



NATURALIST NOTES

March 2024



MNs who attended the walk Feb 25th at Woodland Park. This is an annual event put on by Friends of Woodland Park. They invited us along to engage with the participants. It was quite a hike. But I think we all had a good time.

Richard Solberg



Invitation to Mothing at Deer Park Prairie

- March 23 (TPWD's Wendy Anderson visit) - 7:30p
- April 27 (CNC) - 8:00p

Contact Mary Spolyar for more information.

Eclipse Viewers available at April Chapter Meeting on a first come basis.

Check out our website

<https://txmn.org/gulfcoast>



Spring 2024 Class Field Trip – Coastal Ecology. Photo by Nuna Johnson



HANC Accessible Trail
Maintenance

Bowled and Beautiful, Introduction

Last Spring, straight-line winds took down several trees on our property. One was a large Hackberry (*Celtis occidentalis*). For my birthday, my husband had a section of its large trunk made into a bowl. It is beautiful. Yellow and bluish wood with dark convoluted lines running through it. It looks like a map.

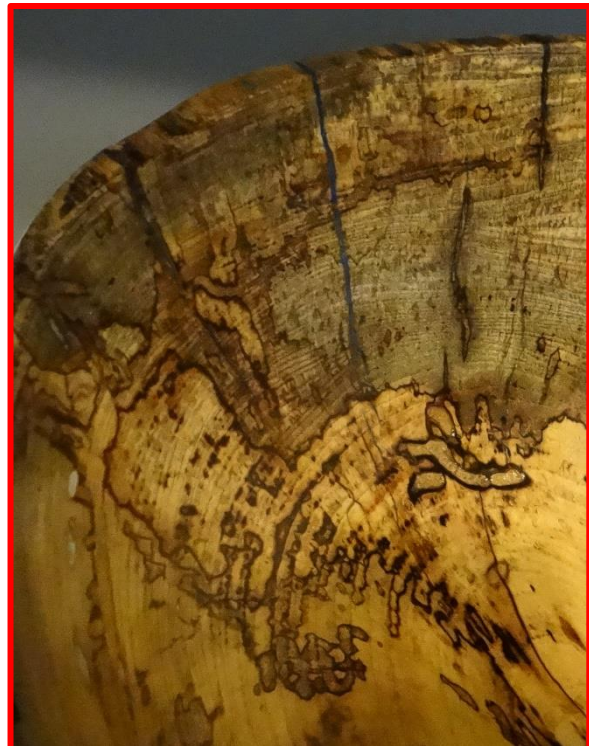
I showed the bowl to an arborist who was on our property recently and he gave me a science lesson. He pointed out the lines in the bowl between blue-stained and yellow wood. He told me that a fungus caused the blue stain and that the tree was trying to protect itself by isolating the affected areas from the rest of the tree.

When I did some online research to find out more, I came across Robert A. Blanchette, a professor in the Department of Plant Pathology at the University of Minnesota. I sent pictures to Dr. Blanchette to ask what might have caused the blue stain in our Hackberry and this was his response:

‘The tree had some internal decay and the wood has some nice spalted wood with a mottled white rot and zone lines and as you mentioned some blue stained wood. The blue stain fungi can come in through wounds or by beetles. For downed trees it could enter with ambrosia beetles. There are a number of different blue stain fungi that are common in hardwoods. One is *Ophiostoma piceae*. It can come in quickly once the tree has fallen. The white mottled rot could have been caused by a lot of different white rot fungi.’



Photo 1: Hackberry bowl and expanded view to highlight blue stain and the compartmentalization in the wood. (Note that the bright blue line in the bowl is epoxy filling a large void.)



Dr. Blanchette's response raised more questions for me: How does a tree make those zone lines? If not caused by a beetle, how does the fungi enter through a wound? What are ambrosia beetles? What other phenomena stain timber?

Over the next couple of newsletters, I'll attempt to answer some of those questions.

