



The Tracker

Central Texas Master Naturalist Newsletter June 2019

Photo by Terry Rascoe

Inside This Issue	
The President's Pen	2
Nature Illustration	5
Butterfly Count	7
Bell County Workday	12
Miller Springs NC	14
Chalk Ridge Falls	16
Mother Neff State Park	18
Out on a Limb	26
Graduation announcement	29
On The Horizon	30

Calendar at a Glance	
June 11th—	GRADUATION!
June 8th—	Butterfly Count
June 13th—	Miller Springs
June 21st—	Chalk Ridge
July 1—	CTMN Board Mtg
July 18th—	Union Grove WMA
July 25th—	Bell Co Museum
July 27th—	Moth Night MNSP

2019 BURLESON PRAIRIE WALK

- Jessica Dieter

When arriving at Burleson Prairie the first thing that hit us was the amazing smell of the wet grasses and wildflowers. The Dickcissel birds were cheerfully singing and flying across the prairie, perching on the tall Prairie Plantain and Rattlesnake Master plants to keep an eye on us. Much to the delight of my six year old son, Nicolas, Lynn Fleming and Mickey Burleson had been out the day before to mark various plants and flowers with pink flags so he ran out into the prairie to yell



Mickey Burleson leads visitors through her reconstructed native prairie near Troy.



out the numbers written on the flags so we could refer to our reference sheets. This was my first time on a native prairie in full bloom, so I was amazed by all the varieties of flowers. The brightness of the Prairie Clover and Cone Flowers were amazing. The butterflies and bees were very busy pollinating and flying around us as we walked. We came across a couple different caterpillars, but my favorite was the Black Swallowtail Butterfly caterpillar. When you

BURLESON PRAIRIE WALK *CONT*

touch his back, he rears up and reveals two orange horns in an effort to intimidate his predator. My son ran from [Gilgai](#) puddle to Gilgai puddle, splashing in the water and making sure to get as wet and muddy as possible! While walking the prairie you get a sense of the amazing way nature works together, from the butterflies and bees taking turns pollinating the same flower to the Lady Beetle and Salt Marsh Moth caterpillar sharing the same Blue Bonnet plant. Everything co-exists in a beautifully peaceful environment. Mickey Burleson joined us for the last half of our walk and enriched us with her vast knowledge and wisdom. She shared wonderful stories and experiences she has had while living on the prairie. We walked down the path toward the Big Elm Creek that runs through Mickey's prairie and saw that the rainfall had turned it into a rushing river that was flowing at amazing speeds. You could see where the land had eroded away due to flooding, so you had to be careful along the edge. As we walked back towards our cars, I ran my hand over the beautiful grain stalks that were growing across from the prairie and I thought how lovely it would be to live out here surrounded by the calmness of the prairie and grain fields, listening to the birds sing and the bees buzz. After a two-and-a-half-hour walk, my little guy was tired, but he made sure to take time to swing on the gate on the way out and splash in the Gilgai puddle once more. There could be no better way to spend my Saturday morning!



Nicolas Dieter by Big Elm Creek

Photos by Jessica Dieter



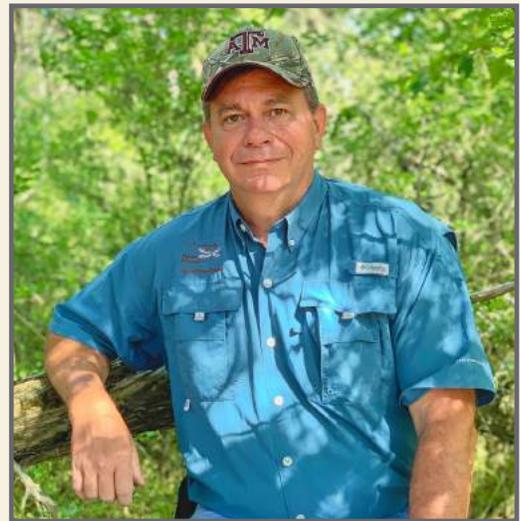
Fields of Gold



Salt Marsh Moth Caterpillar & Lady Beetle on a Bluebonnet

President's Pen

- **John Atkins**



Howdy Folks! I hope everyone had a great Memorial Day and you took the time to remember those that are no longer with us. My son and I were able to take a quick trip to Iowa in mid-May to see my father and pay a visit to my mother's grave. I was amazed at the amount of wildlife present in the cemetery. The outer perimeter was a typical Midwest windbreak consisting mostly of conifers and the drive was lined by beautiful mature apple trees in full bloom. It served as an oasis in the middle of the plowed fields for the birds. One of my nieces had placed a small bird feeder near her tombstone, which I thought was a nice touch. My father, of course, grumbled that it gave the birds an excuse to crap on their tombstone. Typical Iowan.

Only one class remains for our new students! It's been fun, but I'm sure everyone will be happy to get their Tuesday's back! I couldn't be happier with this year's class. They have shown themselves to be energetic and intelligent. They have happily jumped into numerous projects and have even started to take charge of some of the other projects. With minimal guidance, they quickly took ownership of their class project and ran with it. They might not be the largest class we've ever had, but they are already one of the most productive. I would caution the students though to pace yourselves. It's easy to overcommit to the Chapter and burn-out. Slow and steady; there will always be more invasives to remove and trails that need maintenance.



Workdays have really been hit-and-miss for the past two months. When Mother Nature allowed us to work, we accomplished some good things, but often we ended up being rained out. Earth Day at Mother Neff SP was probably the biggest event that we conducted during the past two months. The event was a huge success, with many people commenting that we had the best display in the park. Great job by Bill and his crew, including the "Bug Ladies"!

Cont...

President's Pen cont.



Big thanks to everyone that helped paint the kiosk at Chalk Ridge Falls. I think I probably got more paint on Sue than I did on the sign, but we eventually knocked it out. The kids also seemed to have a great time exploring and picking up litter along the trail.

