

# Naturalist News

An unusual issue for these unusual times.

## Kill Germs The Cajun Way



Not only does it kill germs, it also prevents you from sticking your fingers in your eyes, nose, and mouth (and other places) **a second time**

**Dr. Larry Legg offers this suggestion in case you can't find ordinary hand sanitizer and to remind you to WASH YOUR HANDS!**

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**Texas Paintbrush—photo by Jonathan Reynolds**

## Special points of interest:

- Who earned hours
- Reading list
- Beautiful photography

We're on the Web  
[www.txmn.org/elmfork](http://www.txmn.org/elmfork)

On Facebook:  
[www.facebook.com/TexasMasterNaturalistElmFork/](https://www.facebook.com/TexasMasterNaturalistElmFork/)

## 2020 Elm Fork Chapter Awards - March

The following members achieved the following  
accomplishments as of January and February 2020

### Initial Certifications—Class of 2019

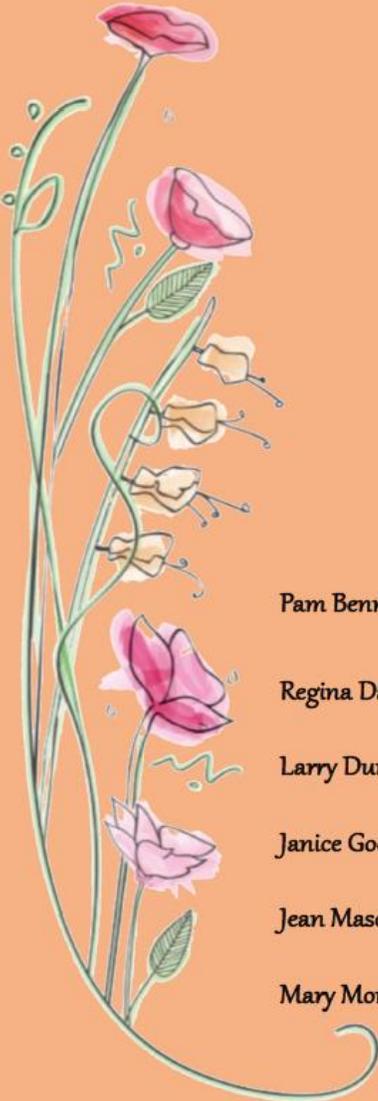
Craig Blow

Hugh Franks

Jim Gerber

Cindy Valcik

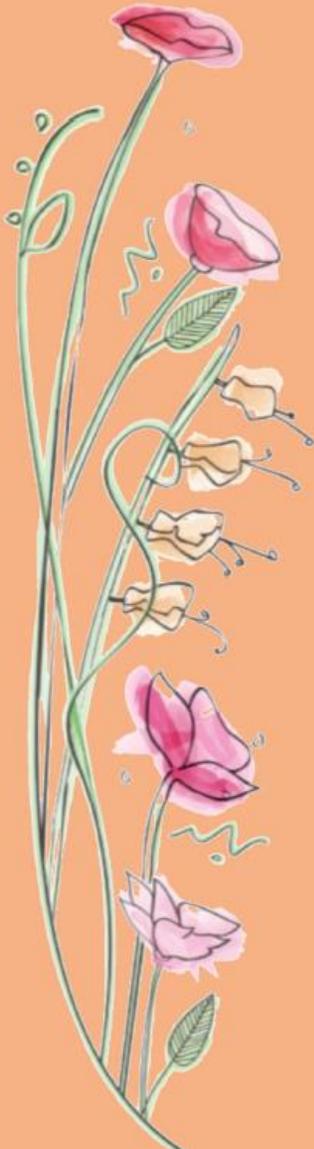
### 2020 Recertifications



Pam Bennett	Leonard Chochrek	Mary Cissell	Linda Cox
Regina Dale	Dale Denton	Bill Derow	Hilton Dickerson
Larry Duncan	Cindy Edington	Jeanne Erickson	Debbie Fulbright
Janice Goetz	Scott Kiester	Jeff LaQuey	Rita Lokie
Jean Mason	Vin Merrill	Abigail Miller	Cathy Milliger
Mary Morrow	Mary Strickland	Tim Trosper	Diane Wetherbee
	Fran Witte	Sue Yost	

## 2020 Elm Fork Chapter Awards - March

The following members achieved the following  
accomplishments as of January and February 2020



### 250 Hour Milestone

Larry Duncan, Class of 2018

Sandy LaQuey, Class of 2019

Alan See, Class of 2017

### 500 Hour Milestone

Jean Mason, Class of 2017

Karen Peden, Class of 2017

Cecily Pegues, Class of 2015

### 1,000 Hour Milestone

Abigail Miller, Class of 2003

### 3,000 Hour Milestones

Dave Rowley, Class of 2000

### 4,000 Hour Milestones

Betty Zajac, Class of 2003

*From Rita Lokie*

### April Chapter Meeting Online

**Chuck Swatske**, of the Elm Fork Chapter 2018 class, will present "Fangs of Fury or Paradise Lost" in a 1 hour webinar at our April Chapter Meeting on Thursday, April 16th.

Chuck's presentation will feature the Broadband Copperhead Snake, (*Agkistrodon contorix latincinctus*). Join him for an in-depth discussion of the maligned and misunderstood but dangerous animal that lives and prospers among us.

Details for accessing the meeting will be posted in PYW.



Female specimen. Texas: Llano County.

Photograph by Carl J. Franklin

<https://www.uta.edu/biology/herpetology/copperheads.htm>



Broad-banded Copperhead  
Photograph by Ray Rauch,  
U.S. Fish and Wildlife Service.  
License: Public Domain.

# Projects in and around the Community

Photos from Marilyn Blanton

Texas Native Plant Art Exhibition—comparing student paintings to actual wildflower!

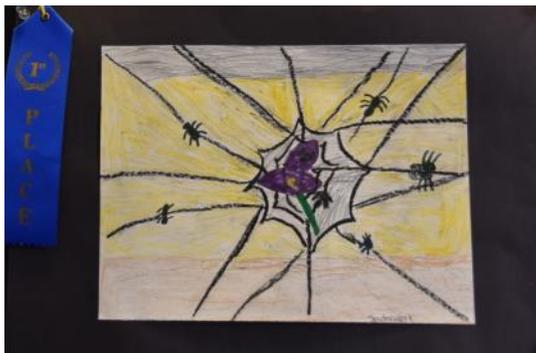
Bluebonnet



Indian Blanket



Mexican Hat



Spiderwort- this student had a creative imagination!

