

# The Tracker

The Central Texas Master Naturalist Newsletter October 2017

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## Calendar at a Glance

October 5, hours due.

October 10 6-8 pm, General Membership Meeting (AT) Zebra Mussel Monitoring

October 20, 18th Annual TMN Conference—Texas Waters Day Training—Corpus Christi

October 20-22, 18th Annual TMN Conference—Corpus Christi

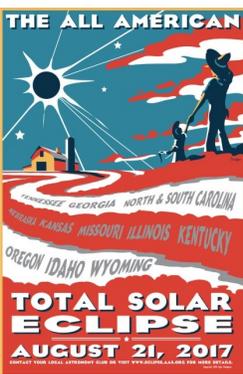
October 26, 8-11 am, Bell County Museum Workday

## The Great American Eclipse

-Zoe Rascoe

I suspect that no one reading this will say “What? There was an eclipse?” The total solar eclipse was viewed by millions of Americans as it moved across the middle of the country from the west coast to the east coast over a period of 90 minutes – any given location having from a few seconds up to two and a half minutes of totality. People travel across the globe for these brief episodes. Now I know why.

The solar eclipse of August 21, 2017 covered the entire United States with at least a partial eclipse. The last total solar eclipse in the lower 48 states was in 1979 and the last total eclipse that covered the US coast to coast was in 1918 (remember that one?) Here’s how it works: the sun is 400 times bigger than



our Moon, but the Moon is 400 times closer to the Earth so both appear to be the same size from our vantage point. When the Moon lines up perfectly and passes in front of the Sun, we have a total eclipse while the Moon’s shadow races across the land. That phenomenon actually happens about every 18 months, but often occurs over oceans or vast unpopulated areas of the Earth. The Moon’s shadow on the ground is actually very narrow – about 70 miles across. That 70 mile band is the Path of Totality where the Sun is completely covered by the Moon. The Penumbra is the Moon’s shadow that blocks part of the Sun. That’s what we had here in Central Texas; a partial eclipse - still an amazing sight.

*Chapter Motto*

**Earth Day,  
Every Day**



I have been an amateur astronomer since first grade when I when I got a telescope for Christmas. I used it to see the craters on the Moon, Saturn's rings and watched many-a comet over the years (remember Hale-Bopp?) Stargazing and photography are nice companion hobbies and a total eclipse reachable by car was not to be missed. Terry and I made plans months in advance ordering our solar viewing glasses, filters for the cameras, an equatorial mount and motor drive for the tripod to keep up with the rotation of the earth during long exposures. I even got new tires for the car – nothing would spoil our pursuit of totality! Well, except weather.

With 11 states to choose from, we decided to head to Missouri for the big event. I know the owner of the 800 acre Native Prairie Trust Public Garden in New Bloomfield which, amazingly, was in the centerline of totality – right in the middle of the 70 mile band – where the length of the eclipse is the longest. So we loaded the wagon and drove to Missouri.



The weather was the only variable out of our control and of course, it was a big issue. Weather across the whole midsection of the country was in transition and even reliable weather apps were confused but chances of cloudy skies were increasing everywhere. It was frustrating to think that months of preparation and a long drive could be spoiled by a few minutes of cloud cover. But I had a plan for that, too. A friend here in Temple, Dr. Randy LeFevre, is a meteorologist for the Air Force predicting weather for missile launches around the world. I called for help. He ran through weather data 3 times over the course of 18 hours – the last coming in at 4:00am, just hours before the eclipse, but enough time for us to drive to Kentucky if necessary. That last text stepped through his evaluation of the many sources of weather data and his vast experience dealing with such a difficult topic – it seemed this was as important as a missile launch! His text: “I think you are in a sweet spot. Stay put.” Randy thought there would be cooling from the shadow prior to totality and would temporarily reduce cloud development. He said many research papers on that topic would be coming out of this solar event.

