

January 2020  
Volume 21 Issue 01

# Naturalist News

A Publication of Texas Master Naturalist, Elm Fork Chapter

Photo from Jonathan Reynolds



Yellow woolly bear that will become a Virginia tiger moth (*Diacrisia virginica*)  
(ID by Diana Hatch)

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Volume 20 | Issue 01

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A Publication of Texas Master Naturalist, Elm Fork Chapter



Red-bellied woodpecker  
comes from Diane  
Wetherbee

## In This Issue

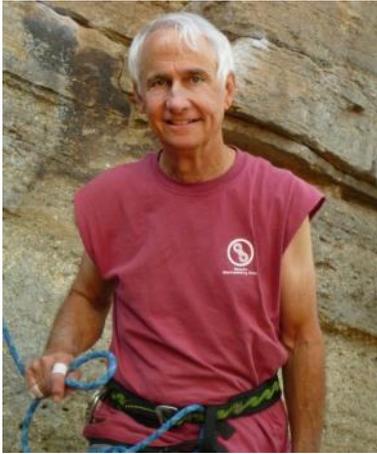
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**We're on the Web**  
[www.txmn.org/elmfork](http://www.txmn.org/elmfork)

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

THOSE WHO CONTRIBUTED TO THIS ISSUE OF NATURALIST NEWS—THANK YOU!

Jonathan Reynolds class 2014

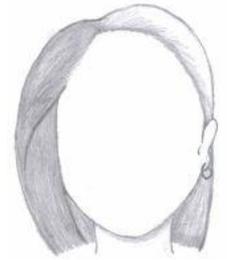


Scott Kiester class 2003

Editor, wanda odum, class 2005



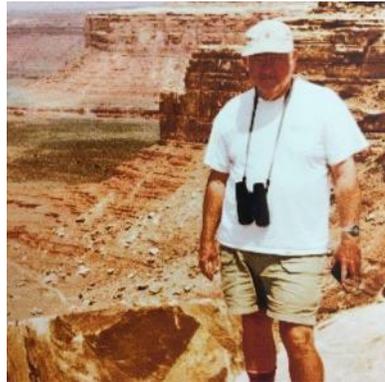
Martha Peet class 2012



Cathy Milliger class 2019—no photo available



Judi Elliott class 2009



Bob James class 2003



Rita Lokie class 2013



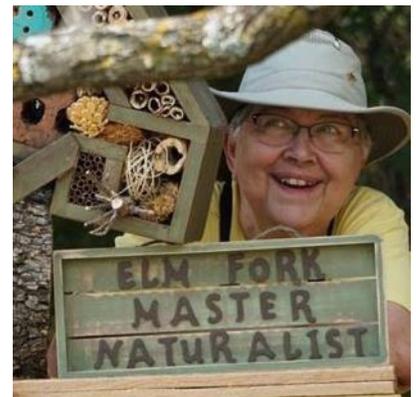
Diane Wetherbee class 2000



Dorothy Thetford class 2001



Marilyn Blanton class 1999



Sue Yost class 2017

*From Rita Lokie*

Dr. Kelly Albus will be our January 16, 2020 speaker and will present "Exploring the field of citizen science".

**Brief description of your presentation:**

Title: "Exploring the field of citizen science" - Join Dr. Kelly Albus for an overview of citizen and community science as a burgeoning field of research, explore the exciting new growth of this old idea, and learn about some of the new projects and breakthroughs in citizen science that are happening in Texas and worldwide.

**Short biography:**

Dr. Kelly Albus is an environmental scientist and educator who has worked at multiple universities, museums, zoos, and research agencies across the country. She enjoys sharing her love of nature with students of all ages, and loves getting outside with her husband and two girls to birdwatch and canoe, and has written and illustrated field guides as a hobby. She discovered and fell in love with citizen science as an undergrad and it has been her passion ever since, leading to a doctoral degree in Environmental Science with a focus on citizen science and science education. She currently works as a Research Scientist and Professor at UNT's Advanced Environmental Research Institute (AERI), where her research is focused on citizen science and community engagement in environmental issues, and she tries to get outside every chance she gets."



