

Prairie Partner News

A publication for and about Blackland Prairie Texas Master Naturalists

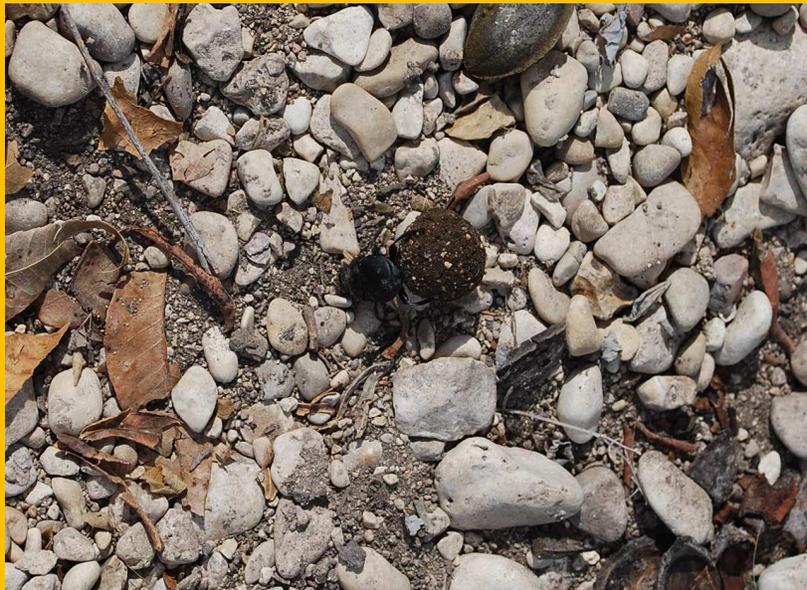
JAN-MAR 2018

Happy New Year! Welcome 2018!

I look forward to serving as editor of OUR chapter newsletter. I hope all members will consider contributing content to the newsletter in the year ahead. I encourage all to send in material, written or visual that can help make it a source for information and inspiration as well as a diary of all that we are doing and plan to do. But, before I turn my focus to the future, please allow me to reflect on 2017 for a moment. As a member of the Class of 2017, I can truly say that this past year was most memorable and rewarding and perhaps one of the more important ones of my life. It allowed me to re-ignite my passion for the natural world in a unique and powerful way. By becoming a Texas Master Naturalist, I fed my hunger for continuing education in natural history and my desire to be an active advocate in the effort to inspire others to become more aware of the beauty and importance of the natural ecosystems that surround us. In an out of the classroom and while volunteering this past year, I was able to keep in touch with nature on a daily and weekly basis. Regular volunteering came with tremendous fringe benefits, including being “forced” to be exposed to nature in a variety of settings and contexts. It was pretty good exercise too! Being a chapter member is like joining a health club and similarly, the more active you are, the more benefits you receive. You are exposed to other members with similar interests that can share their knowledge and motivate you to stay involved. Being a Texas Master Naturalist helps you grow and thrive and emotionally strengthens you. Membership in this “Health Club” has the added dimension of allowing you to change the world in a good way, one habitat at a time, one person at a time. We are members in a movement whose aim is to expand, rehabilitate, preserve and protect our natural spaces and inspire others to become more in tune with nature and bring it into their own lives and those of future generations.

I invite you to look back at 2017 and feel the warm glow of all that we have seen, shared and done as members of this chapter. Let us look forward to the New Year and continue to grow our outreach and in turn nurture each other, ourselves and those that we meet in the days ahead. May each of us scatter many seeds so that a year from now we will reflect on the bounty of our collective labors as members of the Blackland Prairie Chapter.

-Greg Tonian, Editor



DUNG BEETLE at work! In this case, poop is rolling uphill! (S. Llano R. State Park)

Phylum Arthropoda; Class Insecta; Order Coleoptera; Suborder Polyphaga; Superfamily Scaraboidea; Family Scarabidae. See feature article on Beetles .

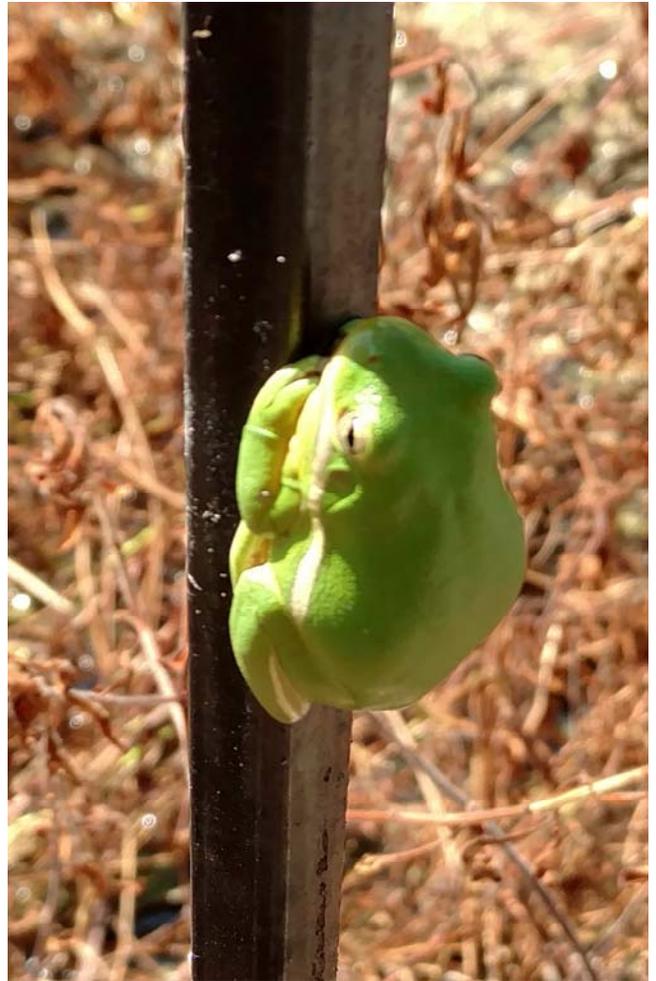
A Message from Chapter President Mike Roome

To all of our members:

Here we go with a new year, 2018, and I have been asked, as your new chapter President, to provide a piece on my thoughts and goals for the upcoming year. As I was pondering this, I recalled my experience as a shiny new 2nd Lieutenant in my first Air Force duty assignment back in the day. A wise old master sergeant, who was also our unit's First Sergeant, respectfully explained that our unit ran just fine because of the non-commissioned officers and enlisted personnel. He then suggested that our job as officers, and mine specifically, was to not mess that up. So, I guess you could say that the only goal I have right now is to not mess up what has been working so well for over ten years. Thanks to the dedication and passion of our chapter's members, from our founders through those most recently graduated, we have what I believe to be the premier TMN organization in this state. It is an honor to preside over such a group. I have received many offers of encouragement and support from our past presidents and many other members for which I am extremely grateful. I am also fortunate to lead and work with an outstanding group of your board members who are so willing to give of their time and energy to make sure our chapter continues to succeed well into the future. I am sure as the year progresses there will be other thoughts and goals come forward that I will want to share with you. Until then, please continue to demand the very best leadership from myself and your other board members and carry on with the great volunteer work all of you do in support of conserving, preserving, and improving the many great natural areas with which we are surrounded.

