Fredericksburg Nature Notes



Newsletter of the Friends of the Fredericksburg Nature Center

January, 2024 Volume 5 Number 1

http://fredericksburgnaturecenter.com

Editor's Musings: Lonnie Childs

Dear Friends of the Fredericksburg Nature Center,

We hope that you had a wonderful holiday and as successful of a 2023 as we did at FFNC. We have already shifted focus and are looking forward to 2024— reflecting on our strategic plan, establishing goals, and creating detailed plans to achieve them.

One of our major objectives for the last couple of years has been to increase our membership levels, and frankly we have struggled to achieve that. We have endeavored to attract new members by increasing the value that we offer our community. In 2023, we reinvigorated our educational workshops and continued to implement improvements on the trails, at the bird blind, and in the gardens. We hope that you continue to appreciate the news, photos, and educational material that the newsletter brings you. The future offers even more value as we develop plans to advance our capabilities in all areas. Our outstanding volunteer corps provides half of the resources required to support our normal operating capability, but the other critical success factor is the necessary financial support to fund our frugal operating budget. If you can't volunteer, please consider becoming a member of FFNC and/or donating to our operating fund. Look for our year end letter detailing our successes and future plans, and/or go to page 15 with a link to our website. And how to join or donate.

Our Interpretive Center project steadily moves forward with the Conceptual Design phase underway led by Brandon Weinheimer of SKT Architects. We recently selected a General Contractor to provide preconstruction services during design and will be making an announcement on that shortly. We will soon interview candidates for Exhibit design/production to join our collaborative design team. In next month's newsletter, I will provide a more detailed review of our near-term efforts and schedule. We always welcome anyone who might want to volunteer on or contribute to this exciting project, so contact me at anytime.

Happy Nature Trails!

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Eastern Screech Owls are AMAZING creatures! If a mysterious trill catches your attention in the night, bear in mind the spooky sound may come from an owl no bigger than a pint glass. Common east of the Rockies in woods, suburbs, and parks, the Eastern Screech Owl is found wherever trees are, and they're even willing to nest in backyard nest boxes. Retired Texas Parks and Wildlife Department game warden and Master Gardener, Michael Mitchell, will take you on a journey to discover these amazing creatures of the night in a workshop presented by the Friends of the Fredericksburg Nature Center.

The workshop will take place on Saturday, January 13, 2024, from 1:00 to 3:00 p.m. at the AgriLife Extension Office located at 38 Business Court, Fredericksburg, Texas.

Michael is an avid "owl observer." Cameras have been set up in his backyard for years to monitor their actions, and during his presentation he will walk you through several annual cycles of the owls. He also uses videos and stills to explain the timelines of what occurs in their natural world. Be prepared - Sometimes nature is harsh, and things do not go as planned. This lecture demonstration is also geared to help you learn how to set up an owl nesting box and camera in your own backyard so you can personally witness exactly how amazing these nocturnal creatures are. Following Mr. Mitchell's presentation, FFNC volunteers will demonstrate construction of a Screech Owl box for the do-it-yourself inclined. Owl box construction plans will be provided to all attendees, as well as information on purchasing kits or finished boxes. Last, but not least, one lucky class participant will win a Screech Owl box as a door prize. Bonus: FFNC will also have a table full of used nature books for sale at the workshop. If you have attended one of our workshops in the past, you know how fantastic they are. YOU DO NOT WANT TO MISS THIS ONE!

Please register by emailing Gracie at gwaggener@flow-apps.com



OUR MISSION STATEMENT: "To enhance, protect and interpret the natural ecosystems of the Texas hill country while providing educational and quality of life opportunities for members of the community and visitors."

All FFNC Volunteers Proclaimed Volunteers of the Year!

On December 11th, FFNC held a Volunteer Appreciation Party to recognize our dedicated cadre of volunteers who are the lifeblood of our organization and the primary enablers of our nature center. We took a moment to smell the Shrubby Boneset (their aroma exceeds a rose) and recognize our accomplishments in 2023 and those who made it possible.





Photos by Patti Guin



More Volunteers!