Dr. Kelly Albus

PROJECTS IN AND AROUND THE COMMUNITY

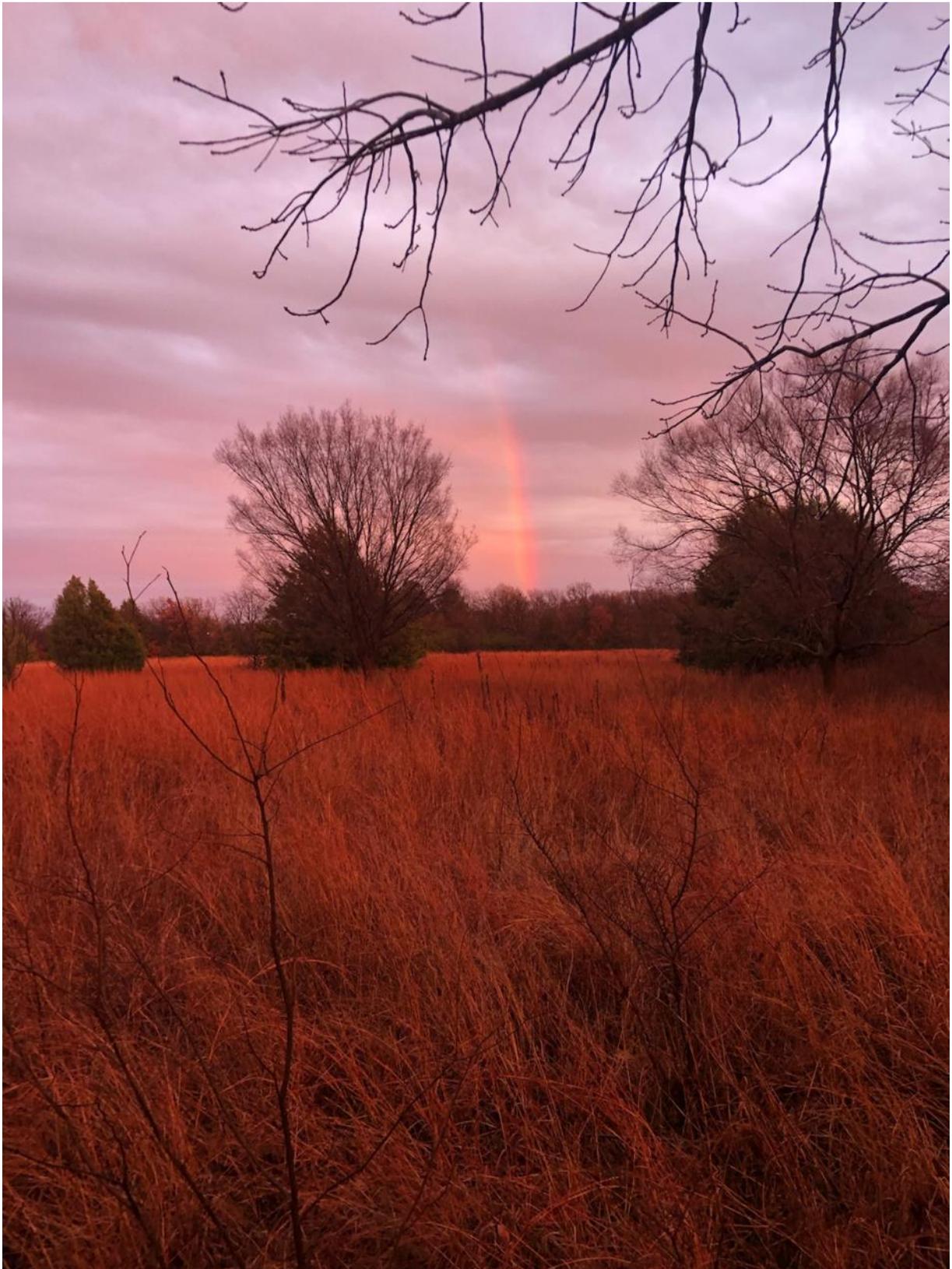


**Native Plant Planting**

This is just the one picture, but it is an important one. This is Carl Patrick at LLELA Wednesday Work Crew planting our 10,000th native plant for 2019. A significant milestone for us, as we haven't ever gotten that many in the ground during one year and we had to overcome a handicap because we lost a public workday in September so we were 2000 plants behind going into the fall, but we made it. In truth it is likely a few past the 10,000th, but for ceremonial purposes this is the one.

*Scott Kiester*

## Field Notes in Focus



**Little Bluestem (*Schizachyrium scoparium*) — From Gallery of Dorothy Thetford**

AT APPROVED

Bird Walk at the Furneaux Creek Nature Trail  
**February 1, 2020 @ 8:00 am - 10:00 am**  
 Branch Hollow park, 2050 E Branch Hollow Dr  
 Carrollton, TX 75007 United States

Bird walk with Steve Romaine - first Saturday of the Month event in 2020 at the Furneaux Creek Nature Trail. 8 am to 10 am - 2 hours of AT

AT APPROVED

**Scott Kiester will provide a two hour Advanced Training session on "My Little Chickadee: The Coolest Bird Ya Ever Did See"**

on Tuesday, February 11, 2020 from 10 A.M. till 12:00 P.M. The AT session will be in Room 115 at the Carroll Courts Building, 401 West Hickory, Denton, Texas.

Description: The seven chickadee species that inhabit North America are more than just another pretty visitor to the feeder. Their social and foraging behaviors and their vocalizations are among the most complex seen in songbirds. True inter-species communicators, their complex warning calls are recognized not only by other birds but by multiple small mammals as well. Come learn about the little birds that do an out-sized job in the forests.



## Lone Star Trail Building School

**February 22 & 23, 2020**

**Sid Richardson Ranch**

ONE FEE MAKES IT EASY \$175.00

[www.groundworkdallas.org](http://www.groundworkdallas.org)

AT APPROVED

AT APPROVED



## Conference Registration Open

Registration is now open for the 2020 North Central Texas Urban Forestry Conference! Join us Wednesday, February 19, 2020 at 8:00 am in Hurst. The conference theme will be the connection between healthy trees and healthy lives, with a focus on how to keep trees healthy when faced with pests, disease, changing climate, and poor soils. The anticipated speakers are Dr. Mike Merchant, Dr. Hans Williams, Sam Hill, a panel of municipal foresters, and state officials. The full schedule is available on our [website](#).



The fee for this presentation has been reduced to \$30.00. If you have already registered and paid the original fee, you will be contacted!