Texas Thistle



# Projects in and around the Community



Winecup



Pink Evening Primrose



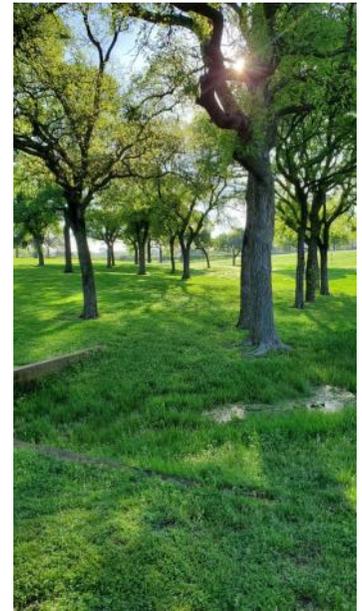
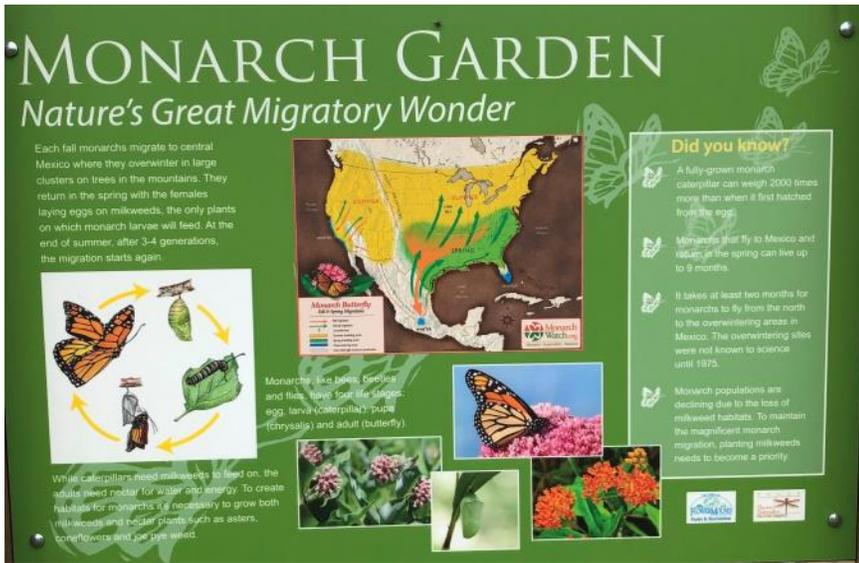
Coreopsis



Indian Paintbrush



# Projects in and around the Community



Green Acres



Monarch Station in early April



Buttercups & Bluebonnets

**E**

Jean Mason

ven though we are temporarily without our workdays, spring has again blessed us with new seedlings, blooms, and yes, weeds. Our outdoor spaces provide us with peace and a sense of constancy during this unusual time. The Green Acres team hopes you enjoy these photos from Green Acres. Stay well!

Mexican Plum



Spiderwort



Those who contemplate the beauty of Earth find reserves of strength that will endure as long as life lasts. There is symbolic as well as actual beauty in the migration of the birds, the ebb and flow of tides, the folded bud ready for the spring. There is something infinitely healing in the repeated refrains of nature – the assurance that dawn comes after night, and spring after winter.”

- Rachel Carson

### RAMBUNCTIOUS RACCOONS

By Bob James

Photos from Dorothy Thetford



Caught napping!

A Number of years ago when I was a Scoutmaster of a Boy Scout Troop the Senior Patrol Leader and Patrol Leaders planned a backpacking campout to Lake Georgetown north of Austin. They had the trip divided into a 4 mile backpack for the younger Scouts into a camp on the south side of the lake and a 16 mile backpack for the older Scouts around the lake to the same camp where we would all camp together. The following morning we would hike back to trailhead. This would give the younger Scouts an eight mile hike and the older Scouts a twenty mile hike. It sounded good to me and on a Friday afternoon after school was out we left for Georgetown State Park.

We arrived at the park rather late and decided to just put our sleeping bags on tarps since the weather was nice. We put all our packs under the two covered picnic areas and turned in early so we could get an early start the next morning. About midnight I saw one of the leaders putting packs into his truck. I asked him what was going on. He told me, "Bob, coons are getting into our packs." I said, "Oh, I thought maybe you were leaving or something." Then I settled back down into my warm bag and tried to go back to sleep. Then I realized what he had said! I jumped up and called the other leader in our area and told him, "Coons are in the packs, John!" He and I both raced over to our shelter and sure enough there were coons throwing stuff out of our packs

and rooting for food. There must have been five or six of them. We finally got our gear back in order and put the packs in my VW bus for the night. One of the Scouts said, "Mr. James, I've never seen so many coons before!" After that experience the trip went just as planned and we had a marvelous time at a beautiful park.

When I was a youngster my Dad took me to see his brother at his farm northeast of Grapevine, Texas. As we sat out in the front yard I noticed a raccoon in the big oak tree where we sat. Within a few minutes the coon came out of the tree and sat on the back of my Uncle's chair. As he sat there he ran his fingers through my Uncle's hair. My Dad kidded him that the coon was looking for fleas. My Uncle laughed and gave the coon a sugar cube. The coon immediately got down and went to the birdbath and started washing the sugar cube. Of course, the cube disappeared, the coon looked surprised and kept looking for it in the water. Then my Uncle went to a tank nearby and seined out a couple of minnows which he gave to the coon. The coon washed and washed the minnows in the birdbath and finally ate them. After this small meal he climbed back to his perch in the tree. My Dad told me later that his brother had the pet coon for over five years and it was really a malicious beast and it would be best for me to never get too close to it. My cousin tried to make friends with the creature and bears a number of scars from the encounter to this day.

A friend of mine called me one day and told me he had some sort of animal in his house. It practically ruined his kitchen and overturned the flour tin and got into the sugar. I told him it was probably a coon and he needed to call a pest exterminator. He called back a week later and said he had several exterminators out with no success and could I help. Well, I reluctantly got out my 22 rifle and a box ammo and went to his house and crawled up into the attic. With a flashlight I finally saw the animal over in one corner of the attic. His eyes were flashing gold and red. I shot him and dragged the body out of the attic. It was, fortunately, an older female past kit bearing stage. My friend told me later, "Bob, I thought I was going to have to burn my house down to get rid of that animal."

Raccoons are fascinating creatures. Here in Texas we have the Texas Raccoon (*Procyon lotor fuscipes*) a subspecies. They are characterized by the black mask over the eyes, a fairly long brownish fur and amazingly tactile hands they use to wash their food. Of course they have no thumb but their five fingers are very mobile. Their front paws have a horny layer that softens when wet and their fingers have non-retractable claws called vibrissae. They use the claws to open mussels and catch small fish. Raccoons have an incredible sense of touch, a good sense of smell but relatively poor eyesight. They can live for 3 to 5 years in the wild but some have lived for 20 years in captivity. The females tend to stay together to protect their offspring. The males, after breeding, tend to live alone and jealously guard their territory and mark it with secretions from their anal glands. They are one of the few creatures to have a baculum or penis bone. The males can weigh up to 20 to 25 pounds.

