Fredericksburg Nature Notes



Newsletter of the Friends of the Fredericksburg Nature Center

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http://fredericksburgnaturecenter.com

Editor's Musings: Lonnie Childs

Dear Friends of the Fredericksburg Nature Center,

Our intrepid volunteers could use the dog days' heat as an excuse and retire to the air-conditioning, but they are to be congratulated for continuing on with our mission at the park. They are some no excuse naturalists!

Our Interpretive Center Advisory Committee held its first meeting, and we have already compiled a long list of potential services and features that might be incorporated into a future IC. We have also begun visiting area nature centers to gather ideas and learn about their successes. Thus far, our committee has visited Riverside Nature Center, Westcave Outdoor Discovery Center, and River Ranch County Park with a visit to the Phil Hardberger Nature Conservancy in San Antonio scheduled for this month. I have also visited a couple of other centers in my own travels. In addition to being learning ventures, the visits serve as great inspirations to forge ahead with our plans.

The FFNC Board also received a review of a draft conservation management for FNC developed by Environmental Consulting Survey. We provided feedback and made requests for items to be included in the final report. The plan assesses each of our seven habitats, identifies strengths and risks, and makes recommendations for improving them or mitigating the risks. We should have the final report in October, and look forward to sharing it with you and using it as a guide for future actions at FNC.

Happy Nature Trails!

Lonnie

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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"

FFNC Activities

Our volunteers continue to labor even through the dog days of August. We proudly completed a new entrance gate and arbor to the Pollinator Garden and will plant a vine species to cover the entrance and offer a floral invitation to visitors from the RV Park.

One of our next major projects will be to install a new, larger capacity watering system at the Hummingbird Garden located at the far end of the Live Oak Wilderness Trail. While we have planted drought tolerant plants, in this exceptional period, even they struggle to flower and serve as a consistent nectar source. Our partners with the Fredericksburg Parks and Recreation team will help us to transport materials to the site.

One of our talented volunteers, Trudy Eberhardt, is an artist and wood carver who shares her talents with us

and the Hill Country Master Naturalist chapter. Below is a photo of the carved sign that now adorns our native bee house at the Butterfly Habitat. Thanks Trudy!



Photo by Lonnie Childs



Photo by Jane Crone

Tuesday Fundays at FNC are always on! We gather every **Tuesday at 8:30am** at the trails, gardens, or the Bird Blind. 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.

Contact Gracie Waggener at gwaggener@flow-apps.com to receive a weekly email notification.

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Volunteer Spotlight



Tom Musselman

Tom became a dedicated volunteer on our FFNC Trail Crew in 2021. He and his wife, Kelly, have been generous supporters to FFNC, and we were pleased to have Tom join the FFNC Board this year. We are fortunate to be a part of his long record of community service. Editor

I was born and grew up in Houston during the 1950's and 1960's. I graduated from Centenary College in Shreveport, Louisiana, in 1974 and shortly thereafter moved to Fredericksburg where my mother had retired to in 1972.

After she passed away, I remained here and in 1976, became manager of two eating establishments, the Domino Parlor and the Gallery Restaurant and Bar. I got out of the food business in 1991 to attend Schreiner College to obtain my teaching certificate. I began teaching in 1992, received my master's degree in Education in 1998, and spent a majority of my 26 year career as a social studies instructor at Fredericksburg High School. I retired from teaching in 2018.



While a teacher, I also served on the Fredericksburg City Council from 2005-2010 and as Mayor from 2010-2012. I returned to Council in 2018 and served until 2022. I now sit on the City of Fredericksburg Planning and Zoning Commission.

Besides being a board member of FFNC, I am also on the board of the Hill Country Community Needs Council and a member of Gillespie County Retired Teachers Association.

I have been married to my wife, Kelly, a community volunteer and chamber ambassador, for forty years. We have a son, Karl-Thomas, age 37, who is a Justice of the Peace in Williamson County in Austin.

I became interested in the Nature Center through working with Bill Lindeman in the *Wings Over the Hills* nature festival when I was on City Council. My wife and I also used to walk our two dachshunds on the trails.



"I don't know what your destiny will be, but one thing I do know: the only ones among you who will be really happy are those who have sought and found how to serve."