-Mike

(Photo submitted by Mike Roome: Green Tree Frog, *Hyla cinerea*)



It's OK to be different, especially if your green!

Not only that , don't hide it!



While it would be hard to prioritize the highlights for 2017, without a doubt, the #1 highlight was the fact that we added a significant # of new volunteers to the Connemara restoration effort. The majority of these new volunteers came from the 2017 MN class and thanks to their efforts, combined with the efforts of the other volunteers, we had the most productive year we have ever had in terms of restoration.

With our focus on "bees and butterflies", we added three new pollinator gardens and all of these were productive from early in the growing season until very late in the year. We had more Monarchs and other butterflies visit the Meadow this year than ever before thanks to these pollinator gardens.

Earlier in the Spring, thanks to some smart/strategic mowing we accomplished in late Winter, we had the very best wildflower blooming season in the past 20 years or so (based on what long time visitors told me) in the Upper Meadow. Karin's photograph (see above) was taken in the Upper Meadow at the height of the wild flower bloom.

In Feb, we began the long term effort to restore Bob White quail to the Meadow, with the introduction of 24 Bob Whites in a call back coop and flight cage.

cont'd next column)

When we released the birds on a permanent basis into the Meadow we had two sightings of them in the Summer. This restoration effort included two of our volunteer families raising Bob Whites from eggs, brooding them and then releasing them into the Meadow. We recently added more adult Bob Whites to our call back pen and will continue the restoration effort into '18.

In May, we added a honey bee hive to the Meadow, along with doubling the # of wild bee "houses" (we now have over 40). The honey bees have been a real educational tool to introduce visitors not only to the Meadow, but to the important role bees play in our ecosystem. Starting in late Spring and continuing to this day, two of our volunteers, Karin and Roberto Saucedo, have had an ongoing effort to medicate and cure several of the resident Meadow coyotes with bad cases of mange. The Saucedos have been tireless in their efforts and the coyotes have been getting better.

Starting in late Winter and continuing through the Summer, we have been working an action plan to remove pecan weevils from 5 of our pecan trees. This action included the removal of all the poison ivy and (cont'd next page)

(Connemara Meadow review continued...)

other small trees from under the pecan trees and treating the ground to eliminate the pecan weevils. In the past, every pecan on every pecan tree in the entire Meadow has been ruined by the weevils. We were able to achieve a 25% success rate under two trees, meaning that about 25% of the pecans were not ruined by the pecan weevils. We want good pecans so the squirrels, blue jays and other birds will have something more to eat. This past Summer, we were able to make the first of two creek walks focused on keeping a 200 + year old Burr Oak from falling into Rowlett Creek. We have devised a plan to help the tree, have most of the materials required and will continue working on this action through the Winter and into next Summer.

All year we have had an aggressive program to eliminate fire ants from the Meadow, with our focus on the NE half of the Lower Meadow. We have been successful in achieving a dramatic reduction in the # of fire ant mounds, at one time this Summer there were less than 5 mounds in this part of the Meadow, a long way from 2 years ago when in the same location there were well over a 100. In the late Spring we purchased a 48" rotary tiller which we use with our tractor. With this tiller we have been able to dramatically increase the # and size of our restoration plots. In the past, a large restoration plot would have been 2000 sq ft. With this new equipment we are able to create plots that exceed 6000 sq ft and we have been able to create more of them. We also use the tiller to create "grow zones" around existing native grass plots. We expect to more than double the size of our existing plots with the use of the tiller. Allen High School Ecology classes have continued to grow native grass for us, starting the grass from seeds in their green house. We move this

grass to grass nurseries and thanks to an additional pump we were able to purchase, we doubled the # of seedlings that made it through the growing season in preparation for transplanting into other plots in the Meadow. We used some of these mature grass nursery grass clumps to establish, for the first time ever, managed native grass plots in the Upper Meadow. We were able to establish 4 of these.

Late in the year we discovered a place close by the Meadow where we could rescue native grass, mostly little and big blue stem. We have been actively moving this grass into prepared plots in the Upper and Lower Meadow. This action is by far the most efficient and effective way to expand our native grass plots.

Our plans/goals for 2018 are to continue with all of our previous actions, creating more plots during the growing season by eliminating invasive plant species, planting/seeding wild flowers and native grasses in our prepared plots, continuing our Bob White reintroduction, saving the Burr Oak, growing our populations of bees, both honey and native, keep reducing the # of trees in the Meadow, keep after the pecan weevils and fire ants and most of all, continue to learn as much as we can about Mother Nature and restoration.

- Bob



The Wylie Prairie Restoration Project:

We have been working on this project for 6 years at this point. It has gone from being mowed five to six times a year to not being mowed at all. We have seeded 6 acres of the 30, one acre per year so everything is coming in at a rotation. This next year we should be able to gather seed from four areas and move them to areas where we have not seeded, in an effort to speed up the natural disbursement of plants. The city is now mowing the trail so we do not have to mulch it anymore. The diversity in the plant community has increased greatly thanks to contributions of seed from chapter members. Ongoing, we need to control the small trees, keep the litter picked up, use iNaturalist to record what flora and fauna are on the prairie, being prepared to show the prairie to any group that asks.