When: SATURDAY JANUARY 18, 2020 9AM – 4PM

Where: *Lewisville Community Room, Municipal Annex  
1197 W. Main Street Lewisville, Texas*

What: *Learn practical and sustainable methods to create a more natural environment in your yard. Presentations on these topics:*

Urban Wildlife  
of the DFW Metroplex

Backyard  
Birds

Chemical-Free  
Gardening

Attracting  
Pollinators

Urban  
Coyotes

Make the “Good” come to life in your yard.  
Seminar price is \$50 and includes lunch. Register at:  
<http://llelaFriends.org/>



## *A Year as a Texas Master Naturalist*

### *Tim Trosper*

I am a master naturalist. The title makes me a bit nervous. “Masters,” to me, are those who achieve such proficiency in their field that any top-ten list has to include them. David Allen Sibley, Yo-Yo Ma, George Carlin, Meryl Streep are masters of their trade. So when I say, “I am a Texas Master Naturalist,” I have a thirty-second elevator speech in my back pocket to explain that I am a citizen scientist, a student volunteer who wants to understand and improve this amazing world we live in. Most everyone, myself included, hears the word “naturalist” and thinks “science” or “technical.” Indeed, it is a considerable thing to think like a scientist and try to get one’s head around the unfathomable complexity of our natural world. But there are other things to learn out in the field. It has surprised me this year that, after all, I am mostly focused on one particular species: *Homo sapiens*. And of all the people I have encountered, I have honed in on the study of one specimen in particular: me.

#### **Look Again**

The study of Tim is ongoing. In one significant episode, my uncle gave me the compact edition of the Oxford English Dictionary (OED) when I was in grad school, studying English and British Literature. It was two hefty volumes with print so small you needed a magnifying glass to read it, which was included by those ever-thoughtful Brits. Language has always fascinated me, and the history of language tells us much about our social evolution.



Mad pops for those folks who are tired of relying upon “experts” for information

One of the words that got my attention was “respect.” The etymology (the study of language, always confused in my mind with entomology, which we TMNs know to be the study of insects) of respect is Latin: re = back and specere = to look at. So, “to look back at.” But I like to think “to look again.” This is a bit different than how we normally think of the word to mean admire, esteem, honor, revere.

It is a small but powerful reminder to hold my first impression at bay and exert some mental effort at catching something valuable that may have bounced off the filter of my bias a split second before I even realize it. It happens so quickly, these internal conclusions.

I got free tickets to see the Indigo Girls at the Myerson several years ago. Two stunning women who were dressed to the nines took a seat nearby and I immediately thought two things: I am under-dressed and I wonder what their boy-friends look like. As the evening went on it was apparent that these ladies did not have boyfriends – they had each other. In this case, the truth was apparent with very little effort on my part. But I had to question how I missed the clues for even a moment. Let’s see, I am at an Indigo Girls concert. These two fabulous musicians were among the first artists to be publicly out as lesbians forty years ago. A large majority of the audience is gay. But because I am a hetero man, and because they didn’t fit my stereotype image of what lesbians look like, I had to admit to myself that this was a clear case of sexual objectification that comes from a deep place, a bias that is innate and conditioned by years of social messaging. Don’t get me wrong, I didn’t beat myself up over this deal as no harm was done. Rather, the incident made me aware of how difficult it is to “check my bias.” How can you check it if you don’t see it?

I have been challenged lately by an acquaintance who is a climate denier. That is, he does not believe that global warming is caused by CO<sub>2</sub> emissions, or at least not to the extent that we really need to do anything about it. This person is far-right in his political DNA and I would dismiss him out of hand were it not for the fact that he is a career scientist. He pointed me to Dr. Roy Spencer, a qualified and well-spoken climate scientist with a solid pedigree. I have now spent quite a few hours researching the “other side” of the global warming debate and it has not been fun. It’s easy to call myself “open-minded.” But the work of actually studying data and theories that oppose my long-held opinion about human carbon emissions is hard. I would much rather be sweating in the heat out on the prairie. Yet, I think this kind of mental work is exactly the kind of “respect” I am trying to develop. It is almost painful to admit that I am suddenly uncertain about a conclusion that I have been supporting for years. This is the problem with conclusions.

So be it. I can almost hear my mom saying those words that I hated so much as a child: “It’s good for your development.” This, in part, is why I joined a science-based organization. I wanted to team up with a group that holds objective truth as the guide-post for any effort to add value to the world we live in. What, after all, is the purpose of science if not to promote a method to remove bias as we search for the answers to how this universe really works?

**My Favorite Species**

Yet, time and time again, my encounters with people seem to pre-empt my focus on the inner workings of the prairie and the forest. We had a young man, a high school senior, volunteering out at LLELA this summer. He did not fit the profile of the normal volunteer. He wasn’t associated with any group, but rather was volunteering because his parents insisted. He was intimidated by the entire experience. Clearing a prairie is a loud, hot, hard undertaking, and it was apparent that he was utterly new to this kind of work. However, he showed up week after week. What impressed me is how the group took him in, watched over him, brought extra water for him, and talked to him about his life and his plans. We all admired his grit and told him so. I felt like it was just an extension of the work we are doing to create a prairie. It occurred to me that we are also growing people.