## Features

On one of our Scout Troop car camping trips to Leonard Scout Camp we pitched our tents out near Lake Grandbury. After our usual campfire we all turned in to go to bed. I got into my tent and crawled into my sleeping bag. I woke up hearing something outside making a scratching noise and a soft purr. I unzipped the tent grabbed my flashlight and looked out. A large raccoon was sitting on my ice chest trying to get it open. I shined my light on him and he turned toward me and hissed bearing his teeth. I said, "Okay Mr. Coon, If you can get that chest open have at it!" I crawled back into my tent, zipped it up and promptly went back

Leaving the scene.



At Dawn I Stare Down a Raccoon

The tallest tree behind my house  
hides many dark abodes.  
One morning a masked bandit  
shuffled out onto a limb.  
There in the bronze light our eyes met.  
The ancient bulk of shadow and leaves  
bowed him toward me, pushed up by the lake breeze.  
A wisp of fog slipped between us,  
When it had cleared, he had gone.  
I have not seen him since.

poem by Eric Lochridge

## Meet a Master

### Meet a Master: Brenda Wellenreiter, our Chapter President Sue Yost class of 2017

Where are you from? I grew up on a farm in Central Illinois. That is where I get my love of plants and animals.

Marital status? Married for almost 40 years

Kids, Grand kids one daughter and one granddaughter

Pets Bevo our dog and Bootsy the cat

Work history Professional work was financial planning in the Oil & Gas business after that I have done accounting for several non-profits

Schooling BS in Math and minor in accounting, Illinois State University

How long a MN? What class year? Class of 2014

Favorite pastime traveling, cooking, gardening

Favorite food Italian

Favorite place to visit maybe the next trip, Past trips New Zealand and Africa

Favorite animal all animals but especially cats

Favorite MN volunteer opportunity The last couple of years my time has been spent on administration.

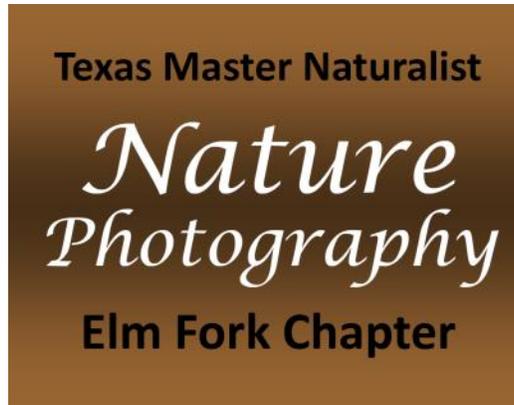
Share a funny story or antidote about being a MN. In 2014 I told Judy Riley I was bored so she convinced Mary Morrow and myself to sign up for the MN training class. Mary and I were in the 2001 Master Gardener class together

Tell us something we'd be surprised to know about you. I raised quarter horses. i competed in Reining, a western riding event and did some of the training. When we lived on the ranch, I had a lot of animals.



## Announcements

From Elise Spain



### Invitation to Participate in TMN-EFC Nature Photography Display

**Are you a nature photographer?** Many of us are, and some of you are really good at it! In order to showcase some of nature's beauty and also celebrate your talent as photographers, we want to display your nature photos at our 2020 Open House.

#### Here are the plans.

1. All Chapter members are invited to submit nature photos for display at our Open House at the Elections Building on July 16, 2020.
2. Photos can be taken with any kind of camera at all, including cell phones.
3. No service hours are associated with taking nature photos to submit for this display.
4. Each photographer may submit up to five photos by emailing them to Denise Remfert at [dremfert@me.com](mailto:dremfert@me.com) using this subject line: **MN Open House Nature Photography Exhibit**.
5. Photos submitted must have been taken by a chapter member of things within our Denton, Wise, and Cooke county area.
6. Denise will select the photos to be printed and displayed.
7. This is not a contest and not all images will be printed. We will be looking for quality and diversity.
8. Photographers may provide their own 8" x 10" prints (drop off details to be arranged as needed).
9. Each photo must be identified in the emails or on the back with the name of what is pictured, the location where the photo was taken, and the photographer's name as it should appear on the label for each photo.
10. All photos selected for the exhibit will be printed 8" x 10", mounted, and labeled, with labels visible to the viewers.
11. The file size for each photo should be 2-5 mb.
12. All photos must be received by June 22, 2020.
13. We expect to be able to display 25 photos, but possibly more.
14. Ideas for any further use of the photos may be discussed and sent to the photographers for approval.
15. Prints provided by photographers will be returned to the photographers via general meeting pickup. Electronic files will be kept on the Chapter's secure Google drive for possible future use.



Hummingbird  
Hawk-moth  
that was feeding  
on Hawthorn bushes—  
photos by Dale  
Meyer

## Announcements



Photo by Jonathan Reynolds

16. Each photographer will retain all rights to each photo, but may grant usage on request, and we will always credit the maker for photos used.

The VMS team will approve service hours only for selecting and producing the exhibit photo prints (Denise), mounting them (work party to be announced), and time required to put up and take down the display at the Open House (volunteers needed).

After the Open House and with permission from the photographers, we could put up other displays also. Would you like to see photos on display around our communities?

Thank you for your photographs and for your support for showing them to others!



Red and Yellow Columbine—photo by Mary Morrow

## Announcements



### 2020 Birding Classic **Postponed** to Fall

Health and safety of our Birding Classic participants, staff, and the birding community are paramount. We therefore have made the difficult decision to **postpone** the 2020 Great Texas Birding Classic.

We remain hopeful that the situation will improve over the next several months. If so, we plan to host the Birding Classic during peak fall migration for a once-in-a-lifetime version of this popular event. We hope all our loyal participants will still have a chance this year to enjoy the Classic and that we will be able to continue to raise funds for habitat conservation and bird viewing opportunities.

**Great Texas Birding Classic 2020 will take place Fall 2020, pending re-assessment of Covid-19 situation in July. We will announce exact dates and additional details soon.**

If you have already registered and paid your fees, we will be in touch by the end of the week with options on how to handle your existing registration. We hope that you will be able to join us this fall and simply transfer your team registration to the new dates, but we realize that may not work for everyone and will have options for all situations.

We hope everyone stays well and that the pandemic situation improves so that you all can participate in a unique fall migration version of the Birding Classic. Thank you for your support and patience during this unprecedented time.

For the latest information on COVID-19 in Texas, visit the [Texas Department of State Health Services](#).