John Burns and Team Beaver continued to whittle away at the Ligustrum jungle that has taken over Miller Springs. I think he has job security with that project! I'm looking forward to using the new PullerBears on the invasives (if we can pry them out of Zoe's hands).

For those that braved the weather to slog through Burleson Prairie, your persistence was rewarded by a great showing of prairie forbs and tons of caterpillars. Thanks to Lynn for putting that together for us.

Lynn's other big project was the museum paver installation. The large crew was able to knock out that job and conduct the regular maintenance within three hours. The pavers look great and the Museum Director was very happy with our work. A very special thanks goes out to the spouses that showed up and made the job look easy!



I know we are on the cusp of another long, hot summer, but the good news is that Chapter work also slows down this time of year. Pace yourselves and drink water. Summer also brings another danger that we don't often think about: bees. We recently lost a Moody resident to bees, unfortunately we lose one or two local people a year to bees. Most of the incidents seem to involve mowers. If you are mowing a new area or somewhere you haven't maintained in a while, please walk the area first to observe for signs of a hive.

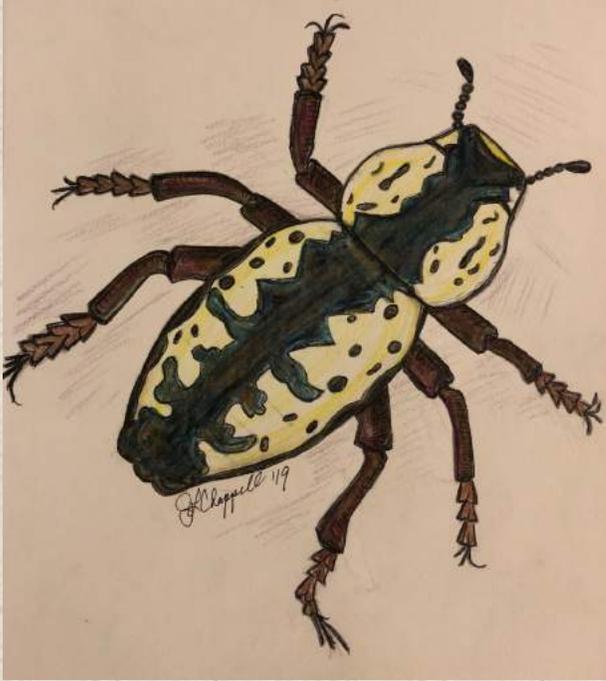
See you at the next meeting.

*Photos: Trainee Jenna Chappell shares some beetles from her collection on Earth Day—photo by Zoe Rascoe
Above, courtesy group photo from Bell County Museum paver project.*

Art + Nature = Scientific Illustration

- Jenna Chappell

After years of sitting in lecture halls for hours a day, I was in desperate need of a change. It started with a field expedition in my last year of undergrad. The purpose of this expedition was to immerse ourselves in wildlife for 10 days. At night we collected specimens to add to the University's collection and by day we would trap and measure mammalian specimens before releasing them. When we were not actively



collecting data, we were required to write down our observations in our field journals. It was at this point that I realized sketches of specimens were quick and conveyed much more information than any of my handwritten notes ever could. It has been years since that first field expedition, but I still sketch out my observations while in the field.

Field sketches and more formal scientific illustrations are not new. In fact, prior to the invention of the camera, the artist's eye was the only way to capture an image of a specimen and share it with the world. In 1678, a mere 200 years before the camera existed, Anton Von Leeuwenhoek was using his revolutionary microscope to observe and draw images of dog sperm. Imagine that at the time, the world had no idea these tiny cells even existed. The world certainly didn't know how they looked. It was common in the early days of scientific discovery to keep field journals full of beautiful sketches. Some of these sketches are all the evidence we have of species long extinct. In fact, at one time ALL scientists were trained in illustration.



Scientific Illustration cont.

Some of these sketches are all the evidence we have of species long extinct. In fact, at one time ALL scientists were trained in illustration.

Illustration is powerful. Images are the universal language. An interesting quote from *The Guild Handbook for Science Illustration* describes this best: "Imagine a description of a yellow butterfly in words only! What shade of yellow? What is the wing shape? What does the color pattern look like? These deficiencies in communication made obvious the need for illustration. Thus, artists accompanied early exploring expeditions to record discoveries visually." Pictures then cut out the need for translation.

Creativity may have gone by the wayside in favor of technology these days. We do love our phones. But, in recent years scientists have started realizing that technology does have its limits. There are simply some scientific concepts that a photograph can not convey to the public. My professor explained this concept well: "Photos see TOO much. But photos can be less clear and some details can be lost because of lighting or perspective. An illustrator examines a specimen from different angles, distances and lighting and composes an idealized but accurate view. Important features are emphasized. Illustrations eliminate much of the visual garbage from a photo which can produce a simpler explanation."



Illustration is still used in textbooks to explain difficult concepts to students. The human eye is still better at picking out the most important identifying characteristics of complex specimens. Unlike a photograph, an illustrator can clarify multiple focal points or layers and put together destroyed specimens through their illustrations. Thus, universities are beginning to offer illustration classes to scientists again. This is how I found myself enrolled in a graduate level scientific illustration class.



Even being open to the idea of scientific illustration, I still found my class very difficult. It was hard for me to train my mind to slow down enough to visually capture minute details of specimens. I was not accustomed to noticing these tiny discrepancies. In a world that moves so quickly it was strange to stop for a moment. Honestly, finishing an illustration takes time. And being a mother, student, wife, etc. is also time consuming. I'm a multitasker and this requires focus. But slowly, drawing began to feel like meditation. It was a blessing even though I cursed through a few assignments. By becoming a better artist, I've become a better scientist. Through meticulous observations, I see things differently. I for one, call that a win!