Ken Steigman, director at LLELA, hosted a group of Chinese college freshman one hot afternoon this year. They were on a two week trip here through the auspices of UNT. We had language barriers with the group but what was apparent after a while is the fact that these young folks had never really been in nature. The forest was intimidating to them. They had zero experience of gardening. I left the preserve that day in a kind of shock as to how something like this was possible and I have been thinking about it since.

One of the thoughts is the idea of “being in nature.” The phrase begs a question: “When or where are any of us not in nature?” I recall the photo “Earthrise,” from Apollo 8. The only people not in nature at the moment of the photograph were the three astronauts in the space capsule. All of the billions of the rest of us in 1968 are in the picture, breathing oxygen created by plants.

Half of the enjoyment I get from being a master naturalist is the community. I did a bit of volunteer work before I retired, but showing up for work on a regular basis at my home base, LLELA, has connected me to some really cool and interesting people. There is a lot that needs to be done to keep a 2600 acre preserve healthy and safe for visitors. The TMN volunteers documented nearly 5,000 hours this year at LLELA. This is only a fraction of



Spring prairie walk

the total effort. This, and really all the other parks and preserves we support do not exist except for the hands-on contributions of a large and passionate volunteer core. We seem to have the regular spectrum of personalities, but all tied together by a common thread: the desire to actually do things to improve the natural world around us. What to do about the sad state of this earth, our only home? How about planting native species, talking to folks about conservation, creating a prairie so students have a real research lab and people can walk through the real thing? I was listening to the radio the other morning on my way to LLELA. It was a house debate on the impeachment hearings. I was so glad to get to the greenhouse, put on my gloves and get to work with a team of eight who spent two hours on a cold, rainy morning hauling, digging, potting and generally cleaning up the aftermath of the big UNT planting day that happened the prior weekend. When we left, the house was completely restored to order. Nobody mentioned politics.



Students from China getting a look at the turtles.

## Tim the Interpreter

Why a Texas Master Naturalist? My answer to this question during our first class session was that I wanted to learn enough to become a decent interpreter and eventually do some trail guiding. So in the spring of this year I was privileged, and not a little nervous, to have a crack at leading a couple of prairie tours at LLELA. Lisa Cole gave me some encouragement (note the word “courage” embedded there) when I confessed to her that I really didn’t think I knew enough. She advised me to talk about what I did know – the hands-on job of restoration. I would love to have a comprehensive knowledge of all the plant names in my back pocket, but I felt like showing the foundation grasses and talking about how fire plays such a critical role was much more valuable.



Prairie bouquet

Still, I did spend a good amount of time trying to get about twenty forbs under my belt. Even better was a personal prairie walk with Ken Steigman and Carl Patrick. Mentors. What would we do without them? Between Lisa, Ken, and Carl I had about a century of experience to draw on.

So early on a perfect Saturday morning, I met 10 adults and 2 kids at the water outlet and after a brief history of this rare piece of land that is

LLELA, we set off. I had one person who certainly challenge my knowledge base. While most of the group was very content to wander amidst the riot of flowers, she was asking, “What is this?” about flower after flower. I knew the first three. On the fourth, I had to respond “That’s a good question.” Most of the time, a teacher will say this when the answer is known. But to me, the very best questions are the ones yet to be answered. We resolved the issue with the I-Naturalist app and she was delighted to have a tool for this and future “What is it?” questions.

I felt like I did my job. What I wanted for these visitors was to experience a feeling. Lots of folks know that milkweed is essential for monarchs. But how many have actually seen those caterpillars chomping away on the plant? We did. The kids loved it. Heck, the adults loved it. And we all had a moment to wonder about a creature that would eventually morph into an international traveler.



Ken Steigman, bird banding with a student.



Richard Freiheit, showing off the result of a decade of restoration.

This is what I was aiming for. The relationship between milkweed and monarchs is fascinating all unto itself, but it is only one chapter of a much longer and complex adventure. And even at that, it is but one animal among the thousands that stop by, or live on the prairie. So what is this place that I have been working on for so many days? Calling it an ecosystem is somewhat like checking off a box on a test sheet. It is a home, a traveler’s inn, a breeding ground. It is an arena for a life and death competition. It is a laboratory for students who are chasing questions that take years to answer. It is food. It is life.

I intend to keep the idea of “respect” at the forefront of my thinking. My initial plan for 2020 is to sign up for an art class and start to sketch these plants I am having so much trouble remembering. I have told myself, for some reason that I cannot explain, that I am not an artist. I’m going to take another look at that conclusion, because several folks have told me it’s an excellent way to learn the flora.

Maybe this spring I can do another interpretive walk on the prairie. I’ll have a better grasp of it, no doubt, but I still won’t have the kind of subject matter knowledge I had when I taught computer classes or ESL. Every time I go out there I get surprised. The grasses that I had nailed down in the summer have all changed shape and color. So does this mean I have to sketch them three or four times to understand and identify them with confidence? Apparently. I guess if it were easy, everyone would be doing it. Look again, Tim. And again, and again.



Basket flower- Centaurea Americana



Turtle tracking with Scott Kiester, one of my many mentors.



Carl Patrick and Ken Steigman, helping me get ready for a prairie tour. These guys have forgotten more than I will ever know.



Finishing up barbed wire removal.



Planters



Me and Russell Tyson, happy to be done and ready to cool off on the ride back.