Tom & Barbara Romano





"Volunteers don't get paid, not because they're worthless, but because they're priceless."

Sherry Anderson

Winter Volunteer Work at FNC

Fun Tuesdays at FNC

Typical tasks involve **gardening skills** and **trail maintenance**, but no experience is necessary. Use it as a learning opportunity. Work in whatever area you choose for as long as you choose. We work some and have a lot of fun outside in the beauty of nature. It's good exercise for the body and great therapy for the soul. If you would like to join us at the park, we would love to have you!

Work sessions are typically scheduled for Tuesdays at 9:00am. During the winter months, the Garden Crew will suspend until further notice. The Trail Crew will resume work sessions on January 9th and will work each Tuesday as weather allows.

Contact Gracie Waggener at gwaggener@flow-apps.com to receive a weekly email notification about scheduled work tasks for the coming week.



- Newsletter—write articles, editing and production
- Website—content management, website maintenance
- Membership management
- Programs

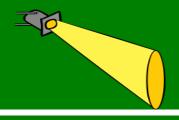
For more information about these opportunities, contact Lonnie Childs @ lonniechilds@utexas.edu



A new entrance path to the Pollinator Garden was recently completed to mitigate erosion and beautify the area.







Volunteer Spotlight

Barbara Romano

Barbara is one of our newest volunteers at FNC and arrives to her volunteer role via the Hill Country Master Naturalist class of 2023. She has quickly become a valued gardener at the Pollinator Garden where she also avails herself of the opportunity to learn more about native plant gardening and how to attract and support pollinators.

And now for a little history on Barbara. She arrived into this world in Fredericksburg where her grandparents lived but grew up in San Antonio, graduating from Thomas Jefferson High School. After high school, Barbara attended the University of Texas – Austin and graduated with a B.A. degree in Mathematics.

Post college, a career in the Air Force as an IT-Communications specialist followed which involved supporting a broad array of technologies ranging from com-

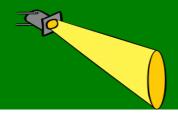


puters and networks to telecommunications and telephones. During this period, Barbara also married and had two daughters. Her Air Force assignments included stateside stints in San Antonio, Nebraska, and Virginia, followed by foreign assignments in Korea, and Naples, Italy where she enjoyed her association with the people and food. After 20 years in the Air Force, Barbara retired and took a Civil Service position working for the Army while continuing to live in Germany and Italy. Thanks for your service, Barbara!

Upon her retirement, Barbara pondered where to live and to what new purpose to apply herself. Her family considered continuing to reside in Italy during retirement. She and her husband had been visiting a 20 acre plot of land outside of Fredericksburg which her parents had purchased in the 1970s, and she had an epiphany that living on this rural plot amidst nature might make for a wonderful life. Fortunately for us, the magic of the Hill Country won out over the pizza in Naples.

In a quest to better understand the natural resources at hand, she solicited a visit from the Land Management Assistance Program (LMAP) crew (a free service provided by the Hill Country Master Naturalist chapter and led by FFNC Board member, Billy Guin) to assess her property and document the plant species and other resources along with potential issues and opportunities. This visit motivated her interest in enrolling in the Texas Master Naturalist class of 2023 to expand her knowledge about nature and particularly native plants. Subsequently, Barbara also became involved with the Fredericksburg chapter of the Native Plant Society of





Volunteer Spotlight

Barbara Romano

Texas (NPSOT) and now serves as Secretary of the chapter Board of Directors.

Following the lead of her father who was a vegetable gardener, Barbara is pursuing her interest in native plant gardening and also exploring and discovering the flora on her property. She is introducing new tree species and plans to plant milkweeds to attract Monarch butterflies. Barbara also intends to learn more about edible native plants.

When asked what does she enjoy the most about volunteering at FNC, Barbara responded that she appreciates the association with like-minded people who enjoy native plant gardening and the opportunity to learn more about pollinators and particularly Monarch butterflies.

Buon giardinaggio Barbara! Grazie!