From Texas Parks & Wildlife Weekly Bulletin



### Featherless Flyer

#### Refuge Update:

##### Road closures due to flooding:

- Refuge Road is closed from just north of the visitor center kiosk to the yellow gate south of Hagerman Road
- Wildlife Drive is closed from Refuge Road to Martin Branch Creek
- Bennett Lane is closed from Big Mineral Creek to K Pad Road
- Silliman Road
- Plover Road
- Tern Road and associated boat ramp
- Egret Road
- All pad roads, with exception of K Pad Road, are at least partially inundated. This includes L Pad and the associated boat ramp which is completely inaccessible.
- No boat ramps are open at this time

##### Facilities currently OPEN (all others are closed due to flooding):

- Butterfly Garden
- Goode Day Use Area
- Sandy Point Day Use Area
- Big Mineral Day Use Area (vault toilet only)
- Harris Creek Trail
- Haller's Haven Trail
- Meadow Pond Trail
- Raasch Trail (partially open from Terry Lane access; a portion of the trail between Refuge Road and the bridge crossing Meyers Branch Creek is inundated)

## Announcements

### Visitor Center Operations and COVID-19:

In keeping with guidance from the White House and the Centers for Disease Control and Prevention (CDC), and acting out of an abundance of caution, we are temporarily suspending operations of the Visitor Center. We are committed to doing our part to slow the spread of COVID-19 and to ensure the health and safety of our employees, volunteers, and you--our friends and neighbors. Refuge lands, including the aforementioned facilities not closed due to flooding, remain open and accessible to the public. Please visit refuge information kiosks or brochure boxes for visitor information and refuge maps. We apologize for any inconvenience and will provide updates as they become available.

### General information for refuge visitors during the coronavirus pandemic:

While outdoor sites remain open at Hagerman National Wildlife Refuge during the current coronavirus pandemic, we urge visitors to follow [CDC guidelines](#). Maintain adequate social distancing, avoid overcrowding and exercise good hygiene. **If a parking lot is full when you visit, please do not stop.** We understand that the outdoors can help relieve stress, but these guidelines must be followed for our public health and safety. For more information please visit our webpage, [FWS Coronavirus Response](#).



## NEWS

### News Release

Media Contact: TPWD Press Office, 512-389-8030, [news@tpwd.texas.gov](mailto:news@tpwd.texas.gov)

April 7, 2020

### Texas State Parks Temporarily Close to the Public

AUSTIN—At the direction of Gov. Greg Abbott, Texas State Parks will be closed to the public effective at the close of business Tuesday, April 7 in order to maintain the safest environment for visitors, volunteers and staff. The Texas Parks and Wildlife Department (TPWD) will continue to stay current with the latest public health recommendations and will announce when a definite reopening date has been determined.

“Given the myriad of challenges and heightened risks of operating the parks at this time, we believe this is the best course of action right now in order to meet the health and safety expectations the state has set out for the citizens of Texas,” said Carter Smith, Executive Director of TPWD. “All state parks will remain temporarily closed until public health and safety conditions improve. During the closure, staff will continue to steward and care for the parks to ensure they can be immediately reopened to visitors at the appropriate time.”

Outdoor recreational opportunities such as hunting, fishing, biking, jogging, walking, hiking, wildlife viewing, and the like are essential activities for Texas citizens. TPWD will continue to do its part to actively encourage and promote these opportunities in ways that are safe and close to home, said Smith.

Through this trying time, TPWD has worked diligently to facilitate access to the outdoors across the state, including in the state park system, which hosted nearly 740,000 day and overnight visitors throughout the month of March.

Despite the implementation of increasingly restrictive visitor use measures to help minimize the transmission of COVID-19 at parks, TPWD has reached a point where public safety considerations of those in the parks, and in the surrounding communities, must take precedence over continued operations. Difficulty in ensuring compliance with social distancing, problems in maintaining adequate supplies and keeping park facilities sufficiently sanitized are only a few of the challenges encountered by state park staff.

While parks are closed to the public, staff will be working to help maintain the standard upkeep, maintenance, stewardship, and continued regular cleaning of site facilities.

The Texas State Parks Customer Service Center is currently working toward contacting customers with upcoming overnight reservations to reimburse stays booked through the reservation system. Group and facility reservations have been cancelled until April 30. Cancelled reservations will not be charged normal administrative fees.

## Announcements

Day passes purchased through the reservation system, not associated to the Texas State Parks Pass, will also be refunded without penalties. The Texas State Parks Customer Service Center will automatically process cancellations of both overnight and day-use reservations. If your reservation is impacted by a facility or park closure, a Customer Service Center agent will contact you – you do not need to contact us. We are contacting customers in order of arrival date and appreciate your patience.

Questions regarding state park reservations can be emailed to [customer.service@tpwd.texas.gov](mailto:customer.service@tpwd.texas.gov) and general park information can be found at [TexasStateParks.org](http://TexasStateParks.org).

## Contributors to Naturalist News this Month



Susan Pohlen class 2007



Becky Bertoni class 2005



wanda odum editor— class 2005

Dale Meyer class 2011 with  
Deborah Meyer class 2012



Dr. Larry Legg 2015



Judi Elliott class 2009

# Contributors to Naturalist News this Month

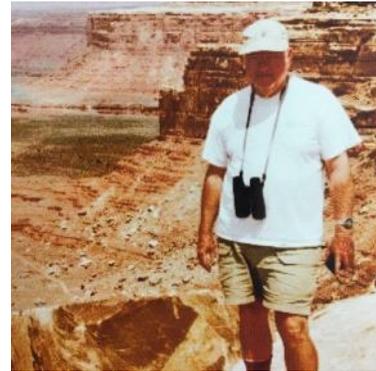
Sue Yost class 2017



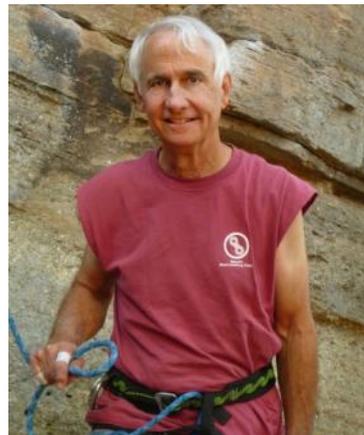
Mary Morrow class 2014



Bob James class 2003



Janice Goetz class 2016



Jonathan Reynolds class 2014



Don Fikes class 2013

Elise Spain class 2017



Marilyn Blanton class 1999



Jean Mason class 2017

Jeanne Erickson class 2006



Rita Lokie class 2013





**Cloudless Sulphur from Janice Goetz—photo taken Hagerman National Wildlife Center**

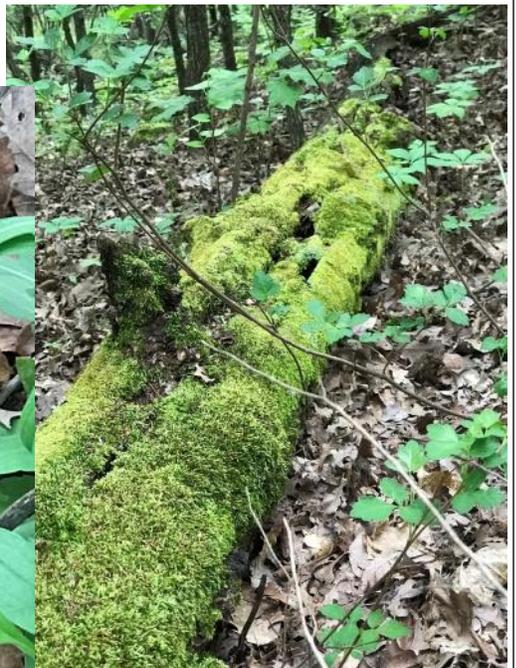
**Least bluet from Jonatan Reynolds**



*A Little Extra*



Mosses, Lichen and Critters—  
Susan Pohlen takes us on a  
walk into her woods.