Cut, drag, and toss



Building out the new tables and Irrigation system with Kayla Peebles, fellow master naturalist and construction worker.



Clearing trails with Scott.



Seed harvesting



Sharon Betty at Clear Creek DISD days – holding the attention of these young folks learning about erosion



Harvesting seeds from a virgin prairie patch out near Greenville Texas. Always looking for new genes to add to the mix at LLELA.



Clearing the canoe trail. Oddly, one of the most enjoyable days of the year



I'm happy. We are finishing up our 2018 Class project at clear creek.



A typical prairie clearing crew. Russell, Me, Alan, Susan, and our fearless leader, Richard.



Robber fly with its prey. Carl spotted it and I chased it all over to get the shot. Great excuse to take a break from dragging branches in the heat.



Always interesting, the view at the water outlet.

## HIKING THE DORBA TRAIL

Lake Ray Roberts State Park

Jonathan Reynolds, TMN EFC 2014

Many visitors to our great local Lake Ray Roberts State Park hike the usual trails. The concrete path that comprises the **Randy Bell Trail**, is probably the most popular trail at Isle du Bois. Also the **Lost Pines Trail**, near the entrance to the park, the **Nature Center** trail, and the short trail to the **Kid Pond** are very enjoyable for those who don't wish to spend more than an hour or two in the woods. But if you want a change of pace, trying one of the lesser travelled trails can offer the hiker a more challenging and exciting experience.

Park your car at the DORBA parking lot, near the day use area, and your fun can begin here! Oh, what's "DORBA" you say? Well, that's the "Dallas Off Road Bicycle Association" and they're the folks that set up a trail network for off road cyclists. But these trails aren't just for cyclists. The very long loops of single track pathways make for a good long hike through a forest of varied species, and changing topography. When you check in at the entrance, ask for a trail map of the park.

On a quiet day you'll find yourself closer to a variety of trees, mushrooms, wildflowers, forest animals, and much more. However, on the weekends, you might have to move off the trail on occasion lest you get run over by an over-enthusiastic mountain biker!

The trail loops are designated "A" through "E", with "A" starting at the parking lot. The "D" trail is a bit more difficult and challenging for hiker or biker. You'll see large gullies, rock outcrops, stumps in the path, and you may find a nice rest break on a trailside boulder, with a nice forest view, and although you think that you may have just a short 30 minute walk, the loops will take you on a roundabout trip that can easily last 2 hours. The E trail is not so convoluted and circles around near the north end of the Isle du Bois peninsula.



The views of the lake here are superb. Personally, I wish the Park would place a nice bench here as it would mark a great rest spot after hiking for an hour. At any rate, when the weather's nice, as it can be during these north Texas winters, hiking on the DORBA trails is a great way to spend an afternoon.

## Christmas Bird Count—Rita Lokie

For the 120<sup>th</sup> year, the National Audubon Society organized the annual Christmas Bird Count (CBC) for 2019. The counts took place between December 14, 2019, and January 5, 2020. Tens of thousands of bird-loving volunteers participated in counts across the Western Hemisphere, and I am proud to say I was one of them!

Audubon's CBC is one of the longest-running wildlife censuses in the world. Each individual count takes place in a 15-mile-wide circle, and a leader oversees the party of birdwatchers. I participated in the Lewisville CBC, and the compiler was Jean Suplick from the Blackland Prairie Chapter. Jean took over the responsibility this year from Keith Lockhart who held the job for 30 years. Thank you, Keith, for your dedication and love of birds! And thank you, Jean, for stepping up and leading the Lewisville CBC.

The Lewisville circle is called "LVTX," and the center is at GPS coordinates 33.03, -96.99. Jean is listed as the compiler for LVTX on the Audubon database. The circle is divided into nine sectors. I participated in the sector on the East Side of Lewisville Lake Environmental Learning Area (LLELA), and our leader was Lisa Cole, LLELA Education Coordinator. The party consisted of Lisa; Dr. Jim Bednarz, Professor of Biology; Ivy Doak, Elm Fork MN; Tim Montler, Ivy's husband; Larry Brennan, Elm Fork MN; Trent Schulze, Blackland Prairie MN; Charles Meister, Blackland Prairie MN; and Brent Blackwell, Blackland Prairie MN. Later, Jean joined our group.



We met Lisa at the LLELA front gate at 6:30 a.m. We headed past the Trinity River to the east side of LLELA, which is not open to the public, and began our hike to find, identify, and count the birds. First, we saw a large group of American Robins and Cedar Wax Wings in a section of trees. Later, we came across a perky little Sedge Wren darting in the grasses who found us very interesting. Jim identified a Harlan's Red Tail Hawk flying in the prairie by his dark color.

Around 11 a.m., we moved to Barn Owl Ridge and split into two groups. Unfortunately, my group only saw two Northern Cardinals, but Charles brought along a scope, so we were able to watch a Sparrow Hawk/Kestrel perched high in a tree. There was some discussion on the sex of the Kestrel, but we finally settled on male. The other group saw a Hermit Thrush.



After a quick lunch, we headed to Lewisville Aquatic Ecosystem Research Facility (LAERF) to search out waterfowl and found a couple of Coots but few birds. Finally, we finished off with a hike of Bittern Marsh Trail. We ended the bird count at 4:30 p.m. Whew, 10 hours of birding! But we had seen and identified 68 species (our goal was 100), and counted 4134 birds!