We left incredibly early to account for traffic and were set up at the Prairie Garden in plenty of time. We waited. We had an app running on a phone that talked through the whole process. “Ten seconds to first contact. 9,8,7,6,5,4,3,2,1. Remove filter. Remove filter.” That was helpful. An astro-photographer friend drove through the night in a rented RV from cloudy Nebraska to sunny Wyoming but forgot to remove his filter so had no photos of totality while his camera was clicking away. He’s now on Prozac.

As we reached totality, it became very dark quite quickly. Dark enough that the stars and planets could easily be seen. With the moon covering the sun, it appeared to be a black hole in the sky with a shimmering white ring – the sun’s corona. I can see why ancient people thought the world was coming to an end when they experienced a total solar eclipse. At the Prairie Garden, the cacophony of birds completely went silent. Only crickets and other insects could be heard. The air cooled by 7 degrees and the breeze was gone. There was a beautiful pink sunset that could be seen 360 degrees around us. The group of people with us, hailing from 8 states, could not be silent. There were oo’s and ah’s, “oh my’s” and “this is incredible!” It was incredible. Maybe I was the one saying that. As much as I’ve enjoyed getting out my special glasses or making a pinhole viewer for partial eclipses, a total eclipse left me awestruck. 3,2,1 Filter on...

April 8, 2024: Another solar totality in the US – right through Central Texas. Be Ready!



# President's Pen



- Rene Berkhoudt

There have been some questions and concerns raised by Chapter members about the recent closing of the Miller Springs Nature Center and I would like to provide the following information for clarification:

Belton Lake was created by the damming of the Leon River. Belton Dam and the lake are both managed by the U.S. Army Corps of Engineers. The reservoir was officially impounded in 1954, and serves to provide flood control and drinking water for Belton, Temple, and the surrounding communities.

Belton Lake overflowed the spillway in 1991-1992 with the occurrence of two closely spaced 50 year floods. The area immediately below the spillway was heavily damaged by the floods. It was rebuilt and reconstituted as the Miller Springs Nature Center on October 26, 1993. It has been managed for the past 24 years by the Miller Springs Alliance, a non-profit group of volunteers that assumed a 25 year lease for 260 acres of federal public recreation land.

When the nature center was first created it enjoyed considerable community support.

Sadly that broad based community support quickly fell by the wayside. For many years now, the Miller Springs Alliance has been faced with declining membership. This small group of volunteers has struggled for years to maintain this public area and the requirement to maintain liability insurance to hold their lease has consumed virtually the entire budget of the organization each year.

The nature center was not closed due to a simple lack of funding as some of the news stories that came out in late summer would have you believe.

The Miller Springs Alliance made a conscientious decision to surrender their lease in August of this year, as it had become too burdensome to continue to maintain it without any real community support or assistance from U.S. Army Corps of Engineers.

Moreover, there was a growing sentiment within the Alliance that the U.S. Army Corps of Engineers should really be responsible for managing their own land base.

The relationship between the Miller Springs Alliance and the U.S. Army Corps of Engineers had never evolved beyond a mere tenant/landlord relationship rather than a traditional mutually supportive volunteer/agency partnership. Friends Groups are a Best Management Practice (BMP) within other Districts of the Army Corps of Engineers.

A volunteer group can help, but should not be responsible for, managing the land base itself as it does not have the resources to do so. This is the norm in federal land management. Based on this model, the volunteer group can work with the federal land manager to attain mutually beneficial goals.

The U.S. Army Corps of Engineers has instead chosen to close the nature center rather than to assume the responsibility for the day to day management of these federal public recreation lands.

It is a decision they may reverse as public support for the nature center grows.

I would like to take this opportunity to thank all of the Central Texas Master Naturalist Chapter members who have volunteered and worked so hard to keep the nature center open for the benefit of the recreating public these past years. Your efforts are greatly appreciated.

# Pallet Planters — The Easy Way to Grow Strawberries

By Krystal Trammell



Growing strawberries is one of the best things about fall gardening. Who doesn't love fresh juicy strawberries, picked right off the plant and ripened to perfection?

Strawberries are hardy to zone 2 and grow quickly, so they're an excellent fall garden project.