NATIONAL BUTTERFLY COUNT

Saturday, June 8th—9:00am

Meet at Confederate Park, Belton



The Chapter's first butterfly count was in June 2010. Rich and Gil helped kick us off. We needed people to record sightings as well as the lookers. Anyone can help! Above: Hiro Somura, husband to Chika who attended our inaugural training class, Zoe's dad and Rich Kostecke.

So how did our Central Texas Master Naturalists get into this great citizen science event?

This will make your hearts flutter, but back in 2013, Rich Kostecke and Gil Eckrich were involved in two butterfly counts, one at Stillhouse and one on Fort Hood. Rich moved to Austin, and somehow, I raised my hand, and said, surely I will be more than happy to be the compiler for the Stillhouse Count. This count is a project of the North American Butterfly Association, founded in 1992, whose mission is to increase public enjoyment and conservation of butterflies.

NABA owns and operates the National Butterfly Center, a 100-acre conservation, education and research center in Mission, Texas. They acquired this agricultural field in

2002, and transformed it into the largest botanical garden in the United States that focuses on native plants in a garden setting. More than 220 species of wild butterflies have been seen in the center.

NABA runs the NABA Butterfly Monitoring Program, which includes the 4th of July Butterfly Counts, and has a large database of butterfly occurrences worldwide. This data is used by scientists to study butterfly population trends and to answer questions about butterfly biology.

You do NOT have to be a pro on identifying the butterflies. You can take photos and record locations and get help identifying later. Here is the way we do this count at Stillhouse Hollow: We meet at the Park and Ride in Belton, right off the interstate at Confederate Park, at 8:30 a.m., this Saturday, June 8. Bring a hat, sunscreen, insect repellent, notebook, pencil, camera (or cell phone), binoculars, and insect guide if you have one. I use the laminated Butterflies of Central Texas and also Kaufman Focus Guides Butterflies of North America.

Go to this website: https://www.naba.org/counts/naba_place.html

On the state of Texas, zoom in until you can see Stillhouse Hollow count, and that will show you the 15 mile radius where we count the butterfly species. It is a lot of territory.

I really need some folks in west and north and east Bell county. Please let me know if you are willing to help, and where you want to count. Bring family and friends to help if you like. I will have an information sheet for each team. This is a fun way to learn butterflies, and be with wonderful enthusiasts, too.

- Mary Ann Everett

What I Learned at School Today

- Gail Wilson

Species, Diversity, and MATH...Oh My!

Aquatic Species Diversity Index Exercise at Nolan Creek—Dr. Wolfe's Class

In an ecosystem the relationship of the number and type of organisms is important. Calculating the diversity of a sample can tell us how healthy (or not) an area is. Our species diversity training by Blackland Research Center scientist, Dr. June Wolfe III, gave us insights into these relationships.

The 2019 trainees performed an exercise in Nolan Creek to get an idea of how to examine and mathematically describe aquatic species diversity that we found. We scooped, sloshed, and turned over rocks. We used tweezers to setup rows of organisms. We counted organism types to determine “runs” and counted total organisms of all found on a light background. From these numbers we determined the Diversity Index which could be graphed to find a steady flat number that mathematically heads to infinity and beyond, per Buzz Lightyear.



Runs were determined in each row by comparing the first organism to the second. If it was the same thing, the next organism was compared to the next. If it was different, it counted as “1 run”. Each organism was compared through to the end of the row. In the example below, Row 1 has 6 runs and 10 organisms. The Diversity Index math is 6 divided by 10 which equals 0.60 ($DI=6/10=0.60$)

See Row 2. We had 5 runs from a **total** of 20 organisms. Where did that 20 come from? All organisms found are totaled from the previous row's number of organisms. Now look at the total run number. Row 1 had 6 and Row 2 had 5, so $6+5=11$. This makes the next calculation, **$11/20=0.55$** . These calculations are continued sequentially until all rows are observed.

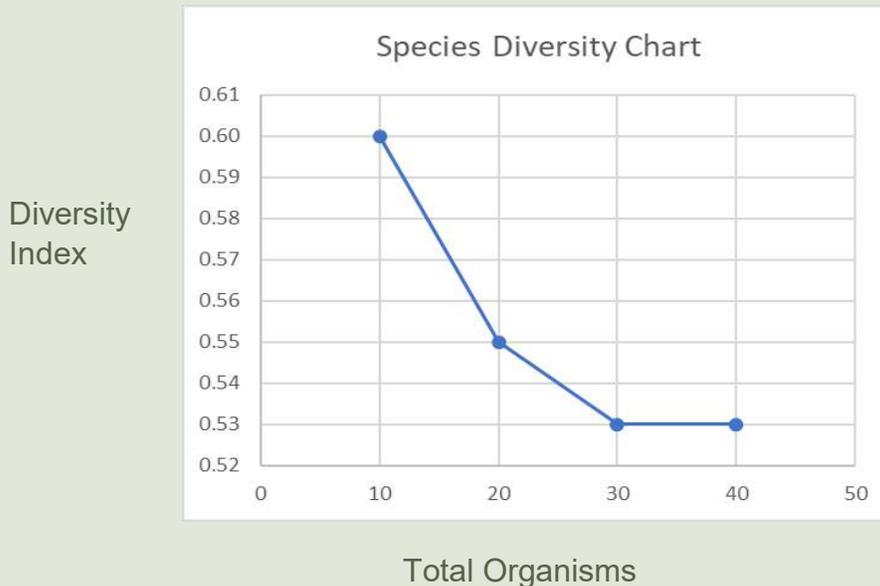


Aquatic Biology Class cont

This example uses rows of 10 objects with total runs/total organisms as the Diversity Index calculation: $DI = \text{total runs} \div \text{total organisms}$ in a set of samples.