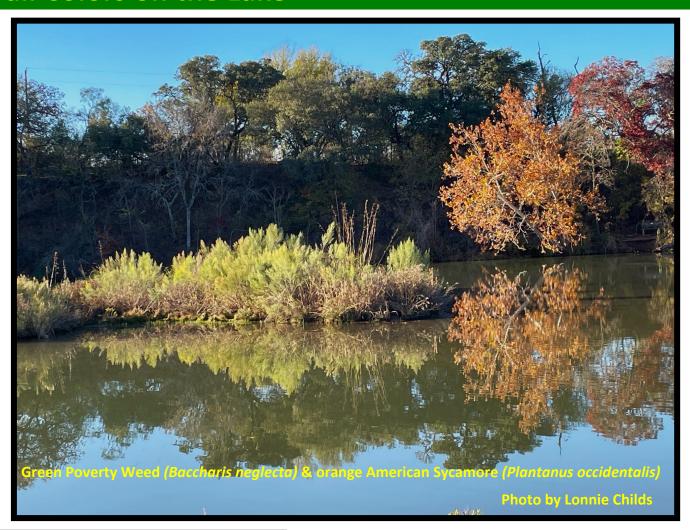






H. S. Jacobs

Fall Colors on the Lake



Belted Kingfisher Megaceryle alcyon

This cocky species can currently be seen flying rapidly along the length of Live Oak Lake & down the creek valley before landing on a perch. You likely will first hear its wild rattling call before sighting it. The species may also be seen perched on a bare limb, or hovering on rapidly beating wings before plunging headfirst into the water to grab a fish. Right click HERE & Open HyperLink to listen to it call.





H. Tuttle

Fall Colors Along the Trail



Photos by Lonnie Childs



Possumhaw (*Ilex decidua*) berries reflect the solar source of their energy.



The warmer environs of the sandstone grotto sustain the greenery of the Maidenhair Fern (Adiantum capillusveneris).



"I would like to paint the way a bird sings."

Claude Monet

Small Winter Birds at FNC

Cuties!

Juvenile Female Cardinal

Cardinalis cardinalis

Photo by Deb Youngblood





Black-crested Titmice
Baeolophus atricristatus
Photo by Deb Youngblood

Carolina Wren
Thryothorus ludovicianus
Photo by Dot Maginot





"Birds chirping around you is a beautiful realization that life is incredibly good. Let this sound be a gentle break in your routine."

Hiral Nagda

Winter Birds at FNC



House Sparrows (Passer domesticus)

A flock of this invasive species can be heard loudly chattering at the bird blind or mobbing the suet feeder.



Domestic Duck (Anas platyrhynchos domesticus)

Descended from the Mallard via human domestication.

Green-eyed Purple-tufted Oak Nuthatch

A new species recently discovered at FNC. It looks a little dazed & confused.

Photos by Deb Youngblood

What's Galling Our Oaks? A Tale of Wasps, Galls, and Ants by Lonnie Childs

Have you recently noticed pools of small reddish beads overlaying the ground under Post Oaks in particular? Their ubiquity and sheer numbers suggest some sort of punctuated natural phenomenon precipitated by some other natural stimuli. As another clue, I also found clusters of these red beads clinging to the undersides of fallen Post Oak leaves. Cutting open one of the beads revealed what appeared to be whitish colored larval or

pupal tissue. From past experience, I knew that it must be a gall of some sort, although I was more acquainted with the larger twig gall forms that range from warty knobs to paperbark spheres.

What are galls? They are abnormal growths found on leaves, twigs, or roots resulting from the stimulation of the plant's cells and caused mostly by egg-laying flies, mites, wasps and other insects or by infectious bacteria or fungi. In the case of insect induced galls, chemicals are released by the mother insect or the eggs which trick the plant bud into growing a specific form of gall and to provide necessary nutrients to the developing larvae encapsulated within the gall.

Galls come in diverse shapes and colors, each form specific to the causal insect and host plant. Oaks serve as great incubators for the developing insect larvae, and many insects have evolved a mutualistic relationship with specific oak species. Scientists have estimated that there may be 800 types of galls on north American oaks, with 700 of those resulting from **Cynipid Wasps.** The great variety of galls has led to some interesting names— oak apples, artichoke gall, oak acorn gall, horned oak gall, gouty oak gall, and **clustered oak mid-rib galls** (which appear to be our currently abundant variety inhabiting Post Oaks).