Take it from me—the easiest way to grow strawberries is upright—in a pallet planter!

You can get pallets for free or cheap in all sorts of places, which saves you money and keeps those things out of landfills, too.

You'll also need some landscaping fabric, a staple gun (or a hammer and some small nails), and a piece of thick plastic the size of your pallet. Contractor trash bags will work, as will painter's dropcloth, or even leftover greenhouse film.

Finally, you'll need some quality garden soil to plant in.

I personally recommend compost mixed with peat moss or coconut coir, in a 2:1 ratio. Be sure to wet down your peat moss first, don't mix it in dry!

You can also add mycorrhizae, worm castings, and/or rock dust as soil amendments.

The coconut coir or peat moss will retain water, keeping your plants evenly moist at the root zone. The compost and other additions will feed your plants, ensuring you get a great strawberry harvest!

Here's how to set up your strawberry pallet garden:

1. Lay the pallet down and cut landscape fabric to cover one side, then staple or nail it in place.
2. Then, cover that up with the plastic, to retain water and minimize soil escaping from the back.
3. Flip your pallet over and fill it in with your soil mix.
4. Add in your strawberry plants—about 20-25 of them! Strawberries don't need a lot of root space, and can be grown as close as 6 inches apart. Water them in, to help the plants' roots make connections in their new soil.
5. Leave your pallet garden horizontal for about two weeks, to allow the strawberries' roots to grow further. Keep it watered—daily for the first week, and every 2-3 days after that. You can fill in any gaps in the soil with more compost or with straw.

After two weeks have passed, carefully prop up your pallet garden against a wall or fence. It'll be a great idea to secure it in some way, so the pallet won't fall down.

# Collective Nouns

By Marilyn Whitworth

Collective Nouns are names for a collection or a number of people or things. I am going to discuss just a few of them as they pertain to water birds. These are English terms of ventry (an archaic word for hunting) from a tradition in the Late Middle Ages at least partly from the Book of Saint Albans of 1486. This list is derived from the Internet but I also heard some of the terms when I was in college majoring in English. These terms have always fascinated me and made me wonder why they were coined.

The most common collective noun for a number of birds in general is flock but sometimes flight or pod is used. This article is going to be limited to seabirds and not all of them.



The first one is a sedge of Bitterns. It is probably called sedge because sedge is a species of perennial grass-like plant growing in tufts in marshy or swampy places with long, narrow sharp-edged leaves and Bitterns hang out in that type of area. The second one is a gulp of Cormorants. It is probably called a gulp because gulp means to swallow hastily, noisily or by mouthfuls and that is how Cormorants swallow their food. The third is called a covert of Coots. One meaning of covert is a shelter which shelters game and another meaning is feather of a bird so that is probably why it is called a covert.



The collective noun for Cranes is also sedge. Sometimes the collective noun for Cranes is herd. One meaning for herd is a collection of large gregarious animals living, feeding, and moving about together. Another meaning for herd is flock together. These meanings may be why they are used with Cranes. Herd is also used as the collective noun for Curlews.

Ducks have four different collective nouns associated to them. They are paddling and raft when Ducks are on the water and badling and plump for other times. Badling is probably a variant spelling of paddling. Plump is probably because of their shape (soft, rounded).



The collective noun for Dunlins is fling. It is probably used because of the way Dunlins will move some part of their body rapidly, impulsively, or hastily. Three collective nouns used for Waterfowl are bunch, knob (fewer than 30), or raft. There are four collective nouns for a number of Flamingos. They are stand, flamboyance, colony, and regiment. Flamboyance means highly colored. I'm not sure exactly why those other terms are used for Flamingos.

There are three collective nouns for Geese. Flock and gaggle are used when Geese are on land. Skein is used when Geese are in flight. Gaggle is probably used because of the way they sound. Skein means thread so it is probably used for Geese in flight because of the way they are spread out in flight.

These are just a few of several collective nouns. Next time I will explore collective nouns for animals we see in Central Texas such as bobcats, deer, possum, raccoons, etc.