Hello Master Naturalist

Some of our new members may not know, when I was chapter president in 2017, I often did a book report on the latest nature book I was reading. I would like to tell you what I have been reading the last few months. Just in case you might have some extra time on your hands!

But first, I hope all of you and your families are well. My wife and I are doing well and are taking this seriously. Frankly I have been a little rattled by all of this. After all, I am in the high risk group. What is most unnerving to me is how some survive and others, seemingly healthy people don't make it. I do think this "down time" will let us reflect on what is really important in life. I am fortunate to have my little 2 acres and a metal shop building, "the Covid Cave", to hang out in during the day (my wife is glad I have it too). With that and sunny weather I can survive this shelter in place order.

I just finished reading **The Overstory**, by Richard Powers. This book won a Pulitzer Prize for fiction and was a #1 bestseller so I am sure many of you have read it or at least heard about it. As you would assume, it is about trees, but it is also about people, the future of our planet, and so much more. I read the first chapter and was stunned. I read the next five chapters and thought "where the hell is this going". Stick with it. It was not a quick read for me. A lot to think about. I wish I were a better writer so I could describe this book. It is told through a cast of characters, seemingly unrelated...but read on my friend. Let's save the planet.

Another book I don't think I have talked to you about is **Braiding Sweetgrass**, by Robin Wall Kimmerer. It was recommended to me by C.J. Solberg. The author is a botanist, professor, and member of the indigenous Citizen Potawatomi Nation. She presents how our relationship with nature and the living world will teach us how to live. Very interesting book. My favorite part was about maple trees.

If you want a nature book but want a mystery too, read **The Feather Thief** by Kirk Wallace Johnson. A true life but totally weird story about the natural history heist of the century. It is about obsession with wild tropical bird feathers used for centuries as decoration. This book focuses on one individual and his consuming interest in feathers for tying fishing flies! The story too bizarre to explain...just read it.

Here are a few more I have read recently, not nature related but entertaining reading:

**The Pioneers** by David McCullough. McCullough is a popular history writer and this is about the settlement of the Northwest Territory around the Ohio River Valley. Very interesting and I loved the pioneer's diaries talking about the massive virgin forest.

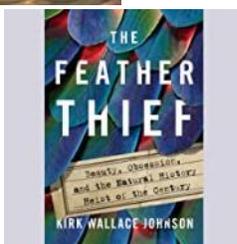
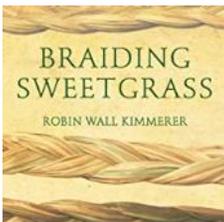
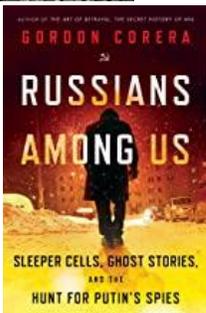
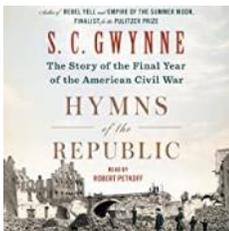
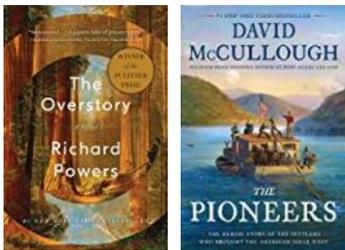
**Hymns of the Republic** by S.G. Gwynne. This was recommended to me by Bob James. A great book about the last year of the civil war. What a tragic waste on both sides. And you think politics are crazy now, wait until you read about what was going on then.

**Russians Among Us** by Gordon Corera This book was recently released. I bought it on a whim thinking it would be a spy thriller. Not really that, but an interesting read about how once the iron curtain fell the US let down our guard on cold war spying from Russia.....but not Putin!

Let me know what you are reading and if you have read any of these, let me know what you think. Stay safe and I look forward to seeing you all soon.

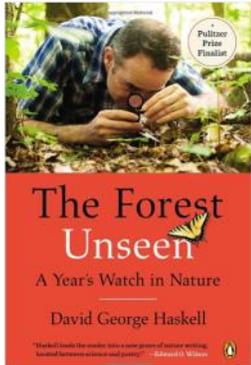
Don Fikes

dfikes5@gmail.com



### Recommended Books on Nature to Read from Jeanne Erickson

The Nature Field Guide section of my library has really grown over the years. The excitement of the new always has me thumbing through the pages enjoying all the incredible photos and diagrams and charts between the covers of each new acquisition. But the mistake I more than often make is leafing past the Forward, Preface, Acknowledgements, Introductions and the "How to Use This Book" sections. No more! Last month, I read *The Forest Unseen* by David Haskell, which inspired me to pull a few field guides off the shelf for a new look. And it may be a great activity for all of us now – an opportunity to explore a more restricted space – our own backyard – with new eyes and inspired curiosity.



Must read to discover how fungi propagate! JE

A biologist reveals the secret world hidden in a single square meter of old-growth forest—a finalist for the Pulitzer Prize and the Pen/E.O. Wilson Literary Science Writing Award. 2012, 288 pages

*From the publisher:*

In this wholly original book, biologist David Haskell uses a one- square-meter patch of old-growth Tennessee forest as a window onto the entire natural world. Visiting it almost daily for one year to trace nature's path through the seasons, he brings the forest and its inhabitants to vivid life.

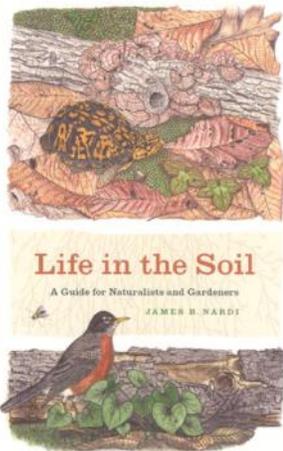
Each of this book's short chapters begins with a simple observation: a salamander scuttling across the leaf litter; the first blossom of spring wildflowers. From these, Haskell spins a brilliant web of biology and ecology, explaining the science that binds together the tiniest microbes and the largest mammals and describing the ecosystems that have cycled for thousands- sometimes millions-of years. Each visit to the forest presents a nature story in miniature as Haskell elegantly teases out the intricate relationships that order the creatures and plants that call it home.