Lifecycyle. The lifecycle of Cynipid wasps are not well known, following is a general synopsis of what occurs according Texas A&M Forest Service. In spring and early summer, tiny wasps (all females) emerge from the fully developed woody galls on twigs or branches. These females then deposit eggs on buds in the larger veins on the underside of oak leaves. These eggs soon hatch and the larvae (tiny grubs) cause small, oblong, blister-like galls to develop in the leaf veins. By midsummer, the larvae in the leaf galls have matured and pupated. From these pupae, male and female adult wasps emerge which then mate and deposit eggs in young oak twigs. In the case of our currently abundant speies, the emergence occurs as the Post Oaks drop





"Nature will bear the closest inspection. She invites us to lay our eye level with her smallest leaf, and take an insect view of its plain. "

Henry David Thoreau

What's Galling Our Oaks?

their leaves in Fall causing the galls to release and fall to the ground also. I have found no emerging pupae yet but will continue to monitor the drying galls.

While walking the Live Oak Wilderness trail recently, I discovered another interesting phenomenon related to the oak galls. I spied a trail of leaf-cutter ants (Atta sp.) engaged in their regular routine of carrying incised pieces of leaf over their bodies like an umbrella. The leaves will serve as a "biobase" on which to grow fungi for the colony's own consumption. Surprisingly, the ants were also transporting a considerable volume of the tiny oak galls back to their colony.

What could be the purpose for ants to harvest galls? Ants are known to gather seeds as a food source. The seeds contain fleshy connective structures



Post Oak Gall Wasp *Andricus texanus* Photo by Kimberlie Sassan *innaturalist*

known as an *elaiosomes* which are rich in lipids and proteins. A scientific study revealed that ants are just as likely to harvest galls as seeds, thus suggesting that the gall tissue contains equally rich nutrients.

Are galls harmful to your trees? Although galls obviously do damage to plant tissue, none of the articles that I found suggested that the damage is very destructive or stressful for a healthy tree. My Post Oaks looked terribly stressed this fall, but the more obvious reason would be the long period of drought and not the overabundant gall population. As to why we have so many galls this fall (a "fall gall ball"), I could find no explanation. My speculation is that some combination of weather or other natural phenomenon triggered the abundant wasp population and breeding, but the mystery remains. Be aware that since galls survive on oaks, they

also contain high levels of tannin which would make them inedible and toxic.

Fun Fact: Tannic acids from galls combined with iron sulfate make a popular purple/black ink dating back to Roman times & used by biblical scholars, Leonardo da Vinci, & the US Postal Service.



Photo by Lonnie Childs



"Art is born of the observation and investigation of nature." Marcus Tullius Cicero

What's That Bill?



Bullock's Oriole Icterus bullocki

"Nimble canopy-gleaners of open woodlands in the western U.S., Bullock's Orioles dangle upside down from branches while foraging and weaving their remarkable hanging nests."

allaboutbirds.org

Bird Drawings & Photos by Bill Lindemann

In addition to founding FNC & FFNC, Bill was a geologist, birder, botanist, odontologist, writer, photographer, artist, and woodcarver. This new feature will showcase some of Bill's photos & attendant drawings. Enjoy!





"We make a living by what we get. We make a life by what we give."

Winston Churchill

Happy New Year!

Dues & Donations are Due in 2024!

At FFNC, we believe that 2024 will be even more successful than 2023. We have plans for trail improvements focused on safety, expanding our educational programming, garden enhancements, & furthering our plans for an Interpretive Center.

A large part of the formula for our success is your financial support.

Please consider becoming a Member of FFNC.
Our operations are funded by membership fees & donations.

<u>Donate to the Bill Lindemann Capital Fund</u> which will fund our future Interpretive Center project.

Go to https://fredericksburgnaturecenter.com/

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Go to http://fredericksburgNaturecenter.com/membership for more information

Comments, questions, or future newsletter submissions can be sent to Lonnie Childs, Newsletter Editor, at lonniechilds@utexas.edu