# UMHB 'Love CTX' Community Service Date

By Rene Berkhoudt

The University of Mary Hardin Baylor came out to support the CTMN Outdoor Service Project at the Miller Springs Nature Center on August 19th. UMHB has been one of the staunchest supporters of our Texas Parks and Wildlife Department (TPWD) Community Outdoor Outreach Program (CO-OP) grant over the course of the last year and a half helping our Chapter to perform trails maintenance, habitat restoration and general site maintenance. Mary Ann Everett and Rene Berkhoudt attended the UMHB Service Fair in September again this year to promote student volunteerism in and around the City of Belton, on behalf of the Belton Parks and Recreation Department and the Bell County Museum. We truly appreciate the spirit of community volunteerism that is alive and well at the University of Mary Hardin Baylor.



Site Clean-up—Miller Springs Nature Center



Student Work Break—Love CTX Service Date



UMHB Group Photo—Miller Springs Nature Center



Swearing in a New Recruit—UMHB Service Fair

# Nitrogen Biomass and Chopping Down Perfectly Good Trees

By Krystal Trammell

Would you ever plant a tree for the sole purpose of chopping it down? It sounds pretty pointless, especially when you consider that the tree grows incredibly fast. Why would anybody chop down a perfectly good tree? To create biomass and fix nitrogen in the soil—that's why!

“Biomass” is plant material—stuff like leaves, branches, flowers, fruit—anything that eventually turns into mulch when it decomposes. This plant matter is essential in building a nice, thick layer of healthy soil.

Biomass helps to retain moisture so that it can slowly percolate down into the earth, instead of running off and contributing to erosion. When biomass starts to decompose, microbial action gets started, and mycelium can start building connections in the soil as well. Any plant creates biomass, but some plants, like the black locust tree, grow really fast (up to 20 feet a year!). These fast-growing types of trees are nearly unrivaled for their ability to create a lot of biomass in a very short time.

In permaculture, this practice is called “chop and drop”, and it's a fantastic way to improve the soil on your land over time. Black locust trees are especially great to use for “chop and drop” practices, because their roots naturally fix nitrogen in the soil. This means they pull nitrogen from the atmosphere, and store it in nodules on their roots for later use.

All members of the legume family, like peas and beans, have this ability to fix nitrogen. When a nitrogen-fixing tree is heavily cut back, the branches and leaves decompose on top of the soil. Even better, a portion of the roots decompose underneath the soil. As those roots die off, the nitrogen they've fixed becomes readily available for the surrounding plants. Black locust trees grow very fast, and their wood is very strong and rot-resistant. They also bloom in white sprays of flowers that our pollinators love. The main reason they're not frequently seen in landscapes is because they are famous for growing long, sharp, and dangerous thorns.



When maintaining your black locust trees it is important to trim the canopy in the fall thereby leaving the trunk bare. Doing so will allow shrubs and plants growing around the tree to absorb winter sunlight causing them to thrive and grow quickly, despite receiving little water or special attention, even in rocky soil. However, please use caution if you're planting a black locust anywhere that's shared with pets and/or small children.

Remember—every rose—or in this case black locust tree has its thorns!

# August Award Presentations

By Zoe Rascoe



Marilyn Whitworth 2,000 Hour Certification Award

Jerry Lewis 500 Hour Certification Award



Richard McCarthy Recertification Award

Shirley Watts Recertification Award



Thank You to all our Chapter members who recertified or attained a Service Milestone this Month!

# Interesting Tidbits

## The Texas Coral Snake

- Rene Berkhoudt

I saw my first coral snake a few weeks ago just outside of the park entrance to Union Grove Park on Stillhouse Hollow Lake. It managed to get away before I could get a good picture of it for *iNaturalist* (after momentarily thinking of catching it). Having lived mostly in the West – most recently in New



Mexico and Utah, I am much more familiar with the rattlesnakes that inhabit the New Mexico badlands and the Colorado Plateau and find this sole North American relative of the Old World cobra (*elapidae*) to be both intriguing and fascinating.

