ingle, Birding Experts
What: "How Climate Change Affects Our Birds"
Where: Online Via WEBEX
 Members: Login to our Members Area on our website for the link.
 Non-Members: Email LindheimerMNCContact@gmail.com



We know that temperature serves as a trigger for many species to undertake important events like migration or reproduction. What effect does the changing climate have on bird populations?

Join us and internationally known birding experts Patsy & Tom Ingle who will explain what's going on with climate and our birds!



December 2020

Coming in January 2021!


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Monthly Chapter Meeting

When: Thursday, January 21, 2021 at 6:00 pm
Who: Barron Rector, PhD
What: "Trends in Land Management: What Ranches to Ranchettes Means for the Hill Country"
Where: Online via WEBEX
 Members: Login to our Members Area for the Link
 Non-members: Email LindheimerMNCContact@gmail.com



Dr. Barron Rector, Extension Range Specialist at Texas A&M University, is with the Texas AgriLife Extension Service in the Department of Ecosystem Science and Management. His professional experience is biology, chemistry, plant taxonomy, environmental ecology and range animal nutrition. He is recognized nationally and internationally for his plant identification skills, training workshops which include discussing poisonous plant issues, exotic, noxious weed management and plant materials important to agriculture and urban interests in native plants. Be sure to join us!



Texas Waters Specialist Certification in 2020

TO: LMN Members
FROM: Marilyn J McFarland
RE: Certification as a Texas Waters Specialist in 2021
DATE: December 30, 2020

In this time of COVID-19 restrictions, there is an alternative to obtaining TWS certification AT hours is offered by state. To obtain the 8 hours of AT needed to certify:

- **Required: Read the Texas Waters Curriculum and take the chapter quizzes (must pass with 100%, can be taken more than once)**
- Attend the live waters webinars
- Previously recorded webinars can be viewed independently; small group discussion through virtual platforms highly encouraged (currently, LMN chapter does not offer this option).

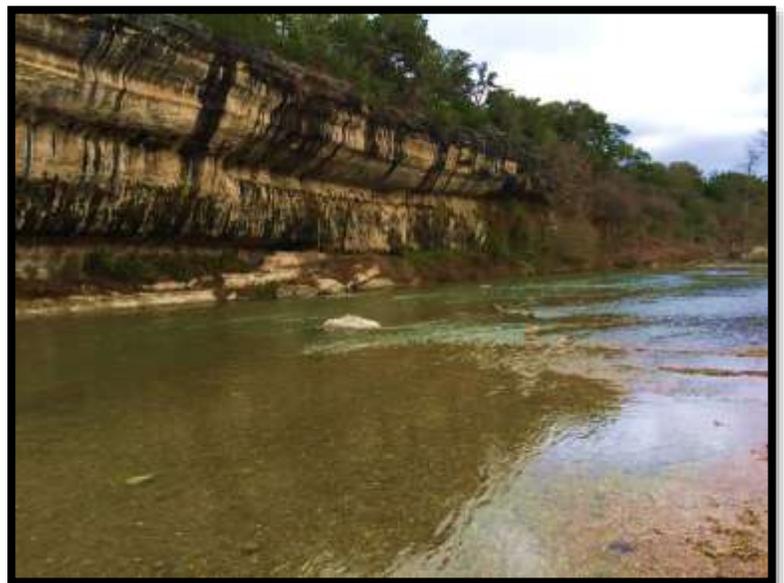
The Texas Waters Curriculum is online. Here are the links to the program:

<https://tpwd.texas.gov/education/water-education/texaswatersprogram/texaswatersspecialist>

If you are going to certify, please let us know so that the Texas Waters AT category is added to your VMS profile. Email me at LindheimerMNContact@gmail.com. Use this email if you have any questions or need clarification.

Remember, if you have already certified as a Texas Waters Specialist, you don't need any more Texas Waters AT, just 10 hours volunteer service annually in water related activities (counts towards your 40 hours). In these days of limited events due to COVID-19, one way to obtain your 10 hours of volunteer activity is to participate in CoCoRaHS - Community Collaborative Rain, Hail and Snow Network. Lindheimer Chapter awards 2.5 hours monthly for your participation - that's 30 hours annually! Here's the link:

<https://www.cocorahs.org/>





Electronic Lindheimer

Social & Online Media

Check us out on the internet, Amazon Smile, Facebook and Pinterest. Place your cursor on the hyperlink, then press your ctrl button and click to follow the link. Designate us as your charity under Amazon Smile.

Website: <https://txmn.org/lindheimer>

Facebook: <https://facebook.com/txmn.lindheimer>

Amazon Smile: <https://smile.amazon.com/> - Designate Lindheimer Chapter

Sign Up Link for BBW 1st Quarter 2021

<https://www.signupgenius.com/go/70a0c4fa9aa28abf58-1stqtr>

Contributing to Community Science: iNaturalist.org



Photo of a Variegated Fritillary
by Joel Dunnington

“Community Science” (aka “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: “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! **Take a look at Comal County!** How to get started? Go to www.inaturalist.org and sign up!

Location	iNaturalist Observations as of 1/4/2021	Species	Observers
World	56,209,994	312,962	172,503
Texas	3,944,007	22,518	22,419
Comal County	44,630	3,537	2,879

Members' Photos - Hill Country Flora

Thank You to Our Contributors!

Nancy Hammack - Evening Primrose

Rick Corbell - Cactus Flower

Susan Bogle - Bluebonnet

Joel Dunnington - Cactus Flower

Darlene Varga - Opium Poppy

Deb Kyrauc - Antelope Horns