As I mentioned earlier, Lewisville is divided into nine sectors, so we need nine leaders with nine parties. Unfortunately, we have two sectors in the Flower Mound area that were not counted this year, so Jean will be looking to the Chapter for more volunteers in 2020. Participating in the CBC is a great opportunity to improve your birding skills and add your observations to 12 decades of data that help scientists and conservationists discover trends in bird populations.

The Audubon CBC is a community science project. There is no fee to participate. Counts are open to birders of all skill levels. For more information, search [www.christmasbirdcount.org](http://www.christmasbirdcount.org).

**Dragonflies**

*Poem and photos from Marilyn Blanton*

With wings glistening in the morning light  
Dragonflies fascinate, charm and delight

Odonata is their order name  
They share common features but they're not all the same

Their colors may be green, red, amber or blue  
Some sport orange, white, brown or black, too

They're fierce hunters of their prey  
It's all part of nature's way

Hawking silently through the air  
Smaller insects should beware

Seen circling ponds or prairie grasses  
Or resting on stem tips as time passes

Veins form intricate patterns in their transparent wings  
Their flight invokes a freedom of spirit and inspires dreams

They're a symbol of change and transformation  
Beautiful creatures to spark one's imagination



male Halloween Pennant (*Celithemis eponina*)



female Widow Skimmer (*Libellula luctuosa*)



female Eastern Pondhawk (*Erythemis simplicicollis*)

## MOSQUITOES IN PARADISE

By

*Bob James*

Several years ago two of my Scoutmaster friends and I thought it would be fun to go camping without our Scouts tagging along. I had backpacked all over the western United States and parts of Canada but had never been to the Everglades in Florida. So, we decided to make a trip there, campout and backpack one of the Florida Keys.

We flew to Miami and rented a car. That evening we drove to Key West and got to see the sun go down over the Gulf of Mexico. The next morning we toured Hemingway's home and Sloppy Joe's. We spent two nights camping in a small park next to some trailer homes.

The next day we drove to the Everglades National Park and checked in at the Visitor Center. The Ranger there assigned us to an unoccupied area where we could camp that night and backpack down to the Gulf the next day if so desired. He asked us if we had tents with mosquito netting. We replied that we did and asked about the mosquitoes. He said that they were in the "Blood Sponge" stage. He said they were really bad in the evening as the sun goes down and for about two hours later. He told us that DEET worked wonders.

The camping area was called Paradise and it had a picnic table and an open area for tents. We set up camp and started to prepare our supper. About the time we started to eat, the mosquitoes came out and shortly drove us into our tents. As I lay in my tent within the mosquito netting I could hear the mosquitoes outside. I placed my hand close to the netting and in a minute or two there were thousands of mosquitoes making a perfect image of my hand on the netting. I could see their proboscises poking through the netting trying to reach my hand. I decided then that I needed to know more about that little irritating creature.

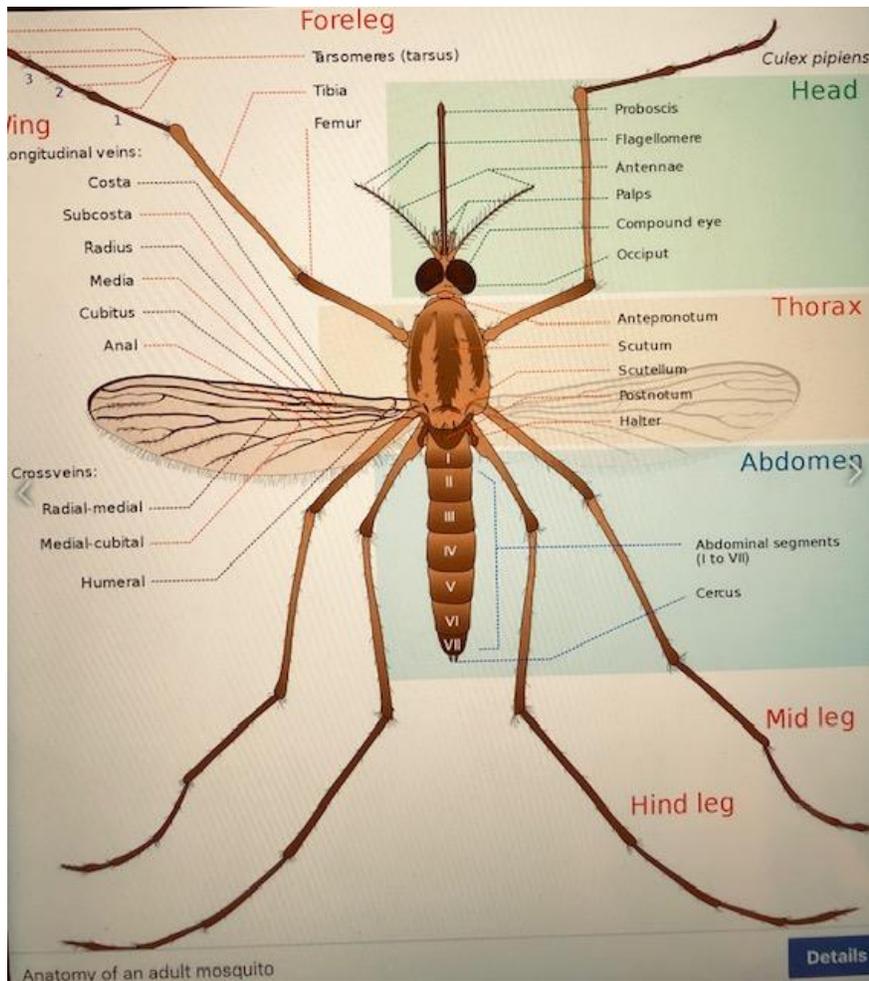
Later, I found out that there are more than 3,500 species of Diptera in the family Culicidae. The name mosquito comes from the Spanish; mosca means, "little Fly". It has a segmented body with one pair of wings and three pairs of legs. They weigh approximately 3 milligrams. (See attached photo). The mosquito has been around for about 226 million years; it survived the Kt extinction.