Shannon Morrison



Patterns in Nature - Bilateral Symmetry

An animal is bilaterally symmetrical if the right and left sides are mirror images of each other. The orange line shows how to divide a

spider into left and right halves. Animals with bilateral symmetry also have a 'head' and 'tail' as well as a 'top' and 'bottom'. Sensory organs are concentrated in the 'head' which encounters the environment first.



Bilateral symmetry arose in the late Precambrian. The first fossil that appears to have bilateral symmetry is that of *Kimberella*, a small, bottom-dwelling organism possibly related to molluscs.

Over 99% of animals are bilaterally symmetrical. Several hypotheses attempt to explain the advantage of this type of symmetry. Its main advantage over radial symmetry is appears to be related to motion. Bilateral symmetry allows for directed motion and for a rapid change of direction.

Next month's newsletter will explore radial symmetry.

Sources: Holló, G., Novák, M. The manoeuvrability hypothesis to explain the maintenance of bilateral symmetry in animal evolution. *Biol Direct* 7, 22 (2012). <https://doi.org/10.1186/1745-6150-7-22>

By Aleksey Nagovitsyn
(User:Alnagov) -
Arkhangelsk Regional
Museum, CC

Reflections on Outreach – Part 1

As someone new to the chapter, after only one year in the TMN program, and about six years part-time in Houston, outreach has offered me valuable opportunities to connect with the local community – of people, flora and fauna, and the environment. I've also found activities that are not necessarily labelled 'outreach' can provide that connection. It's a wonderful two-way street. Some examples:

My first-ever volunteer service was last year's Nature Fest at Jesse H. Jones Park & Nature Center. I had only been on the TMN training course for six weeks at that point and had not yet attended a chapter meeting. At the event, I met a number of long-standing chapter members, who were fun and welcoming, and made me feel part of the Gulf Coast TMN 'family'. I also encountered a fabulous location along Spring Creek, which I was able to get to know better at our later Freshwater and Forest Ecosystem field trip.

Jesse H. Jones Park is a regular outreach commitment – which we will do again this year in March – but a new opportunity came when we were approached by the Green Committee of Eagle's Trace, a senior living residence. We ran a stall there on pollinators, which was enthusiastically visited by many residents, some attracted by the lovely lantana pots as door prizes (thank you Jill Johse). One resident is also training to be a TMN, but in a different chapter, and we discussed opportunities for future talks etc. with the residents. It was a fun day – we volunteers (John Mustol, Pat Lewis and me) felt very appreciated and we have been invited back this year. That's an outreach success in my view!

Another first-time opportunity came in July when we ran a stall (indoors, thankfully, in a fabulous building at Schlumberger's (SLB) Completions Houston Product Center) about the TMN program for SLB's World Environment Day. We were visited by engineers in overalls and hard hats, office workers, and scientists with goggles round their necks! A truly diverse group of which many people showed interest in the program – though perhaps more for their teenaged or young adult offspring. Back to college? No thanks, seemed to be a general response from people working in a high-powered engineering facility. But spreading the word about the program is always a valuable activity. I have found myself doing that at many other non-outreach activities and workshops that I attend. When they hear about what we learn and the opportunities we are offered, keen amateur naturalists go wild for the chance to go back to college to learn about Texas Nature. Especially if I show them our textbook!

Rose McFetridge

TMN Member Book

New member Debra Currie has started a book club meeting at Edith L. Moore Sanctuary in the library conference room. Meetings are the first Wednesday of the month at 11:30 am. Please contact Debra for further information.