The Erwin Park Prairie Restoration Project:

We are two years into the re-establishment of the prairie in part of Erwin Park. This was grazing land for cattle before it was given to the city of McKinney as park land; the area has been mowed regularly until two year ago when we began to work on 50 acres inside the big loop. Very little seed has been purchased however we have had a lot of seed donated from members of the chapter. We have a separate area that we have been seeding to establish a butterfly way station. We have been moving native grass seed from where it is growing already to other areas within the project area. This year we look forward to seeing greater diversity in the flora and fauna in the area. We will continue removing small trees in the prairie area and raising the understory of the tree clusters to help Park & Rec. We are always on the lookout for litter which does occur as the area is surrounded by camp ground. We need to continually monitor and record the flora and fauna as it continues to expand, I would love to see an e-bird site set up for this area, increased use of iNaturalist will help us document what is here. (both articles by Dave Powell)



Heard Trail Guide and Docent Training

-by Dave Powell

We currently conduct the training in September for new trail guides as that is the beginning of the new school year. We trail guides for the most part are only active during the school year for school groups however we are always needed for special events to help guests on the trail and any other needs. Several folks help with weekend workshops and as trail docents when they are available, there are always folks needing guidance and information about the Heard. The Sanctuary Technician has projects that he needs help with and there is always work tasks in the gardens. The Animal Care Department is quite often looking for dedicated folks to help care for the exhibit animals. If you like to do repairs of building projects we can also use the help.

The Heritage Farmstead Museum

By LuAnn Ray

Are you interested in the history of Collin County, life on a prairie farm, native prairie plants or sharing your knowledge of any of the above with the public? If the answer is yes, then the Texas Native Prairie Garden at The Heritage Farmstead Museum (HFM) in Plano is the perfect volunteer opportunity for you! Located near the intersection of W. 15th Street and Custer Road, the Texas Native Prairie Garden at the HFM is convenient for BPTMN's located on the south west side of our chapter's boundaries.

In 2016, landscape architect and BPTMN '13 Jeff Holba sketched a landscape plan for a 100'x50' garden addition focusing on prairie plants native to Collin County. Many seasoned BPTMNs tilled the soil, laid stone edging and gravel paths and waged war on Bermuda grass and nutsedge. (cont'd next page) (photo: Prickly Ash)

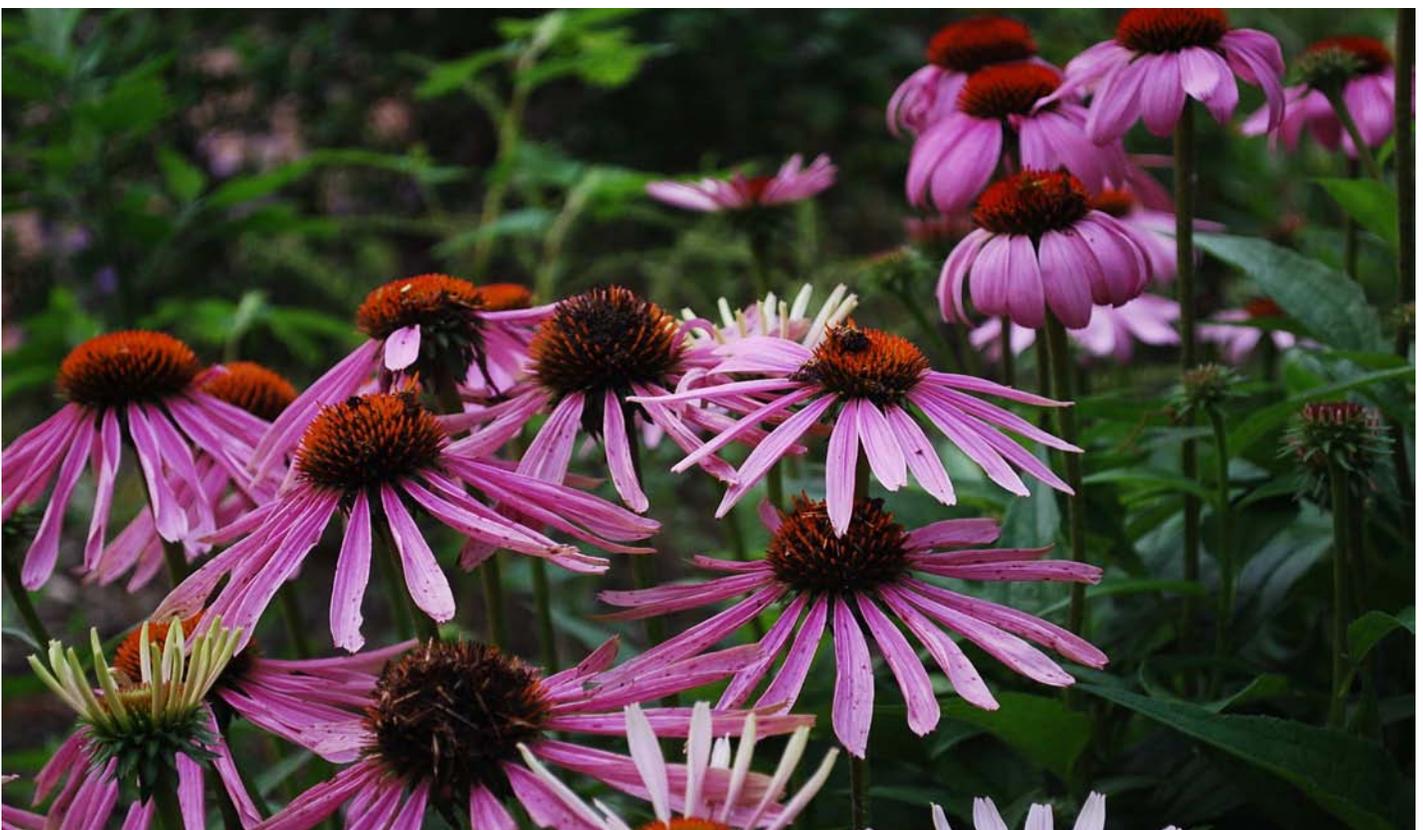


(HFM Report...)With the hardscaping in place and soil prepared, it was time to sow some seeds and pray for rain. Jr. Naturalists from Wilson Middle School spread many bags of native seeds and tamped them into the soil by doing their best buffalo herd stampede impersonation. Rain was plentiful last spring and so were garden volunteers. A new crop of recruits from the BPTMN class of 2017 showed up at 8 am every other Saturday to battle the weeds and nurture the natives. Although the invasive grasses persist their numbers are greatly reduced and the prairie garden addition put on a beautiful spring and summer display.

This fall, the garden produced large quantities of native seeds including rattlesnake master, blue mist and mealy sage, Texas star, Mexican hat, Indian grass, lemon horsemint, American basket flower and partridge pea, these seeds were gathered and will be used in BPTMN chapter projects including the Erwin and Wylie prairies.

As we look ahead to 2018 several new volunteer opportunities are planned for the native prairie garden at the HFM including a garden docent program to educate school groups and support HFM special events. Plans are being made to construct a compost bin to dispose of our garden clippings in a more ecofriendly manner and serve as a compost education demonstration area.