So here are a few books that touch on the many overlooked and hidden gems in nature that one must really look for to see.

*Life in the Soil; A Guide for Naturalists and Gardeners*

James B. Nardi

336 pages | 69 color plates, 229 halftones, 2 line drawings © 2007



After reading this book, the urge to go out collecting has become irresistible. JE

*From the publisher:*

The biological world under our toes is often unexplored and unappreciated, yet it teems with life. In one square meter of earth, there lives trillions of bacteria, millions of nematodes, hundreds of thousands of mites, thousands of insects and worms, and hundreds of snails and slugs. But because of their location and size, many of these creatures are as unfamiliar and bizarre to us as anything found at the bottom of the ocean.

*Life in the Soil* invites naturalists and gardeners alike to dig in and discover the diverse community of creatures living in the dirt below us. James B. Nardi begins with an introduction to soil ecosystems, revealing the unseen labors of underground organisms maintaining the rich fertility of the earth as they recycle nutrients between the living and mineral worlds. He then introduces readers to a dazzling array of creatures. Organized by taxon, *Life in the Soil* covers everything from slime molds and roundworms to woodlice and dung beetles, as well as vertebrates from salamanders to shrews. The book ultimately explores the crucial role of soil ecosystems in conserving the worlds above and below ground.

## Let's Read

*A Guide to Common Freshwater Invertebrates of North America*  
J. Reese Voshell, Jr.  
454 pages, 103 color pages, 135 b/w illustrations, 2002



*Two of my favorite pages describe the process of how arthropods shed their skin as well as how some go through diapause. JE*

*Two of my favorite pages describe the process of how arthropods shed their skin as well as how some go through diapause. JE*

*From the publisher:*

***A Guide to Common Freshwater Invertebrates of North America*** meets the needs of this growing audience of teachers, amateur naturalists, environmentalists, anglers, and others interested in aquatic biology by providing substantive information in non-technical language for about 100 of the most common groups of invertebrates found in the inland waters of North America.

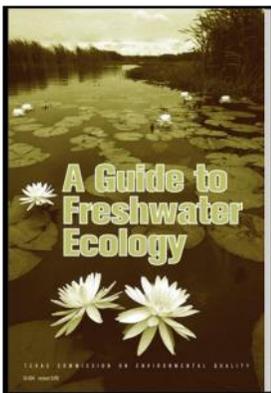
Section I of the book provides background on the biology and ecology of freshwater environments and explains why and how this group of organisms can be studied.

Section II describes nearly 100 of the most common groups of invertebrates. For each group, a whole-body color illustration is provided along with brief text pointing out the most important features to use to identify members of the group.

Section III contains expanded descriptions of the life histories, behavior, and ecology of the various invertebrate groups, and identifies their important ecological contributions and relationships to humans.

This guide has several strengths: it is broad in scope, geographically and taxonomically; it is written at a substantive yet easily accessible level that will appeal to both general readers and those with more advanced interest in the subject; and it contains numerous high-quality illustrations, which will greatly facilitate the easy and rapid identification of specimens

*A Guide to Freshwater Ecology*  
Christine M. Kolbe, Mark Luedke  
Texas Commission on Environmental Quality  
122 pages Publication GI-034 revised 5/09  
Download on-line or order copies: [takecareoftexas.org](http://takecareoftexas.org)



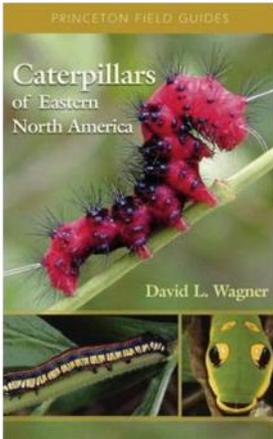
*The section on Basics of Freshwater Ecosystems introduces terminology and concepts about drainage basins, lakes and river systems. JE*

*From the publisher:*

The purpose of this manual is to familiarize individuals with a variety of topics related to freshwater ecosystems. It is intended to be user friendly and should therefore be beneficial to individuals with a wide range of expertise. The information describes the basics of water and water quality as well as freshwater invertebrates, fish, reptiles, amphibians, birds and plants. It is well illustrated with clear diagrams, charts and drawings.

*Caterpillars of Eastern North America*  
David L. Wagner

512 pages 2010 by Princeton University Press



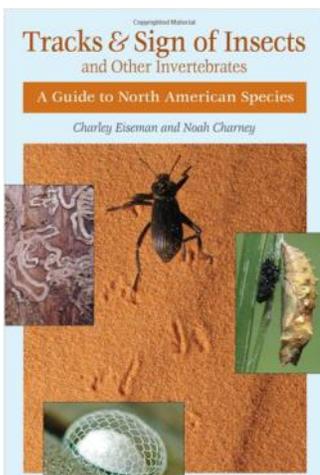
*From the Publisher:*

This lavishly illustrated guide will enable you to identify the caterpillars of nearly 700 butterflies and moths. The more than 1,200 color photographs and two dozen line drawings include numerous exceptionally striking images. Full-page species accounts cover almost 400 species, with up to six images per species including an image of the adult plus succinct text with information on distribution, seasonal activity, food plants, and life history. These accounts are generously complemented with additional images of earlier instars, closely related species, noteworthy behaviors, and other intriguing aspects of caterpillar biology.

Many caterpillars are illustrated here for the first time. Dozens of new food plant records are presented and erroneous records are corrected. The book provides considerable information on the distribution, biology, and taxonomy of caterpillars. The introductory chapter covers caterpillar structure, life cycles, rearing, natural enemies, photography, and conservation. The section titled "Caterpillar Projects" will be of special interest to educators

*The section on caterpillar survival strategies is fascinating. JE*

*Tracks & Signs of Insects and Other Invertebrates*  
Charley Eiseman and Noah Charney  
592 pages 2010 Stackpole Books



*From the Publisher:*

2012 *Choice Magazine* academic book award winner (zoology).

The first-ever reference to the sign left by insects and other North American invertebrates includes descriptions and almost 1,000 color photos of tracks, egg cases, nests, feeding signs, galls, webs, burrows, and signs of predation. Identification is made to the family level, sometimes to the genus or species. It's an invaluable guide for wildlife professionals, naturalists, students, and insect specialists. Includes beetles, spiders, ants, flies, butterflies, mayflies, dragonflies, earwigs, crickets, grasshoppers, scorpions, centipedes, millipedes, snails, earthworms, lacewings, wasps, damselflies, slugs, and alderflies.