		Organism Types (runs)	Total Organisms	Diversity Index	
Row 1	oozzzxjxp	6	10	0.60	$6 \div 10$
Row 2	xxxjzozjjo	5	20	0.55	$11 \div 20$
Row 3	jjojxxxzo	5	30	0.53	$16 \div 30$
Row 4	xxxjjojzo	5	40	0.53	$21 \div 40$

A graph of the math can be made using these final calculations and numbers of organisms. Eventually the curve becomes asymptotic (approaching infinity as shown by a straight line on a graph). This is the point that represents the species diversity index.



So why all this work for numbers, data, and math? Biodiversity is important. Without standards and numbers, we cannot track the trends of wildlife. Is this species increasing or decreasing? Is water quality improving or worsening? Are insects increasing or decreasing? Can that affect the bird migrations?

The math will tell...

REFERENCES:

Dr. June Wolfe III, Blackland Research Center.

Lind, O.T., 1985, Handbook of Common Methods in Limnology. Kendall/Hunt Publishing Company, Dubuque, Iowa, 199 pg.



Jean Solana snagged a water critter.

MEMBER ACCOMPLISHMENTS



Several CTMN members received acknowledgement of recertification and milestones in volunteer service hours.

Left: Tina Atkins (2016), Sarah Dorn (2014), Shirley Watts (2011) and Linda Fairlie (2018) and her trusty companion pup, Sofi (2018) recertified as Texas Master Naturalists for 2019.



Joe Dorn receives 2019 recertification. If only John would let go of the certificate.



Melissa Jue is assisted by her budding naturalist in receiving her TMN recertification

MEMBER ACCOMPLISHMENTS *Cont.*



Mary Ann Everett (2003) recertifies for 2019



Ben Clement (2016) recertifies for 2019 and reaches the 250 Hour Milestone for Volunteer Service.



Mary (Sunshine) Sharp (2016) was presented the bronze dragonfly pin for 250 hours of Volunteer Service.

Below: Nicole Norelli (2015) is back in Texas after a 2 year stint in California as the Coordinator for the Riparian Invasion Research Laboratory at University of California—Santa Barbara. She spoke to Master Naturalists and guests on her experience in managing invasive species at a statewide level among many different organizations and agencies. Her work was primarily with Saltcedar, an invasive plant familiar to Texans.



Bell County Museum Workday



Museum Workdays are the 4th Thursday each month. All help welcome! Thanks to Lynn Fleming for coordinating.



Bell County Museum Workday cont.

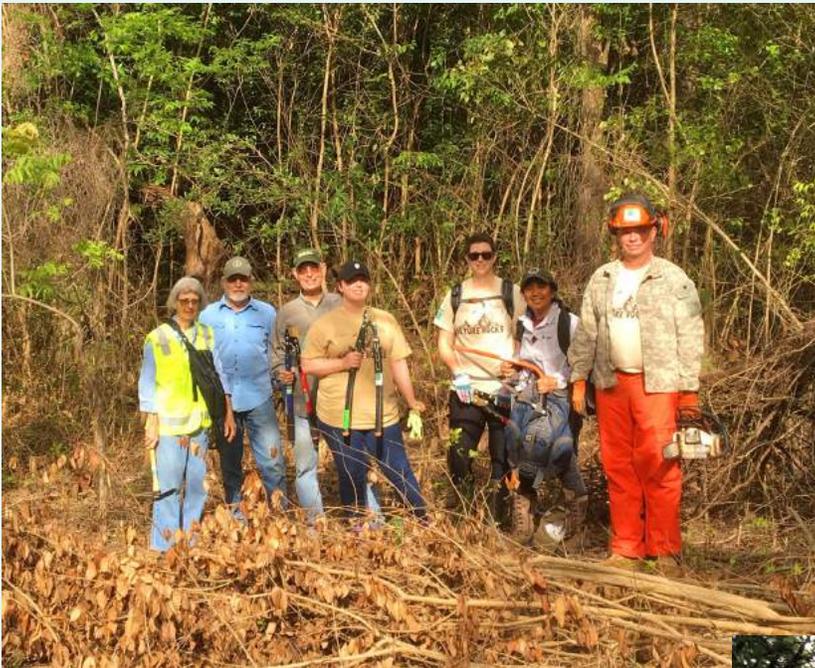


Invasive Species Control

- JOHN BURNS



We had our second MSNC workday on Thursday, April 11th with 8 people helping that day including three from the 2019 Training Class. We brought out the big guns this workday with our President donning the chainsaw chaps and really getting after it with the chainsaw. We have made a very visible impact in the area on removing invasive trees and shrubs. I would provide a photo, but it just doesn't do the work justice. Our May workday was cancelled as it had rained the previous day and was too muddy to work safely.



John Atkins, Bert Peeples, Wade Matthews and John Burns sign in for the workday.



Tina Atkins, Jenna Chappell, Jessica Dieter and Shirley Watts gear up for some ligustrum chopping.

Miller Springs Nature Center cont

As part of their class project, the 2019 Trainees built 14 bluebird houses. On May 14th the Class met, with several spouses in tow, to install the birdhouses. We started at 9:00am and made quick work of the installation project. It was a good thing it all went quickly because it started pouring down about 15 minutes after the job was completed.



Jenna Chappell has checked the bluebird houses for any activity and there has not been any yet. Of course they have not been in place very long, She also mapped the birdhouse locations so the rest of the chapter members will know where they are. [Click here for the map.](#)

The Class is still planning to install 2 benches on the steep area of Green Pond Trail.



Next Workday will be Thursday, June 13th at 9:00am. Weather permitting of course!



Nine members of the 2019 Training Class, a couple of spouses and a pug gathered in May to install bluebird houses at MSNC.