In January we will resume monthly 2nd Saturday garden workdays from 9am-11am. Garden workdays and information about docent training will be post on the forum after the New Year. –LuAnn Ray





The Blackland Prairie Raptor Center's mission is to care for injured and orphaned raptors and educate the public about their value to the environment as a whole. The Center is located in Brockdale Park at Lake Lavon in Collin County, and includes a clinic, nursery, education facility, and rehabilitation flight cages for recovering birds. So far this year, they have served over 700 patients, with an average live release rate of 80%! Primarily, their patients are eastern screech owls, barn owls, red-tailed and Cooper's hawks, and to a lesser extent, great horned owls, Mississippi kites, American kestrels, and other owls and hawks. These injured or orphaned birds are brought to the Center from all over North Central Texas, as far south as Houston, to be rehabilitated for re-release into the wild. The Center is also home to 14 education raptors, who are featured in our education programs for schools, festivals, camps, and environmental groups. These birds wouldn't be able to survive in the wild, due to imperfect flying/ hunting abilities or having imprinted on humans. You can meet them in person and learn about raptors at BPRC every first Saturday of the month, or at any of the many events planned throughout the metroplex. (See details below.) Photo of a Barn owl above taken by Greg Tonian at the BP Raptor Center during 2017 Field trip.

Upcoming events at BPRC:

First Saturday is an ongoing event, with a raptor program held at 11:00 & 1:00 on the first Saturday of every month. The program is followed by a prairie walk around the grounds of the BPRC at Lake Lavon. This ongoing event is the only time the raptor Center is open to the public.

Paint a Raptor class in November was a hit, so another has been planned for some time in January or February. The first class featured an eastern screech owl (the adorable tiny ones) as a model for class participants to paint. Future classes will feature falcons and hawks. Cost is \$45 and includes all your painting supplies.

EagleFest is coming again this January; with details to follow, so consult the website for updates; bpraptorcenter.org. (a side note: there are plans in the works for the construction of very large flight cages at the BPRaptor Center to facilitate the recovery of large birds like eagles. Collin County has EAGLES?!?! We do!)

July 10: West Irving Public Library; 2:30-3:30 at 4444 West Rochelle, Irving TX, 75062.

Fall 2018; Ribs and Raptors; the big fundraiser for the BPRC. Details TBD, so watch the website. This is the big annual event for the Center, with both live and silent auctions, food, fun, and raptor rehab info. This event raises a lot of the funds needed to run the Center throughout the year.

By Debbie Doyle, Class 2017 and volunteer at BPRC



FRIENDS OF FURNEAUX CREEK by Jennifer Wilson

Carrollton, Texas - In the quiet, woodsy area on the south side of the intersection at Arbor Creek Drive and Hebron Parkway lies a serene nature trail that follows Furneaux Creek. Just 13 months ago, Bob Olsen and Richard Johnson realized they were both separately planting and maintaining young plants and trees within the northernmost greenbelt of the City of Carrollton's Blue Trail. (Approx. 4.5 miles long walk/jog/bike path) They decided to align efforts, and with neighbor Sherry Dickie's direction, began a group called Friends of Furneaux Creek. Friends of Furneaux Creek's mission is to bring people together to enhance, improve and beautify this area. All new plantings are native to the area to enhance the natural habitat for insects, birds and animals. Invasive plants are also being removed. Since its inception, Friends of Furneaux Creek has:

- become a 501(C)3 nonprofit organization
- conducted monthly meetings with educational speakers, which counts as advanced training for Master Naturalist volunteers
- planted over 300 trees, countless numbers of flowers and shrubs, a wildflower field and several flower gardens (Phase I)
- installed bird houses, owl boxes and a butterfly corral (Phase I)
- worked with the city to get irrigation and install two hose bibs (Phase I)
- hosted two Boy Scouts to complete their Eagle projects on the trail, with more projects in progress
- provided several opportunities for multiple Girl and Boy Scout troops to earn badges, be involved in the community and learn about the environment
- hosted two successful community events - the July Night Walk and Arbor Day Celebration
- been awarded a matching grant from the city's Neighborhood Advisory Commission to expand the trail into Phase II

There is a lot on the agenda for Friends of Furneaux Creek in 2018. Phase II is an ambitious endeavor, which continues the trail further along the greenbelt south of Phase I. Trees are sparse in this area. The group proposes to install 44 canopy trees, 52 understory trees, 54 shrubs and several flowering plants and grasses and maintain them throughout the year. It is a huge undertaking and now, more than ever, steady help from many volunteers is needed. The group is planning three community events during 2018 - a Night Walk in March, a morning Summer Solstice event in June, and an Arbor Day Celebration in November. The events introduce more neighbors to the trail and hopefully gain them as a member, volunteer or donor.

Friends of Furneaux Creek also seeks cash donations to meet the requirements of the city's matching grant and continual caretaking needs for the area. There are several opportunities for various school, church or community groups to earn volunteer hours - including Master Naturalists. There are several official and unofficial work days throughout the year where gardening expertise is needed to guide other volunteers. As well, there are other tasks at hand, including watering, mulching, clearing log-jams and basic maintenance. And many able bodies will be needed when planting begins in Phase II. If you're interested in volunteering and supporting Friends of Furneaux Creek, please contact fellow Master Naturalist, Richard Johnson at 469-877-0695. Friends of Furneaux Creek is on the web: FCNatureTrail.org And Facebook: [facebook.com/Furneauxcreeknaturetrail/](https://www.facebook.com/Furneauxcreeknaturetrail/)

BPTMNs at Arbor Hills Nature Preserve in Plano

Ernie Stokely

12/14/2017

In the fall of 2016 Rachael Bennett, Outdoor Recreation Coordinator for the city of Plano, approached Rick Joosten (BPTMN) about starting a monthly nature walk in Arbor Hills Nature Preserve in the southwestern corner of the city of Plano and in the southeastern corner of Denton County. Debra posted something in the newsletter about volunteers for this activity, and I quickly connected with Rick Joosten who was already in contact with Rachael about starting the walk. According to my records, Rick and I launched the monthly walk series on November 5, 2016, with 25 attendees who showed up on a sunny day to enjoy a 1 ½ hour stroll through the park. The date was set for the first Saturday in the month for a 1 ½ hour walk, which has continued on a monthly basis. Starting in January, 2018, the dates will be reset to move to the second Saturday due to numerous first-Saturday conflicts.