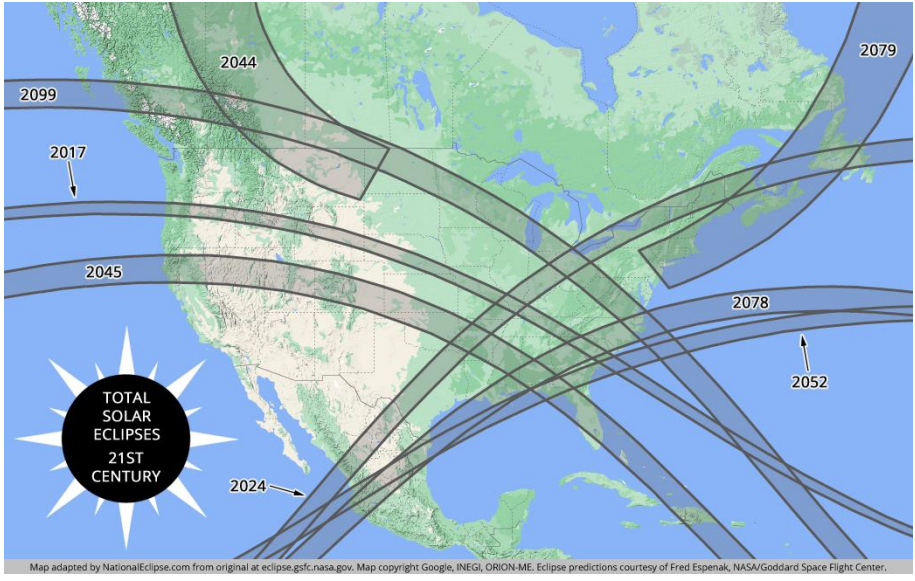
Texas Total Solar Eclipse - Monday April 8, 2024 Mid Day

It is said that a partial solar eclipse is interesting, an annular solar eclipse is very interesting, but a TOTAL solar eclipse is AWESOME!

What is a solar eclipse? When the moon comes between sun and earth blocking the view of the sun. The arrangement is: sun moon earth. A lunar eclipse arrangement is when the shadow of the earth obscures the moon; arrangement is sun earth moon. There are 3 types of solar eclipses: partial, annular, and total. A solar eclipse only happens during a new moon, while a lunar eclipse only happens during a full moon.

What's the big deal about the Total Solar Eclipse? Total Solar Eclipses can be a bucket list item for naturalists, along with experiencing the aurora borealis, or witnessing a volcano erupt. Next month on April 8, YOU will have an opportunity to share the experience of a TOTAL solar eclipse with 13 million of your favorite Texans & international eclipse chasers. However, Houston is NOT in the path of totality for the April 2024 eclipse. The path of totality is narrow and runs through Texas up I-35, but with a little planning, YOU can experience one of nature's greatest displays! You'll have to wait until April 14, 2200 (yes 176 years) for a total solar eclipse in Houston (most recent in Houston was 1878), so this could be your once in a lifetime opportunity. During the April 2024 total solar eclipse, the shadow of the moon will race across the US from Texas to Maine, approximately 1900 miles, in about an hour, at twice the speed of sound.

What is the difference between the October 2023 ANNULAR solar eclipse and the April 2024 TOTAL solar eclipse? As the moon revolves around the earth sometimes it's a bit farther away or a bit closer to the earth. When the moon is closer to the earth, it is big enough to completely block the sun (total solar eclipse); when the moon is just a bit farther from the earth, it's not quite big enough to block the entire sun, and a ring of sun shines from around the moon.



nationaleclipse.com

Are total solar eclipses “rare”? Total solar eclipses occur on planet earth about twice a year, but in very narrow bands, and on a planet with 70% water and lots of low population areas like Antarctica & Greenland, it’s uncommon for large groups of people to witness a total solar eclipse. On average on A PLACE on Earth, a total solar eclipse happens about every 377 years, so a total solar eclipse is a once in a lifetime event – unless you decide to become an eclipse chaser.

Lynn Travis

Sam, TNT, and the Moth Posse at Memorial Park

In town for the Texas Chapter of the Wildlife Society's Annual Conference, TPWD Urban Biologist Sam Kieschnick (aka sambiology) and TPWD Texas Nature Tracker Craig Hensley joined the Moth Posse for a fun evening of mothing at Memorial Park recently. Several students attending the conference came as well and enjoyed their introduction to mothing. Even though the night was a bit windy and chilly, the moths didn't disappoint. Here's a link to the FB live video:
<https://www.facebook.com/texasnaturetrackers/videos/1808373639678674>.



Left to right: Chalcedony Midget (Alex Smith); Dwarf Longhorn Beetle (Mary Spolyar); Gathering around the barrel. 24 species new to the park!