Chalk Ridge Falls Park

- Jessica Dieter

When I found out the workday for Chalk Ridge Falls landed on a day off for the Belton School District kids, I was excited! My fellow CTMN trainee Jenna and I have six-year-old littles Nicolas and Evie. They had been asking to join us on a workday and this became the perfect opportunity. What better place to train future Master Naturalists than at a local park! Our workday goal was to get the entrance sign repainted, but we had more than enough hands ready to help out with painting. So, a few of us took off down the trails to pick up trash. The kids saw this as a treasure hunt and were excitedly picking up everything they could find. We were able to spot plenty of types of cactus and thistle growing alongside the river.



Evie Chappell and Nicolas Dieter take a break from trash pickup .



Jenna Chappell is a two-fisted painter!

When we returned, we noticed that the sign was almost completely painted, but there was a little left at the top. Jenna and I took our turns painting the upper portion of the

We could also see small fish in the water. By the end of the trail we almost had a complete set of clothes that had been discarded and collected by our expert trash picker-uppers. Nicolas and I had boots on, so we splashed through the water as much as possible. More than a few times I had to stop and dump the water out of Nicolas' boots and he was wet up to his waist by the time we got back to the sign.

Chalk Ridge Falls Park

of the sign while the kids had a snack and dried off in the sun. After we were done, John fixed what we “messed up” and made it perfect. Now that the sign was painted and the trash picked up, we headed out to feed our hungry kiddos. Another beautiful and productive day at Chalk Ridge Falls Park!



L to R: Melissa Jue and son Clive head for the worksite; Bert Peeples, Sue Valdez, John Atkins and Ben Clement admire the refreshed sign; falls at Chalk Ridge; Jenna and Jessica finish the high work—Ben on standby for a tump from the ladder. Thanks to Tina Atkins for photos and for some spousal help as well.

Photos by Jessica Dieter and Tina Atkins



Mother Neff State Park

1680 TX Hwy-236, Moody

- **Zoe Rascoe**

Bill can be reached at b_abright@yahoo.com

First-Ever MNSP Earth Day Festival Saturday, April 27th

Master Naturalists were asked to provide educational activities at the Earth Day event at MNSP—and we did just that. A good crew came to lead nature tours, display a Discovery trunk station on Mammals run by Jean Solana, including replica furs, skulls and scat; a Touch A Bug booth where Jenna Chappell, with the help of Jessica Dieter,



discussed all things beetles; Lynn and Dakota Fleming (and Marge their mascot) had a table for making the always-popular animal tracks using sand molds and plaster of paris; there was information on trees with a demonstration of a stump puller device—and more!

Bill Abright, our organizer and MNSP liaison, said “Over 100 people come through our exhibits and left happy, educated, entertained and knowing a lot more about Master Naturalists!” Thanks

to Bill, Jean, Lynn and Dakota, Jenna and Jessica, John and Tina Atkins, Kathy Cantu, Daisy Klassy and Zoe Rascoe for representing the Master Naturalists and sharing your knowledge and love of nature.

We'll be back to help MNSP with their ***National Moth Night event on Saturday, July 27th.***

Photos next pg (L to R, top to bottom): Tina Atkins, Lynn and Dakota Fleming; Jenna Chappell, Daisy Klassy, Jessica Dieter; Fiery Searcher Beetle; Zoe and the awesome PullerBear (get it?) stump puller; Zoe and Jack; Jean Solana and toothy friend.



Mother Neff State Park



**EARTH DAY
2019**

Discover the night life @ Mother Neff State Park

Free event with no park entrance fee! Gate opens at 7:45 pm

Moth Night

Mother Neff State Park
1680 TX-236 Highway
Moody, TX 76557

July 27th 2019

8:00pm - 10:00pm

National Moth Week is held worldwide celebrating moths. Everyone, everywhere can become a Citizen Scientist and contribute scientific data about moths.

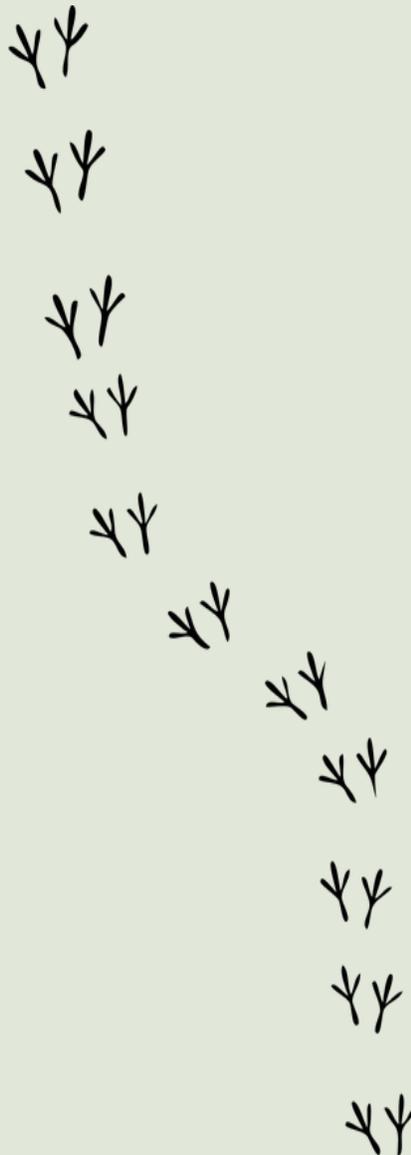


<http://txmn.org/centraltexas/central-texas-moth-night>

Mark your calendars for July 27th – [Moth Night at Mother Neff Park](#). We are so excited to join forces with Mother Neff State Park for this fun-filled night and want YOU to join us! This event will be held from 8 to 10pm so pack your bug spray and bring your flashlights. We will have blacklight stations set up to attract moths and will be searching around to see what other night critters we can locate. Face painting and activities will be available for the kids to enjoy. As always, volunteers are needed so please contact Jessica Dieter at jessycatd@gmail.com if you are interested!