In mid-2017 we starting having monthly themed walks that included vine identification, migratory birds, fall flora and fauna, and general plant identification. Attendance dropped off fairly dramatically since the initial walk in 2016, but we hope that better advertisement and the relatively warm winter we are having will allow the attendance to build in the coming months.

In 2017 the group of Master Naturalist guides for the Arbor Hills walks has grown to include Greg Tonian, Louise Frost, and Dub Spenser. We have also had help from plant experts Carol Clark and Dana Wilson.

Sadly, we lost the leadership of Rick Joosten when he moved to California in the summer of 2017. Rick was a great trail guide with a broad knowledge of plants, geology, and the local history of early settlers into Collin County. He also had an warm and enthusiastic way of connecting with the public, and we miss him greatly.

NEW OFFERING in 2018 The COLONY Texas

Guided Interpretive Nature Walks will be hosted by Greg Tonian on the last Saturday of the month starting in January 2018 on the The Colony Shoreline Trail from 9 –10:30 am. Hikes will start at Lake Ridge Dr. access point. The Colony shoreline Trail is on Army Corps. Of Engineer land on the Eastern shore of Lake Lewisville and provides easy access to habitat where one can observe native flora and fauna. Greg invites chapter members to join him as he implements this offering and makes it a regular part of the Colony Calendar. Dates for the first quarter are: 1/27, 2/24, 3/31 and 4/28

Class of 2018

Though we will not confirm a spot in our Class for any of the applicants until January, our Class is already half full: this through the end of November. December has, historically, been the month in which we received most of our applicants. Consequently, we are optimistic that we will receive 32 qualified students. We believe that limiting our Class size to 32 provides the very best educational experience. Unfortunately, a few must be wait-listed.

Though our communications director, Jodi Hodak, sends an article that provides particulars of our upcoming Class to the *Dallas Morning News*, and to local community papers in Plano, Frisco, Allen, and McKinney, we rely heavily on word of mouth. Our Chapter Members are fabulous ambassadors for our program.

We have an eminently qualified panel of speakers, most, but not all, of whom are college professors who lecture on the same topics in their classrooms that they present to our classes. We also benefit from knowledgeable folks from our Chapter. Prior classes have enthusiastically received our training regime that involve outside study and hands on experiences. For example, LuAnne Ray conducts a water quality and macro-invertebrate class, Dave Powell, Mike Roome, Fran Woodfin, Tony Manasseri and I lead the class on a tree identification walk. In our final class, we offer a variety of experiences, including a Wetlands walk with LuAnne, a Cedar Break walk with Dave Powell, a Butterfly experience with Melanie Schuchart, and a plant walk with Bill Woodfin.

We continue to focus upon a Blackland Prairie specific point of view, while presenting more universal concepts. This year we are excited to offer a new experience to our Class. What is more specific to the Blackland Prairie than an understanding of the Bedrock and Soils that constitute its unique nature? Dick Zartler (rocks) and Lorelei Stierlen (soils) will lead our Class outdoors to explore these topics.

I am grateful that our Chapter includes so many talented members who are willing to selflessly share their knowledge and perspective with our students. We are a lucky bunch. Speaking of gratitude, please thank the members of our Education Committee, who work hard to offer a splendid educational experience to each new Class. They are Sally Evans (emeritus), Ed Ellerbe, Fran Woodfin, LuAnne Ray, Laura Simpson, Jane Skinner, Sharla Stack, Caroline Curfman, Cindy Napper, Susan Smith, Maureen Metcalf (adjunct) and Paul Hodges (2017 Class Representative).

2018 Tally: 20,129 BPTMN Hours by 162 members = \$402,580 Sweat Equity

Bullet Points of Restoration and Research Projects at *Lake Lewisville Environmental Learning Area* in 2017

LLELA's mission is to preserve and restore native Texas ecosystems and biodiversity while providing opportunities for environmental education, research and recreation.

Our vision is to heal the land and restore the bond between people and nature, ensuring the preservation of our natural heritage for the future.

Since tallgrass prairies are the most endangered ecosystem in Texas and we continue to lose prairie remnants at an alarming rate, our top priority has been to save as much as we can and reintroduce those species back into the degraded grasslands at LLELA. Having said that, we also conduct forest and wetland restoration projects at LLELA.

We also are just as committed to reintroducing extirpated wildlife species whenever possible and have many wildlife management programs ongoing at LLELA. It has always been our goal to include the community in these programs as well as faculty and students from UNT and other institutions. Master Naturalists have always played a major role as leaders of specific projects within this program. Examples are:

- 1) Participation in plant rescues, growing plants, germinating seed in the LLELA nursery and transplanting plants to LLELA restoration sites
- 2) Participation in the eradication and management of invasive exotic species at LLELA
- 3) Managing barn owl nest boxes to provide additional breeding opportunities and study the local population—banding owls roosting and/or nesting in nest boxes, collecting pellets for prey species identification and composition.
- 4) American kestrel nest box management assisting the conservation of this species, participating in the American Kestrel Partnership program.
- 5) Reintroduction of northern bobwhite quail project
- 6) Blue bird nesting box studies involving managing the nest boxes, banding young and now trapping adults in an effort to understand population dynamics.
- 7) Winter site fidelity study on grassland birds [5th and last winter]-assessing which birds return to the same area to winter each year.
- 8) Manage existing trails and develop new hiking trails.
- 9) Conducted the first annual LLELA bioblitz

LLELA's environmental education team interprets the native ecosystems and restoration effort at LLELA to the public, and provides recreational opportunities for visitors. Over 9,400 visitors of all ages participated in school field trips, guided hikes, summer camps, Scouting programs, kayak tours, and other activities in our 2016-17 fiscal year. Volunteer trail guides, Information Center docents, and log house guides help us execute these programs. (Cont'd next page) Below: Planting a forest trail at LLELA



LLELA Plans and goals for the future:

- 1) Research the management and reintroduction of two species of native box turtles at LLELA.
- 2) Research projects utilizing our MOTUS system to track wildlife, particularly migratory species. Plans are being made for a painted bunting project.
- 3) Partnering with ONCOR to create prairie under their transmission lines, creating a showcase to encourage individuals and municipalities to replicate our restoration efforts in their own land within the ONCOR easements to provide a functional wildlife corridor.
- 4) Internship program Fall of 2018.
- 5) Ability to stream live into classrooms at UNT and elsewhere.
- 6) Add additional "large scale" volunteer events.
- 7) Grow the LLELA Bioblitz
- 8) Extend LLELA programs to other City and LISD parks and schools.
- 9) Add interpretive and wayfinding signage along the trails.
- 10) Develop an interpretive plan which will guide outreach efforts at LLELA.