*I have only started going through this book – in fact began with the section on webs – found out that spider webs ensnare their prey with two different types of webs – those that are “sticky” and those are more like Velcro. JE*

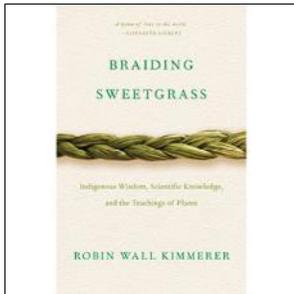


**Lady Bird Johnson Wildflower Center University of Texas**

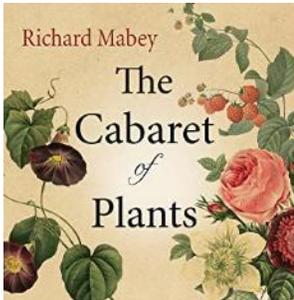
**The Power of Books**

Words have immense power. Learning about new topics gives us things to talk about; opens new avenues of exploration; connects us to different communities; makes us smile, wonder and furrow our brows. Nature has power too. We've brought together the best of both with a plant-minded book list to keep your botanical brain growing.

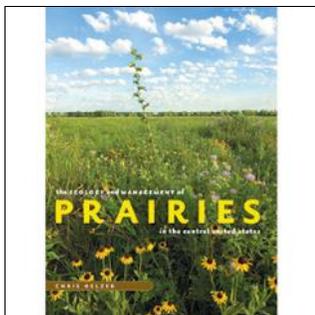
**Our recommendations**



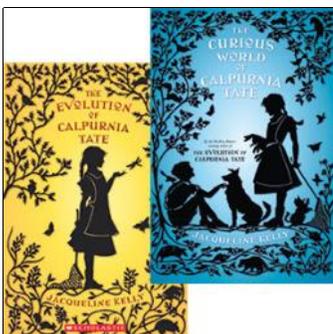
**Braiding Sweetgrass, by Robin Wall Kimmerer** Weaving together sincere and poetic (but never cliché) personal narrative with botanic knowledge and indigenous stories and perspective, Kimmerer gives juicy scientific insights and asks us to confront how our words affect our relationship with the natural world. — *K. Angel Horne, PR, Media & Marketing Coordinator*



**The Cabaret of Plants, by Richard Mabey** A great read and captivating work of botanical history that challenges what we know about history, plants, beauty and culture. Mabey deftly illustrates how the botanical world is central to the human experience, and not simply as a source of food and medicine. — *Patrick Newman, Executive Director*



**The Ecology and Management of Prairies in the Central United States, by Chris Helzer** If we want to improve our environment, we must understand how to manage landscapes from the perspective of ecosystem function. This text breaks a complex subject into accessible components. Read it and go plant a pocket prairie. — *John Hart Asher, Senior Environmental Designer*

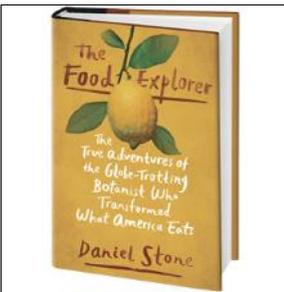


**The Evolution of and Curious World of Calpurnia Tate, by Jacqueline Kelly** A great pair of books for budding naturalists. The main character is a spunky, nature-obsessed 11-year-old growing up at the turn of the century in a small, Central Texas town called Fentress — much better than reading history from a textbook! — *Julie Graham, Education Coordinator*

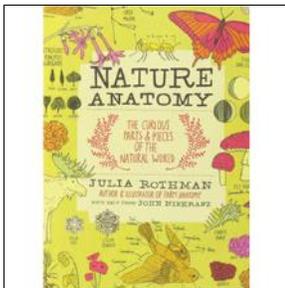
## Let's Read



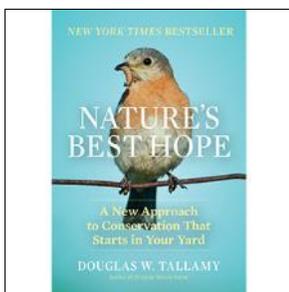
**Flora of Middle-Earth**, by **Walter S. Judd and Graham A. Judd** This combination flight-of-fancy and serious deep-dive provides detailed profiles of every real and imaginary plant mentioned in J.R.R. Tolkien's works. Accompanying black-and-white woodcut-style illustrations mimic the feel of thumbing through old volumes of illustrated herbals. Delightful! — *Carrie McDonald, Manager of Volunteer Services*



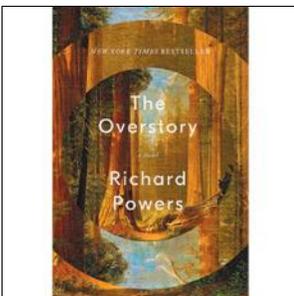
**The Food Explorer**, by **Daniel Stone** In the 1800s, the American diet was wholesome and totally bland. That changed dramatically due to a passionate botanist named David Fairchild. This book chronicles his many trips, which brought us mangos, kale, avocados, dates, Egyptian cotton, Bavarian hops and the flowering cherry trees of Washington, D.C. — *Frances Cushing, Assistant to the Volunteer Manager*



**Nature Anatomy**, by **Julia Rothman** At first glance, Rothman's wondrous illustrations may seem like pure eye candy, but you'll find surprisingly in-depth science here as well. Look, learn, and dig in with recipes and art projects — a great catalyst for connecting with nature in a deeper way. — *Amy McCullough, Editor & Communications Manager*

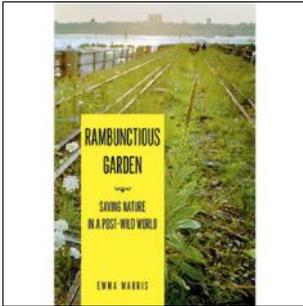


**Nature's Best Hope**, by **Douglas W. Tallamy** Since it's spring, I've been doing more weeding than reading — but Tallamy's most recent text is a great motivator. At a critical time, he reminds us that restoring and maintaining native plant habitat in our own yards (back and front) is not only a good thing to do, it's our responsibility to our neighbors, both human and wildlife. — *K. Angel Horne, PR, Media & Marketing Coordinator*

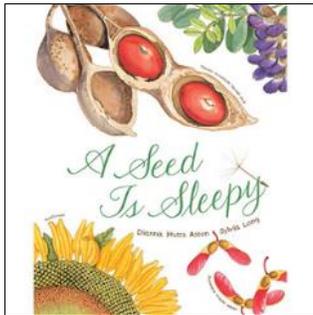


**The Overstory**, by **Richard Powers** Reading this Pulitzer Prize-winning book is like seeing all the intricately interconnected parts of a forest for the first time. Powers explores the immigrant experience, the psychology of environmentalism, love, heartbreak and death. But it's the trees that leave you feeling connected to the life vibrating all around you. — *Lee Clippard, Director of Communications*