Bird and Egg Matching Game

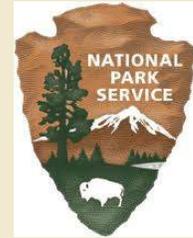
- Andreas Wooten



Eggs: Cardinal, House Finch, Tufted Titmouse, House Wren
 Chicks: House Finch, Tufted Titmouse, House Wren, Cardinal

ZION NATIONAL PARK

Utah

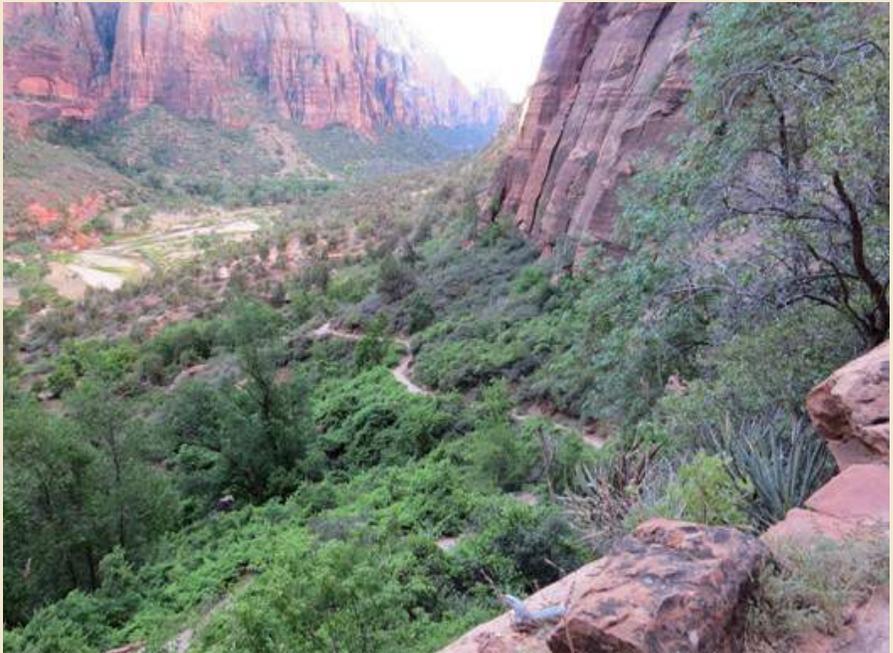


- Linda Fairlie

In June of 2014, we went to Zion National Park. We enjoyed a lot of what the park has to offer, including Angel's Landing and the Narrows.

Wow.

Angel's Landing. The name comes from the earliest European settlers imagining Angels landing on the very tip of the mountain. The hike is 5.4 miles, with a 1500 foot elevation change through a canyon.



We started by getting up early. I took my walking stick and a nylon backpack to put it in for the chain part. What is this chain part? some of you are asking. We'll get to that in a moment.

We hiked up a sandy trail that was very easy going. It was early so it was pretty cool. Then we arrived at a section that headed steadily up, but was paved like sidewalk. Up, up, up. There were switchbacks eventually and we started counting them. We got past 19 before we ever got to the "wiggles." The wiggles are steep switchbacks as part of the canyon wall. Altogether, there were 39 switchbacks. So far so good, although I must confess I had to stop to "take a picture" a few times.

Now, I do not have a lot of confidence in myself about these strenuous trails. I had worked hard to psych myself up for this hike. We came across this guy and he said "you're not even to the hard part yet." I wanted to cry. Seriously I let this guy's words shake my confidence. John cheered me on, and we continued. We got to the first viewpoint which was breathtaking!

This is the place where those who are afraid of heights stay and maybe even go back down. I didn't think I had a fear of heights, and it turns out I was right. There was a German man coming off the chains just as we were arriving at them. "Don't do it, you get the same view from here." he said. I knew better and I have wanted to make this hike since the first time John

ZION *CONT*

told me about it. I'd trained. I could do it. Better confidence at this point.

Ahead were the chains. This is a section of the mountain shaped like the start of a roller coaster. The path varied but there were times when the path was about 3 feet wide and there were sheer drops off the canyon on both sides. You had to use the chains to pull yourself up some very steep steps. There are places where you have to walk sideways to get through. I used muscles I didn't know I had. I used my mountaineering techniques I learned from Ranger Glen and while it used a lot of energy, it was fun. John had to keep adjusting my nylon backpack with the collapse-able walking stick in it so the stick wouldn't fall out. I tell you the truth, I think John would have enjoyed going twice as fast up and down that mountain, but he



stayed right with me. I mean, really. I trip over a 3 foot rock right in front of me. Heck, sometimes I trip over my own feet. He wanted to be with me and to keep me safe. That is worth more than a nickel.

Once we reached the top, we could see the Narrows, the Great White Throne, Weeping Rock, Hidden Canyon and Zion Canyon from this viewpoint. We arrived at the top by 9:00 and had estimated 10. Yay for us!



There were chipmunks and squirrels at the top begging for food. Most people knew better but some kids tried to feed one. They will bite. I went into teacher mode and made sure they knew what they were risking. I do remember my mother feeding a squirrel at the Grand Canyon when I was a child. I thought it was awesome then. Since then, I've seen pictures of a hand bitten by a squirrel. It was nasty looking.

John and I do tend to go into teacher mode when we see people leaving the trail where there is soil crust containing small living creatures, or when people scurry down the hill off the trail and make the erosion worse or cause damage to the trail. This day, there was a kid, about

ZION *CONT*

13 or 14, who was throwing fist sized rocks off the peak of the trail. There are people down there hiking the trail. The second time, John said something to him and he stopped. Later, on the way down, a rock missed hitting me from above by about 2 feet. It scared me!

We sat and enjoyed the view from atop Angel's Landing for about an hour. We had our snacks, drank some water, took some pictures, talked to some people and just plain enjoyed the view. It was amazing and totally worth the hike.