The coral snake found in Texas (*Micrurus fulvius tenere*) is the only black, red, and yellow cross-banded serpent in the state whose red and yellow bands touch; the head and tail are marked only with black and yellow. Coral snake mimics like the milk snake and king snake have red, and white or yellow bands, separated by black rings. The bright colors of the coral snake may serve as a warning signal to deter potential predators.

Coral snake venom is largely composed of neurotoxic peptides and is, therefore, more deadly than the venom of most other North American reptiles. An exception being the Mojave Green Rattlesnake (*Crotalus scutulus*) – a pit viper whose range does not extend into Central Texas - but whose venom contains a lethal mix of both neurotoxins and hemotoxins.

A lethal dose from a coral snake for an adult human being is as small as five to ten milligrams, dry weight; several times more virulent than the venom of the western diamondback rattler (*Crotalus atrox*). Its toxic peptides can spread rapidly through the blood stream and can cause intense pain although heavy envenomation is often difficult to determine because the central nervous system may not manifest symptoms for several hours. Still, few people are harmed by coral snakes: only one percent of all venomous snake bites are attributed to coral snakes, and fewer than 10 percent of these are fatal.

Coral snakes can be common in suburban neighborhoods throughout all of the state but far West Texas, *M. fulvius* is so secretive and nonaggressive toward human beings that only those who handle the snake are often bitten. The rigid fangs, which are longitudinally grooved pegs rather than hollow hypodermic tubes, are less than one-eighth inch in length and are unlikely to penetrate shoes or even most clothing, although corals can pierce a pinch of skin anywhere on the body. If molested, the coral snake is a quite determined biter that flips its head from side to side and snaps sharply.

Like a miniature version of their relative the cobra, the prey of coral snakes is chiefly other snakes, which are overcome by means of their potent venom. *M. fulvius* has an extended reproductive season; sometimes the larger of a reproducing pair of corals, usually the female, will attempt to eat its prospective mate. Old habits are hard to break. The coral snake breeds from late summer to late spring and lays its clutches in mid-summer. The three to five eggs, one and three-eighths inches in length by three-eighths inch in diameter, are deposited beneath loose ground cover or a layer of soil to prevent their drying; they hatch after some two months into young 6½ to 7½ inches long, which resemble adults.



## Interesting Tidbits... (cont)

### Central Texas Master Naturalist Chapter

#### Photos of the Month!



Zoe Rascoe at the Solar Eclipse



Lynn Fleming's Wild Backyard



Thank You - UMHB!

Miller Springs Nature Center  
'Love CTX' Community Service Date



# On the Horizon

## NOVEMBER

November 5 Enter your volunteer and training hours into VMS.

November 6 (V) Salado Workday (1st Monday of month). Susan Terry: [slterry@gmail.com](mailto:slterry@gmail.com)

November 7 (V) CTMN Board Meeting, 3pm-5pm. Agrilife Extension Building, Belton

November 14 (V) CTMN PACE Meeting, 6pm-8pm. Belton Church of Christ

November 30 (V) Nolan Creek Hike & Bike Trail Cleanup, 8am-11am. Meet at Confederate Park's Park & Ride. Mary Ann: [everett.maryann4@gmail.com](mailto:everett.maryann4@gmail.com)

## MORE IDEAS TO KEEP YOU BUSY ...

A. Volunteer Opportunity with Clearwater Underground Water District at Sirena Fest Sat Oct 7. Clearwater needs volunteers to help show their mobile classroom trailer to visitors. Please contact Rene for additional info, [rene.berkhoudt@gmail.com](mailto:rene.berkhoudt@gmail.com)

B. Salado's Sirena Fest. Sat Oct 7, 2pm - 6pm. Volunteer Opportunity. This festival is a family friendly fair that is designed to heighten awareness of the importance of Salado Creek to the Salado Village. Contact Susan: [slterry@gmail.com](mailto:slterry@gmail.com)

C. Meridian State Park Open House Sat Oct 7 Free, fun-filled family event. No park entry fees, gates open 8am. Event starts at 11 am and will include a lunch fundraiser, LIVE music from B&B Band, Pokey O's ice cream sandwiches, educational and historic booths, kayaking, self-guided nature hikes, kids' fishing event, archery, a hay ride and much more!