Accomplishments in 2017

Transplanted over 6,000 nursery grown plants onto restoration sites at LLELA

Nearly 5,000 volunteer project hours donated to LLELA by our volunteers

Expanded the native plant nursery capacity to 10,000 plants produced annually

UNT Ecology and Mammalogy laboratories began conducting labs at LLELA

Hosted the 2017 Texas SER Conference

Opened an Information Center

Hosted the Bringing Nature Home workshop with Dr. Doug Tallamy (Photo: l. to rt., Ken Steigman and Richard Freiheit)



Volunteer Opportunities at Hagerman NWR by Laurie Shepard

Winter is not necessarily a quiet time at Hagerman National Wildlife Refuge. For birders, it means winter visitors like Harris's Sparrows and Ruby-crowned Kinglets, as well as Snow Geese and Ross's Geese by the thousands. The spectacle of the white geese feeding on the refuge draws many human visitors as well, which in turn, increases the need for volunteers to man the Visitors' Center and conduct tours on the refuge. Winter is also a good time for trail maintenance, when scrub has died back and trails are accessible.

Hagerman's large butterfly garden also needs some clearing and cleaning this time of year, but not so much that wintering over eggs, caterpillars, and chrysalis's are lost. Winter caps off a full year of activities led by volunteers from the Friends of Hagerman and several chapters of Texas Master Naturalists, including Bluestem, Blackland Prairie, and Dallas Chapters.

In spring, the weekly work maintaining the butterfly garden begins. A group of Butterfly Docents meets monthly to share information and plan activities in the garden. Every other week from April through October, the docents conduct a garden walk, introducing visitors to various host plants and species of butterflies. School groups also come to the refuge for a wide variety of nature related programs conducted by volunteers. Bluebird boxes throughout the refuge are monitored all spring and summer, and all nests and fledglings of any species are catalogued.

During the heat of summer, activities such as public tours and bird walks continue but are planned earlier in the day. The Friends of Hagerman conduct monthly educational programs for children and adults year round. The adult nature programs are usually locally focused and may be applied to Advanced Training (subject to approval). Visitors who prefer a motorized transport are offered a narrated electric tram tour twice a week year round to find and identify wildlife on the refuge, while also learning the history of the location. Trail maintenance also continues the rest of the year.

Another year-round effort by the U.S. Fish and Wildlife Service (USFWS) is to create a photo file including all members of the Animal Kingdom found on the refuge. A project has been created in iNaturalist for Hagerman NWR, but photos may also be sent directly to Courtney_Anderson@fws.gov.

Friends of Hagerman hosted a Butterfly Day in October 2017 with activities for adults and children. Native plant seeds harvested from the butterfly garden were passed out to visitors to spread in any of the areas they visited during the day, ensuring a profusion of spring and summer flowers in 2018. Fall also brought more school groups, hosted by USFWS and supported by a host of Master Naturalist volunteers.

Opportunities for volunteer time, advanced training, and simply enjoying nature (because that's why we do this, isn't it?) are many at Hagerman NWR.