Going down was a lot different than going up. There were some tricky places to find footholds, and by that time we encountered a lot of people going up. We had to find wider spots in the trail to let them pass and vice versa. John had seen a big bird, and the way he described it, I thought it was a Peregrine Falcon. I kept hearing it cry, and kept looking

for it. Finally we spotted two of them at the top of a tree. Some very brave sparrows were trying to get them away from their nest and the Falcons were *not* moving. It was pretty exciting.



Down the chains, down the switchbacks, down the paved path. Not *all* down, however, and the bits that were uphill were making me sweat! We had shade until half way down the paved path.

Off the mountain at 12 noon. I was proud of myself. At one point an older man asked me, "You didn't make it all the way up, did you?" and I proudly said, "I sure did!"

I almost fell asleep on the shuttle back to the car - I was SO tired. Happy, but tired.

Photos by Linda Fairlie

My Sub-Urban Backyard

- Andreas Wooten

This is a little Hognose Snake. If we let the yard grow up, we get a lot of these. They especially like the area around the pond and the compost bin. Lots of frog snacks around. This was a little one, only about eight inches long. Most years I relocate four or five—this is number one. He was released out on Fort Hood. One of the most colorful ones we have had by far.



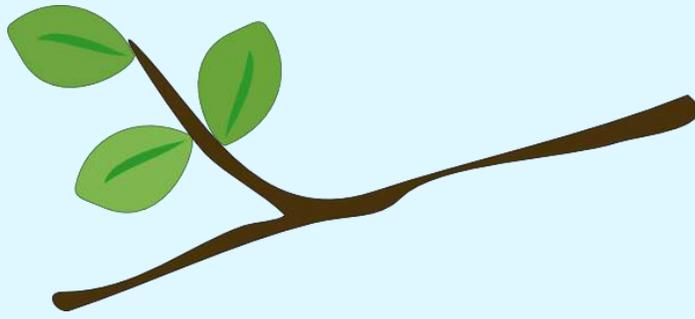
Not everything is going to be “in” your yard. Sometimes it is under the yard. A few months ago, I had a very large obnoxious rock that “grew up” in the front yard. We removed it in about 3 ice chest-sized pieces. What was interesting was all of the critters preserved in it. According to a paleontologist friend of mine, it is as follows: “A rudist bivalve shell. It is Cretaceous age (120-65 million years ago), a relative of the modern oyster that filled the niche of modern corals. Its lower shell was very robust and long, horn shaped, and 2-3 feet long. The lower shells’ internal structure is made like a lattice for strength as an efficient way to generate shell material rather than spending lots of energy making a solid shell.



They bivalves clumped together in colonies and the space between acted as a baffle for sediment.” I just think it is cool.

Again, we just want to make sure everyone has the “big three”: food, water and shelter for backyard critters. Nothing special, and nothing specific to any one critter. They seem to find what they want with water

and a compost pile! If you are a frustrated sub-urban dweller, just keep trying. I waited 2½ years for my bats to show up. Keep planting, keep water out and have a nice pile of leaves and twigs somewhere, and the critters will show up eventually.



Out on a Limb

- Mary Ann Everett

Tree Description: Deciduous, slender shrub or small multi-trunked tree, 12-15' tall or up to 25' tall if it's happy where it lives.

Blooms: Bright yellow, densely clustered round heads, ½ to 1½" across. Blooms sporadically in late spring through fall, especially after a rain. Very fragrant!

Fruit: Brown, long and narrow, flattened, 4-10" long. Seeds are round and flat.

Location: Found on rocky, dry limestone soils on western Edwards Plateau and Trans-Pecos in Texas, and southern NM and into Mexico. Find them on the hills near Garner State Park, Big Bend and the Davis Mountains.

Leaves: Delicate foliage with alternate, bipinnate leaves.

Bark: Light gray to brownish, smooth when young, developing cracks and fissures later.

Heat & Drought Tolerance: Low use of water and cold tolerant. Likes dry, rocky limestone or igneous soils. Makes a lovely addition to native gardens.

Interesting Fact: It's a legume! The leaves and young branches are palatable and readily eaten by livestock. No pests or diseases of major concern.

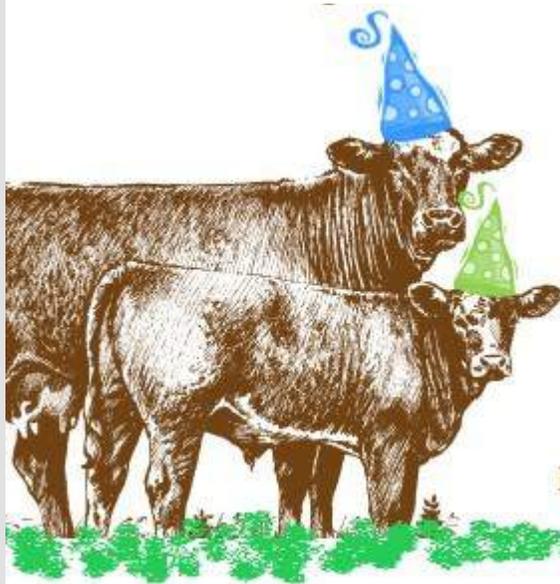
[Click here for name of tree](#)





Pasture Party

Hosted by Fleming Grain & Cattle, LLC



A hearty THANK YOU to Lynn and Robert Fleming, #1 daughter Dakota, Josh and Michael for hosting our chapter members and families to a great gathering out in the country on June 1st. The weather was pleasant, the bugs were somewhere else and the food, fun and fellowship were abundant. Yes Lynn. Yes, we would all like to do that again sometime. Especially the S'mores part.



Fleming Hosts and Cooks

Pasture Party Fun *Con't*



Photos by Tina Atkins and Zoe Rascoe

Good to Know...



Program:

Gil Eckrich, Wildlife Biologist

"It's Only Natural"

High Five - It's Graduation Time!