D. Texas Pollinator BioBlitz 2017. Happening now through Oct 7. Pollinator BioBlitz participants observe and identify pollinators. Share observations to Instagram or iNaturalist. Details at [www.tpwd.texas.gov/pollinators](http://www.tpwd.texas.gov/pollinators)

E. Colorado Bend State Park Events: Sat Oct 14, 8:30am - 3pm, Heritage Day. Colorado Bend is celebrating 30 years!

F. Fall Vegetable Gardening Workshop presented by Earth Repair Corps of McDade TX. Oct 21 9am - 5pm. Cost is \$75. Gopher Springs Farm, 123 Three Oaks Lane, Bastrop.

G. Mother Neff Friends Group Fundraising Event, Sat Nov 4th, 10am - 3pm. Volunteer Opportunity. Need volunteers to assist with children's activities, hikes and CCC history programs. For details contact Park Superintendent Melissa Chadwick: [Melissa.chadwick@tpwd.texas.gov](mailto:Melissa.chadwick@tpwd.texas.gov) or (254)853-2389 extension 224

H. 17th Annual Bell County Water Symposium Nov 15, 8:30am - 4pm. Location: Texas A&M University - Central Texas Campus, 1001 Leadership Pl, Killeen in Warrior Hall Multi-Purpose Room. Learn how groundwater is managed in Bell County. Information: (254)933-0120, [www.cuwcd.org](http://www.cuwcd.org) or the Clearwater Underground Water Conservation Facebook page.

**Be Sure to Check Out the CTMN Weekly E-Mail for a Full Listing of Upcoming Events!**

### CHECK US OUT ON FACEBOOK!

<https://www.facebook.com/Central-Texas-Chapter-Texas-Master-Naturalists-116648718373317/timeline/>

(V) Approved for Volunteer Hours  
(AT) Approved for Advanced Training  
(MA) Must Apply for approval of hours

## 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,*

### Board of Directors

**President:** Rene Berkhoudt

**Past President:** Lynn Fleming

**Vice President:** Mary Ann Everett

**Secretary:** Mary Sharp

**Treasurer:** Marian Riegel

**Web Master:** Dale Hughling

**Membership:** Ben Clement

**Historian:**

**Host:** Mary Odom

**Training:** Sue Valdez

**Newsletter:** Rene Berkhoudt

### Chapter Advisors:

Whitney Grantham,  
County Extension Agent, Natural Resources

Derrick Wolter,  
Wildlife Biologist, Texas Parks and Wildlife

### Newsletter Staff

**Editor:** Rene Berkhoudt

**Proofreader:** Zoe Rascoe

**Contributing Writers and Photographers:** Krystal Trammell, Zoe Rascoe, Marilyn Whitworth, Rene Berkhoudt

**Please send any news of events, articles or photos of what you're doing or what's going on in your yard or area to:**

**Rene Berkhoudt at [rene.berkhoudt@gmail.com](mailto:rene.berkhoudt@gmail.com)**



Green Anole (*Anolis carolinensis*) on a willow tree  
— Rene Berkhoudt

### The Central Texas Master Naturalist Chapter:

Holds member meetings the 2nd Tuesday of February, April, June, August, October and December at 6 p.m. at the Belton Church of Christ at 3003 N. Main. Location exceptions are in December and June.

**PACE** meetings are at the Church location at 6 p.m. the 2nd Tuesday of January, March, May, July, September and November. **THE PUBLIC IS WELCOME AT ALL OF OUR MEETINGS.**

**Programs      Activities      Committees      Everything else**

The Board of Directors meet the 1st Tuesday of January, March, May, July, September and November at 3 p.m. in the Board Room at the Agrilife Extension Center at 1605 Main in Belton.