The mosquito proboscis is a tube like structure in three parts. When the mosquito lands on its victim, two pointed incisors pierce the skin and open the wound. The mosquito then injects saliva into the wound to stop coagulation and desensitize the wound while it sucks the victim's blood through a mouth tube. The female mosquito is the only one of the species that requires blood to propagate itself. It is during this process that the mosquito infects the victim with any pathogen it might be carrying.

The mosquito is the vector for many diseases – malaria, yellow fever, Chikungunga fever, dengue fever, west Nile virus, Ziki virus and Eastern Equine Encephalitis (EEE). According to the World Health Organization over 700,000 people die each year from pathogens carried by the female mosquito and it has killed more people than any other cause of death in human history. In fact, they have theorized that one half of the population of Homo sapiens, 108 billion, have died from pathogens carried by the Mosquito over the total life span of our species of 200,000 years. The mosquito is a narcissistic creature. It does not pollinate plants or aerate the soil nor consume waste. It is not an indispensable food source for any other animal; it has no purpose other than to propagate her species and perhaps kill human beings.

By far the greatest killer is malaria, a protozoan or parasite carried by the Anopheles culicifaces; 300 million people, annually, contract the disease. There are 450 different types of malaria parasites, 5 affecting humans. The Anopheles mosquito inhabits the warmer climates which can sustain year around mosquito populations promoting chronic and the ever present circulation of her diseases. As temperatures rise due to climate change, this disease carrying species, usually confined to these southern regions and lower altitudes will eventually creep north and into the higher altitudes. Malaria on the lower Gulf Coast will move north as the earth warms.

## FEATURES



The female feeds on blood and then rests as the blood is digested. In 2 to 3 days after being inseminated, the eggs develop. After maturing the eggs are laid in still water in the form of a raft of 100 to 200 eggs. The eggs hatch into larva and then develop into pupa. In 3 to 5 days the pupa split open and the imago emerges. After developing in the warm still water the imago becomes a young mosquito. The entire process takes about one week. A single successful breeding pair can create a population of thousands.

Mosquitoes will suck the blood of almost any creature if they can reach the exposed skin. Dogs are especially vulnerable and the mosquito will infect them with heart worms, a parasite that eventually kills the host.

Mosquito control is incredibly difficult. Chemical sprays work well but have an objectionable environmental impact. DEET works as an individual application on the skin but has an odor. We still don't know the long-term effects of DEET exposure. Cleaning up standing water in ditches, drains, flowerpots, old tires and other containers that hold water is important. Dragonflies consume hundreds of mosquitoes and having plants that encourage them in your yard is important. Mosquitoes are a formidable adversary. As Havelock Ellis stated:

“If you would see all of Nature gathered up at one point, in all her loveliness, and her skill and her deadliness, and her sex, where would you find a more exquisite symbol than the Mosquito”.

## Perils on the Trail

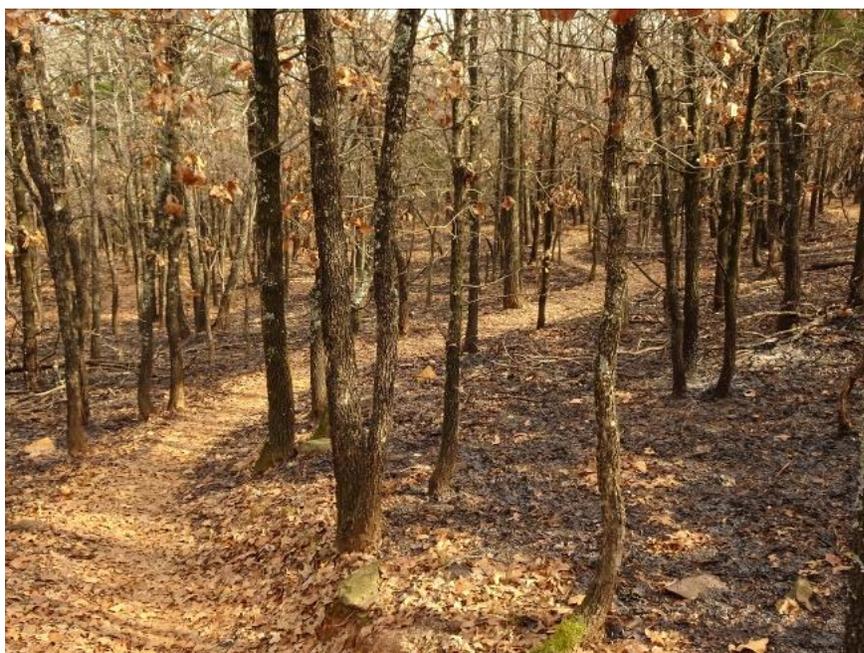
By Cathy Milliger—class 2019

I think I may have something interesting for the Naturalist News. This is a story from last summer when I was hunting for Texas horned lizards for the research project. I had just started down a trail not more than about 20 yards when I felt something hit me on top of my head. I had never encountered this before, so startled, I stopped, felt my head. I did not find any blood nor a knot, and my sun hat was still there. I looked upward, and all around, but could not see anything. I just could not figure out what could have struck my head with such force. So I continued down the trail with my head down on the lookout for Texas horned lizards.