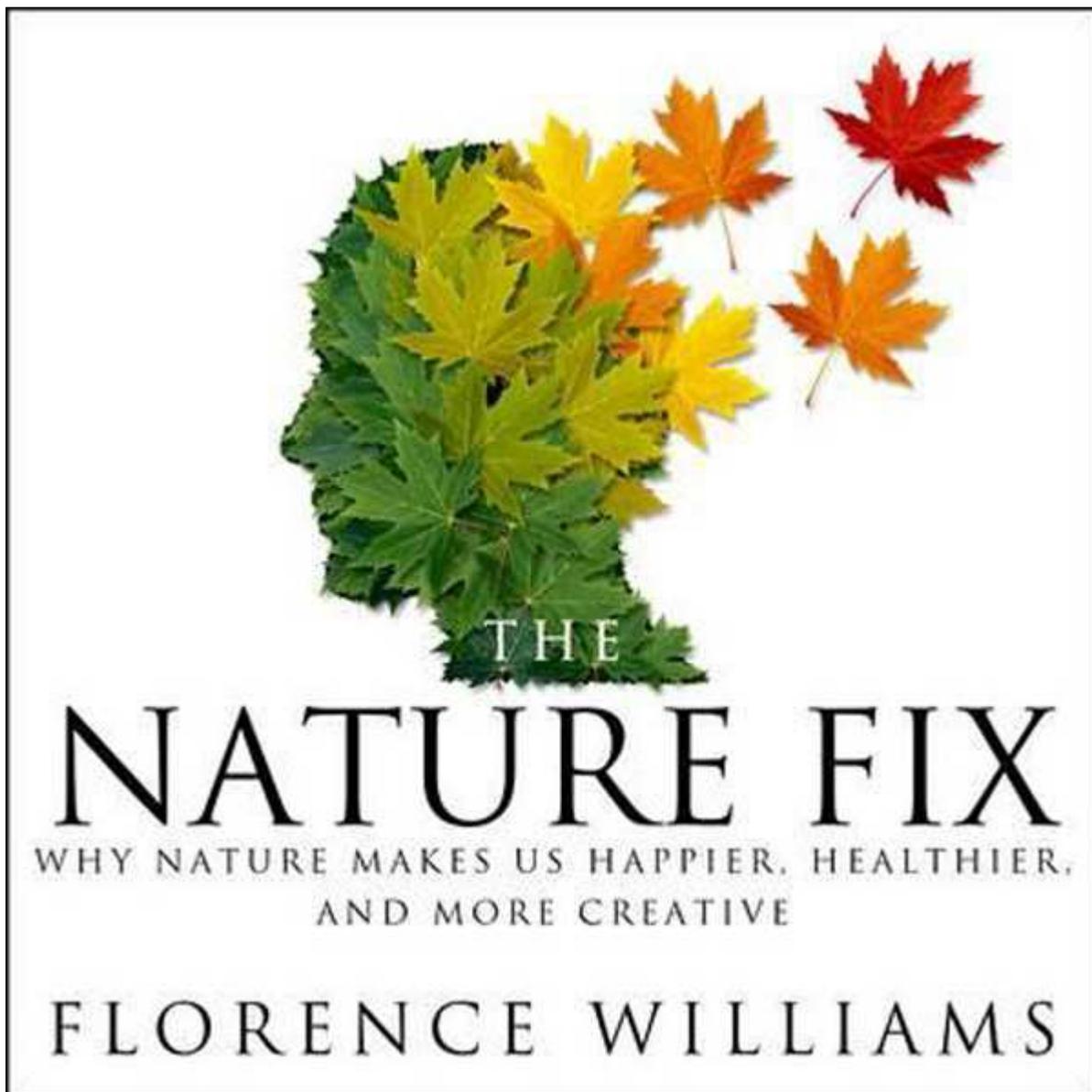


Book Review

By Greg Tonian

It is likely that being a TXMN reinforces a belief that our time spent immersed in nature enhances our well being. What we do has both physical and mental benefits. If nothing else, we get physical exercise and enjoy the fulfillment volunteers involved in a good cause, serving others often feel. One thing that has been evident in my interactions with people as a TXMN is their apparent yearning for knowledge and understanding of living things and closer relationship with them. As a butterfly house docent, trail guide and in my daily life I experienced this curiosity, sense of wonder and even trepidation exhibited by all ages. Kids respond to the sensory experiences of nature in different ways, perhaps out of fear or because of their separation from technology, but more often than not, they become drawn to it. Some want to physically interact with it, to touch it. Others become mesmerized. Some get bored, but it is likely that a small chink in their emotional armor has developed that could lead to a closer relationship with nature over time. I am amazed at how knowledgeable children and adults are about nature and yet I sense that many of these same individuals realize that the more they think you know about nature, the less they know!

The reason for the preceding musings, is that I want to share with you a book that I just read:



The book explores how Nature benefits us and shows some public, institutional, private and scientific examples of what they might be. Since many topics are explored and since the content of the book surely relates to our work as a TXMN. I will not provide a full recap of the book, but encourage you to read it. However, there were some key takeaways which I will use as bullet points for your own reflection:

1. Finnish Researcher Liisa Tyrvaian advocates 5 hours, preferably 10 hours of time in Nature per month
2. The original concept of “Kindergarden” was developed by Fredrich Frobel in 1782 and literally used the woods and outdoors for early childhood education efforts with excellent results.
3. In Japan, Health Ministry efforts encourage and promote Shinrin yoku or “forest bathing” to reduce stress. Based on Shinto-Buddhist practice of allowing nature into the body using all 5 senses.
4. Biophilia defined by Erich Fromm in 1973 as “passionate love of life and all that is alive and defined by E. O. Wilson as the “innately emotional affiliation of human beings to other living organisms”
5. Today’s culture has seen a dramatic reduction of the hours kids spend outside
6. Exposure to green plants made people more generous with “green” money in experiments
7. Finland: Metsampietto ~ “covered by the forest” or being lost in the beauty of the forest due to the spells of “forest sprites” (not sure what the Finnish expression for “covered by the prairie” would be!

Nature is used in powerful ways in programs to help kids with autism (reduces dependency on drugs); veterans with PTSD, criminals and drug addicts and young and old that are addicted to today’s technology (cell phones).

In the coming year as a TXMN’s we can not only enjoy the healing power of our time and efforts in nature, but we can encourage others to experience its benefits as well. The time we spend in Nature truly gives meaning to the expression “Quality Time!”. As a TXMN, we, in a sense, can provide a psychosocial service as we help others get a much needed and therapeutic “Nature Fix”.

(Photo below: Butterfly house at the Heard becomes a “Kindergarden”)



THOSE INTERESTING INSECTS!

This is the first column in a series with the goal to edify and educate readers of this newsletter and encourage them to consider the plethora of insects that we often overlook in our various activities as TMN's. The diversity, abundance and impact of insects cannot be ignored, yet, it is likely that other living creatures and plants tend to attract most of our attention while insects, like snakes, might be more likely to illicit a fright-flight reaction or simply remain unnoticed, despite their dominance. The one exception, I will grant is of course the adult butterflies, which are a big part of our efforts and pollinators in general. The point is that far more insects get overlooked simply because they tend to be smaller, drabber and yet, they are everywhere, taking on many forms and shapes.

In this inaugural post I will lead with the largest group of insects and for that matter, the largest Order of the Animal Kingdom, the Order Coleoptera, the Beetles. There are over 400,000 known species of Beetles and possibly more than a Million species on the planet. 40% of all insects are Beetles accounting for 25 % of all known animal species.

Evolutionary biologist J.B.S. Haldane during a discussion with theologians curious about what observations he could make concerning the creation based on his studies quipped that the creator must have an inordinate affection for beetles. Beetles appeared 285 MYA and essentially are the "tanks" of the insect kingdom, occupying countless niches in their environments and likely will be one of the most enduring life forms on Mothership Earth.

Coleoptera as a group name is attributed to Aristotle who came up with the name Koleopteros. Koleos is a derivative of the word for sheath and pteron is the Greek word for wing. Beetles have a rigid elytron or forewing that sheaths and protects the hind wing below. The word beetle is derived from the Old English verb bitan, to bite.

Beetles like all insects, in the adult form, have the basic body form: head, thorax and abdomen. They have mandibles or chewing mouth parts (True Bugs, next issue, have piercing/sucking mouthparts), antennae, compound eyes on the head; 2 pairs of wings and 6 legs on the thorax. They have a complete metamorphosis: Egg to larva (grub), to pupa then adult.

BEETLES

It would be difficult to review all of the different types of beetles. There are 5 Sub Orders, the largest, Polyphaga (roughly "Eats everything") consists of over 170 families with over 300,000 species. This group includes weevils and scarabs.

My recommendation regarding the "Fab" Beetles is to remember them in your work and interpretation and remind yourself and others that they are a major player in the animal kingdom and perhaps deserve more affection than we normally give them. Like many insects, we often only see the adult form of the beetle, the pupal and larval stages are out of sight and eggs virtually invisible. We must remember that these stages are important sources of food for other creatures. Larvae and Adults alike can also pose significant threats to crops and human resources.

Giving attention to the tiny beetle we may perhaps get closer to the microcosm of other insects, spiders, snails, worms and other tiny denizens that bring diversity to the ecosystems around us. It is truly amazing how a tiny red lady BEETLE can captivate young and old alike.

The following are just a few of the common beetles to look for:

Curculionidae: Weevils or snout beetles, many considered pests.

Coccinellidae: Lady Beetles, larvae and adults feed on aphids and scale insects

Cicindellidae: Tiger Beetles, predatory, some iridescent

Colorado Potato Beetle: Family Chrysomelidae. Leptinotarsa decemlineata (look for the ten lines on green body), plant pest

Scarabaeidae: Scarabs, Dung Beetles; some sacred some make truffles out of poop!