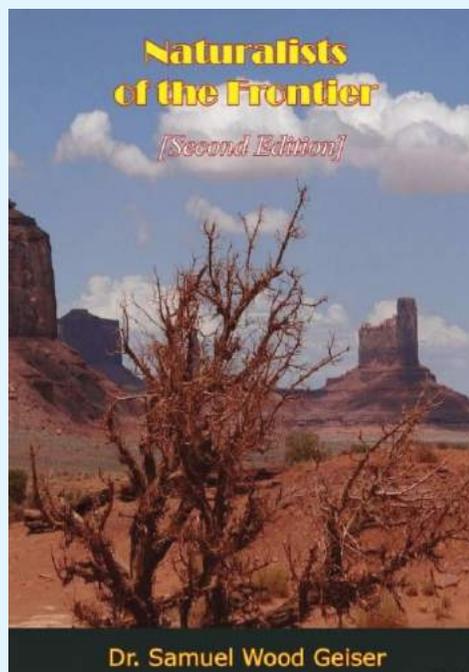
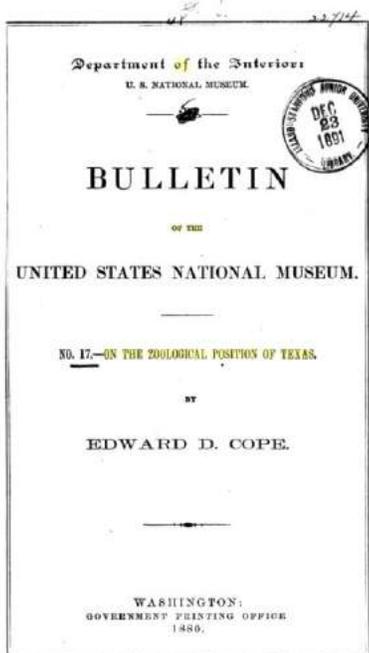
Central Texas Master Naturalists

Please join us as we honor our 2019
Trainees with an Ice Cream Social

Tuesday, June 11th
6:00-8:00pm

Temple Public Library
100 W. Adams Street
McLane Room—3rd Floor

*Family members and friends of
Trainees are welcome!*



"On the Zoological Position of Texas" by Edward Drinker Cope (1880) and "Naturalists of the Frontier" by Samuel Wood Geiser (1929) were both recommended reading by Lynn Fleming, our instructor on Historical Naturalists. Cope's book is available online at www.archives.org



Photo by Terry Rascoe—Window Trail at Big Bend NP

June 2019

Note: All items are links to our website calendar for maximum details

[Mon 3rd: First Monday Gardening at Salado Museum. 8am.](#)

[Mon 3rd: CTMN Training Committee Meeting. AgriLife Extension Office. 11:30am-12:30pm.](#)

[Tues 4th: CTMN Training Class. Blackland Research Center. 8:30am-3pm.](#)

[Sat 8th: Butterfly Count. Confederate Park. 8:30am.](#)

[Thurs 13th Miller Springs Work-Day. 9am.](#)

[Fri 21st: Chalk Ridge Falls Work Day. 9am.](#)

[Thurs 27th: Bell County Museum Workday. 8am.](#)

[Fri 28th: Pond Project. USACE, Belton Dam Office. 9:30am.](#)

July 2019

[Mon 1: First Monday Gardening. Salado Museum. 8am-10am.](#)

[Mon 1: CTMN Board of Director's Meeting. AgriLife Extension Office. 11:30am-12:30pm.](#)

[Tue 9: CTMN Chapter Meeting. Belton Church of Christ. 6pm-8pm.](#)

[Thurs 11: Miller Springs Work-Day. 9am.](#)

[Thurs 18: Union Grove WMA Work Day. 9am.](#)

[Thurs 25: Bell County Museum Workday. 8am.](#)

[Fri 26: Pond Project. USACE, Belton Dam Office. 9:30am.](#)

(V) Volunteer Hours
(AT) Advanced Training

Newsletter Mission Statement

“Our mission is to inform and educate Master Naturalist members and the general public about our local environment and resources, and what we, as caretakers, can do to protect them.”

Board of Directors

President: John Atkins

Past President: Lynn Fleming

Vice President: Mary Ann Everett

Secretary: Melissa Jue

Treasurer: Don Wyatt

Technology: Dale Hughling

Web Master: Nicole Norelli

Membership: Linda Fairlie

Communications: Gail Hughling

Hospitality: Mary Odom

Training: Lynn Fleming/Mary Ann Everett

Chapter Advisors

Whitney Grantham,
County Extension Agent, Natural Resources
Texas A&M AgriLife Extension

Derrick Wolter,
Wildlife Biologist, Texas Parks and Wildlife

Newsletter Staff

Editor: Zoe Rascoe

Contributing Writers: John Atkins, Jenna Chappell, Jessica Dieter, Kathy Cantu, John Burns, Bill Abright, Linda Fairlie, Andreas Wooten, Gail Wilson, Mary Ann Everett, Zoe Rascoe,

Contributed Images: John Atkins, Tina Atkins, Jenna Chappell, Linda Fairlie, Andreas Wooten, Jessica Dieter, Gail Wilson, Terry Rascoe, Zoe Rascoe

We now have options for recurring feature articles on member visits to National Parks and Texas State Parks, “Fish Tales” (of any kind!), backyard nature, and more. If you have a story to share, just send me your idea.

Zoe Rascoe trascoe@hot.rr.com



The Central Texas Master Naturalist Chapter

Chapter meetings are held the 2nd Tuesday of each month at 6 p.m. at the Belton Church of Christ at 3003 N. Main. Location exceptions are in December (Holiday party!) and June (trainee graduation!) Most meetings include a nature-related program and the public is welcome to attend. Find topic information on our website and Facebook page.

The Board of Directors now meets the 1st Monday of each month from 11:30am-12:30pm in the Board Room at the AgriLife Extension Center at 1605 North Main in Belton.