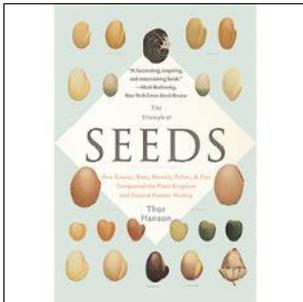
## Let's Read



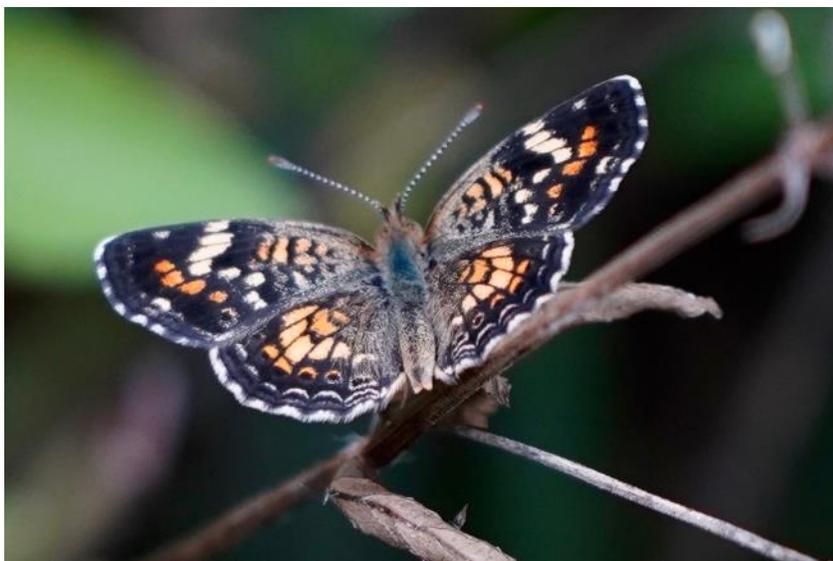
**Rambunctious Garden, by Emma Marris** There is a serious debate among ecologists and designers regarding the trajectory of conservation. This thoroughly interesting read questions traditional conservation strategies by embracing more radical interventions within degraded ecosystems. [Read the full review here.](#) — *John Hart Asher, Senior Environmental Designer*



**A Seed Is Sleepy, by Dianna Hutts Aston and Sylvia Long** This book offers an informative glimpse at the seed-bearing parts of familiar Texas natives, such as mountain laurels, as well as lesser-known plants including devil's claw and Texas barberry — a lovingly illustrated look at seeds for children and adults. — *Rosalie Kelley, Youth and Family Programs Coordinator*



**The Triumph of Seeds, by Thor Hanson** By breeding plants (such as chocolate, coffee, cotton, guar) with desired traits over millennia, people have increased their options for food, stimulants, fiber and chemicals. Read it while sharing an Almond Joy — what Hanson calls “an entirely seed-based experience” — with your favorite gardener. — *Minnette Marr, Conservation Program Manager*



Maybe a Phaon Crescent Butterfly, but not sure. At Hagerman National Wildlife Refuge—Janice Goetz



*Blueberry Mason Bee or a Blue Orchard Bee (Osmia lignaria) in my Texas Mountain Laurel— comes from gallery of Lisa Rosenberg*

## Almost the Last Word

By Fawn Power [rd.com/funny-stuff/funny-poems/](http://rd.com/funny-stuff/funny-poems/)

A fruit is fated to be sliced.  
It sighs before the blade.  
In joyful hope that now at last  
Its future has been made.  
The slice is swift.  
The foodies fast!  
The rind is cut and saved.  
The pulp is squooshed and  
Squished and smashed!  
I've heard that it's been said  
No braver lemon gave its life.  
The memory never fades  
For citrus that resigns itself  
To become lemonade.



*We need more lemonade during these traumatic times!*

**I want to thank each and every contributor and every reader throughout all these years! You are valued greatly.**

Contributors to the newsletter are needed every month So think ahead of what you can share. If you have something for this page, it would be welcome—try to keep it to one page. Editor

- 
- ① NEVER OPEN A BOOK WITH THE WEATHER.
  - ② AVOID PROLOGUES.
  - ③ NEVER USE A VERB OTHER THAN "SAID" TO CARRY DIALOGUE.
  - ④ NEVER USE AN ADVERB TO MODIFY THE VERB "SAID."
  - ⑤ KEEP YR. EXCLAMATION POINTS UNDER CONTROL!
  - ⑥ NEVER USE THE WORDS "SUDDENLY" OR "ALL HELL BROKE LOOSE."
  - ⑦ USE DIALECT SPARINGLY.
  - ⑧ AVOID DETAILED DESCRIPTIONS OF CHARACTERS.
  - ⑨ SAME FOR PLACES + THINGS.
  - ⑩ LEAVE OUT THE PARTS READERS TEND TO SKIP.



Texas A&M AgriLIFE Extension  
Joseph A. Carroll Building  
401 W. Hickory Street  
Denton, TX 76201  
940-349-2883

Our mission . . . "to develop a corps of well-informed volunteers who provide education, outreach, and service dedicated to the beneficial management of natural resources and natural areas within our community"

Our vision . . . "in our community, Elm Fork Chapter of the Texas Master Naturalist program will be recognized as a primary source of information, education and service to support natural resources and natural areas today and in the future."



We're on the Web  
[www.txmn.org/elmfork](http://www.txmn.org/elmfork)

#### Regular Monthly Chapter Meetings

9:30 a.m. preceded by a social time at 9:00 a.m. on the third Thursday of each month. Chapter meetings are open to the public. Next meeting:

**April 16, 2020 featuring Chuck Swatske online. Topic is Fangs of Fury—Broadband copperheads**

#### Board Meetings

The Board meets each second Thursday of the month at 9:30 a.m. The Board last met March 12, 2020. Next monthly Board meeting is planned for April 9, 2020

Monthly Board meetings are open to members.

#### OFFICERS OF THE BOARD:

PRESIDENT—Brenda Wellenreiter  
IMMEDIATE PAST PRESIDENT—Adelaide Bodner  
VICE-PRESIDENT/PROJECTS—Jody Springer  
SECRETARY—Kathryn Wells  
TREASURER—Jerry Betty  
MEMBER-at-LARGE—Harriet Powell  
CLASS REPRESENTATIVES— David Jones & Susan Pritchard

#### ADVISORS:

Janet Laminack, Extension Agent  
TPWD—Ricardo Torres

Educational programs of the Texas A&M AgriLife Extension Service are open to all people without regard to race, color, religion, sex, national origin, age, disability, genetic information or veteran status. The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Courts of Texas Cooperating.



Doodling—  
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