It wasn't long before I felt another blow to my head. This time I looked up quickly only to see a Mississippi Kite flying off. This bird had hit me on the head. I looked around thinking it could have been defending a nest or something like that. There were not many trees on the trail I was on, so with one eye to the sky for rogue kites and the other on the ground to search for horned lizards I proceeded down the trail.

Soon here the bird came again aiming for my head, this time I ducked under a small mesquite tree to keep from being struck in the head again. The bird was relentless in its attacks. Needless to say I did not make good time going down this trail! After a while, the bird was nowhere to be seen and I could resume my search for horned lizards.

About 1-1/2 hours down the same trail, I felt a swoop by my head. It was back or either another rogue kite had resumed dive bombing me. I again took refuge under what mesquite trees I could find. This bird disappeared much quicker than the last one. When I returned I talked with other people who also had experiences of being struck in the head by Mississippi Kites. What an adventure that was!! Fortunately, this was a one-time event!!!!



Jonathan Reynolds takes us on a different trail on the Greenbelt south.

**Scrambled Master Naturalist Words we all [should] know.**

Let's have some fun and keep those brain cells active!

Sue Yost class of 2017

yoogecl  
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pbaihimsna  
sdrbi  
vneogietta  
arervocni  
ieerptls  
wdlaetn  
lssfoi

Only I know the answers!

Feel free to send me your unscrambled words [sdyst@asunnytexas.com](mailto:sdyst@asunnytexas.com)  
Answers will be in next months' newsletter}

@

As a member of the Horned Lizard Conservation Society I had previously submitted this poem which is really to honor some of the many defense mechanisms of the Texas Horned Lizard. Here it is:

Oh horned lizard, you walk around so proud.  
Oh horned lizard, you are not very loud.  
You flip around and shake your tail, and show your fiercest face!  
You squirt some blood from the corner of your eye right into a predators face.  
You flatten yourself upon the ground, you puff yourself up too!  
Poke out your spoked this ain't no joke.  
You could be dinner soon!!  
So hiss away you bold reptile and push yourself up and down.  
You MUST survive, so stay alive to walk around so proud.

*Cathy Milliger class 2019*



**Squirrels—love ‘em or not so much—are here to stay!**

**T**here are more than 200 species of squirrels. Squirrels are most common in wooded areas and they have successfully spread themselves all over the world with the exception of only a few isolated land masses. The few places that have no squirrels include Australia, New Zealand, Madagascar, and Greenland. Squirrels belong to the Sciuridae family, which includes tree and ground squirrels, flying squirrels, chipmunks, prairie dogs and marmots.

Gray squirrels bury their acorns all over the place, often forgetting where they put them, causing the seeds to grow into oak trees.

Squirrels can leap over five feet vertically, jump about ten feet horizontally, and overall they tend to be surprisingly clever mammals. Hence overcoming squirrel proof bird feeders is nothing more than a minor challenge for most squirrels. Why not make peace in your backyard by buying squirrels their own feeder?  
<http://www.pikes-peak-market.com/squirrels-about.html>

Photo comes from Jonathan Reynolds





### The Raven

By Edgar Allan Poe

Photo comes courtesy Dorothy Thetford



Once upon a midnight dreary, while I pondered, weak and weary,  
Over many a quaint and curious volume of forgotten lore—  
While I nodded, nearly napping, suddenly there came a tapping,  
As of some one gently rapping, rapping at my chamber door.  
“Tis some visitor,” I muttered, “tapping at my chamber door—  
Only this and nothing more.”

...

And the Raven, never flitting, still is sitting, *still* is sitting  
On the pallid bust of Pallas just above my chamber door;  
And his eyes have all the seeming of a demon’s that is dreaming,  
And the lamp-light o’er him streaming throws his shadow on the floor;  
And my soul from out that shadow that lies floating on the floor  
Shall be lifted—nevermore!



On Dorba Trail (see p. 13 for article) from Jonathan Reynolds

ALMOST THE LAST WORD

PEANUTS

By Charles M. Schulz



If you have something you'd like to share on this page, send to Naturalist News editor, wanda.odum. (Make it short, please!)



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."

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

Northern Flicker in snow—  
w odum (pen & pencil)



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**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 will be at:  
Southwest Courthouse, 6200 Canyon Falls Drive, Flower Mound/Hwy 114,

**Board Meetings**  
The Board meets each second Thursday of the month at 9:30 a.m. The Board last met January 9, 2020. Next monthly Board meeting is February 13, 2020  
Monthly Board meetings are open to members.

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.