Cerambycidae: Longhorn (Long Antennae) Beetles, larvae wood borers

Gyrinidae: Whirligig beetles, aquatic

Dytiscidae: predaceous diving beetles

Lampyridae: Fireflies, luciferin catalyzed by enzyme luciferase

Dermestidae: Carpet Beetles, some destroy insect collections

Scolytidae: Bark Beetles, seek weakened trees

Meloidae: Blister beetles secrete cantharidin for defense

Passalidae: Wood Borers (larvae create etchings under the bark)

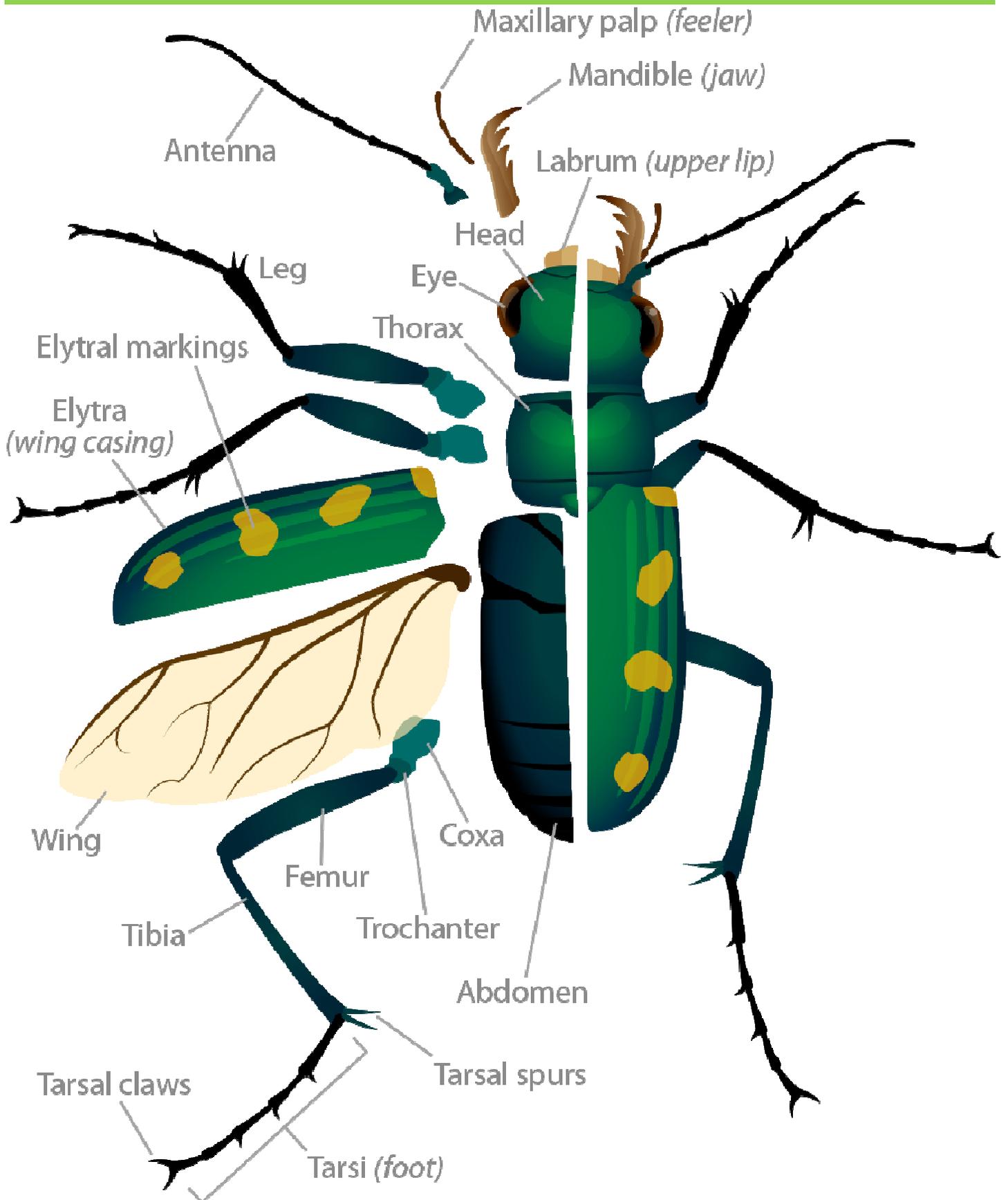
Lucanidae: Stag Beetles (large horns are used in courtship only)

Silphidae: Carrion Beetles, important decomposers, CSI stars!

Elateridae: Click beetles have a hinged body that they can snap

By Greg Tonian (Whose first car was a "Beetle")

Tiger Beetle Anatomy



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The Mission of the Texas Master Naturalist program is to develop a corps of well-informed volunteers to provide education, outreach and service dedicated to the beneficial management of natural resources and natural areas within their communities for the State of Texas.

The Texas Master Naturalist program is a partnership between the Texas AgriLife Extension Service, Texas Parks & Wildlife and other local partners.



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Upcoming BPTMN Meetings
2nd Tuesday, 7 p.m.,
Heard Museum Science Center
January 9: **"OPEN HOUSE ON THE PRAIRIE"**

Board members will announce what is in store for the Chapter in the New Year . No formal speaker.

February 13: "Light Pollution: More than a barrier to star gazing" TOM FLEMING

Mr. Fleming is a lifetime educator with degrees in Astronomy and Mathematics with an emphasis on Physics. He is devoted to taking these intimidating subjects and connecting them to the natural world to make them more understandable . An avid photographer since the late 60's, he has captured all facets of the natural world and has been coping with the impact of light pollution on the aesthetics of the night sky since the beginning of his career. The presentation will explore the impact of light pollution on organisms and explore how this is part of broader overall environmental pollution issues.

Websites of Interest...

All About Birds:

<https://academy.allaboutbirds.org/features/birdanatomy/>

Blackland Prairie Texas Master Naturalist Calendar <http://bptmn.org/calendar/>

Cornell Lab of Ornithology -

<http://www.birds.cornell.edu/Page.aspx?pid=1478>

Earthkind Landscaping

<http://aggie-horticulture.tamu.edu/earthkind/>

Green Source DFW

<http://www.greensourcedfw.org/>

Ladybird Johnson Wildlife Center

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

Texas Aggi Horticulture

<http://aggie-horticulture.tamu.edu/>

Texas Parks & Wildlife Updates

<https://tpwd.texas.gov/>

Texas Smartscape <http://www.txsmartscape.com/>

Texas Superstar Plants <http://www.texasuperstar.com/plants/>