Albert Schweitzer

Tom Musselman

Beginning in 2012, during spring break and summer vacations from teaching, I took on the task of tearing out our front lawn and replacing it with xeriscaping. With my wife's help in research and design, I put in native and drought tolerant plants and bushes, poured in umpteenth yards of mulch, constructed rock pathways, set up birdbaths and birdhouses, and decorated with eclectic yard art such as old wheelbarrows and watering cans, restored park benches, and fun wind features such as whirligigs and windmills. It continues to be a work in progress through maintenance and improvement with new plants replacing those lost to freeze or drought.

After retiring from teaching in 2018, and with my wife's urging to utilize my newfound gardening and land-scaping skills, I began volunteering with the Friends organization and eventually became a regular crew member on the Nature Trail. I joined the FFNC board earlier this year.

I find much satisfaction in working outdoors and helping with the upkeep of such a valued and treasured part of Ladybird Park. I also feel this is a good way to give back in the memory of naturalist Bill Lindemann, who started it all.

Bird Lover Tip of the Month

Lights Out Gillespie County!! The fall bird migration is about to start, so it's time to implement measures to reduce mortality in the billions of migratory birds that fly over Texas annually.

Full Fall Migration Period: August 15 – November 30 Peak Fall Peak Migration Period: September 5 – October 29

Following are some actions that you can take.

- Turn off all non-essential lights from 11:00 p.m. to 6:00 a.m. each night during migration season.
- Do not use landscape lighting to light up trees or gardens where birds may be resting.
- For essential lights (security & safety lighting), use the following dark skies friendly lighting practices:
 - > Aim lights down;
 - > Use lighting shields to direct light downwards and avoid light shining into the sky or trees;
 - > Use motion detectors and sensors so lights are only on when you need them;
 - > Close blinds at night to reduce the amount of light being emitted from windows.

For more information, go to https://tx.audubon.org/urbanconservation/lights-out-texas



"If you don't know history, then you don't know anything. You are a leaf that doesn't know it is part of a tree."

Michael Crichton

A History of LBJ Municipal Park by Clifford Ernst

For the purposes of our Conservation Management Plan, we went searching for some history on the park location and its historical uses. Our good neighbor, Clifford Ernst, who resides on his family farm adjacent to the park provided this account. Thanks Mr. Ernst!

Here are my recollections of the history of the park. I do not have exact dates but am stating what I remember.

In the late 1940s Gillespie County chose the site for an airport adjacent to the Tivydale Road (FM 2093) and State Highway 16S. At that time Mr. Tatsch, the owner, of the property which included the present-day "Tatsch House" did not want to sell just his field. He would only sell if Gillespie County purchased his entire place. For a while after the purchase, Gillespie County rented the Tatsch House to the Walter Pfiester family. At that time, the only access to the property was via Tivydale Road (FM2093).

The upper small dam with access across the creek was built in the early 1950s. Three picnic areas were built - the first one with a concrete picnic table near the creek northwest and down the hill from the Tatsch house, the second one with a concrete picnic table across the creek near the present-day Pavilon #4, and the third picnic area was also across the creek and south of the present day driving range. The third picnic area no longer exists.

During the 1950s, there was a period when Gillespie County allowed the operation of a small gravel quarry near the present-day Pavilion #5. I do not recall there being a dump on the park property. There were no livestock anywhere in the park after 1950. The Tatsch's probably had livestock in the 1940s

Access to the park was improved during the 1950s. Gillespie County agreed to pave the dirt road from State Highway 16S to the Ernst residence (our house) if the county could extend the road into the park. This was agreed to with a handshake - with no easement agreement.

In the 1950s, my family operated a dairy. At that time, the runway at the airport was only 2500 feet long. The southern part of the airport property was cultivated field. My father leased the field from the county, and we grew hay crops there. There was also a small field where the present-day baseball diamonds are located, and we leased that field. I plowed that field when I was in high school (1954 to 1958).

I did not live in Fredericksburg from 1962 to 1974 and missed some of the changes that occurred then. The big changes like the golf course, the swimming pool, and the Pioneer Pavilion came after the city of Fredericksburg took over the park from the county in 1968.

Lady Bird Johnson Municipal Park continues to improve and one of the best improvements is the Nature Trail. Thank you, Friends group, for all the time and talent that you continue to spend improving the park.

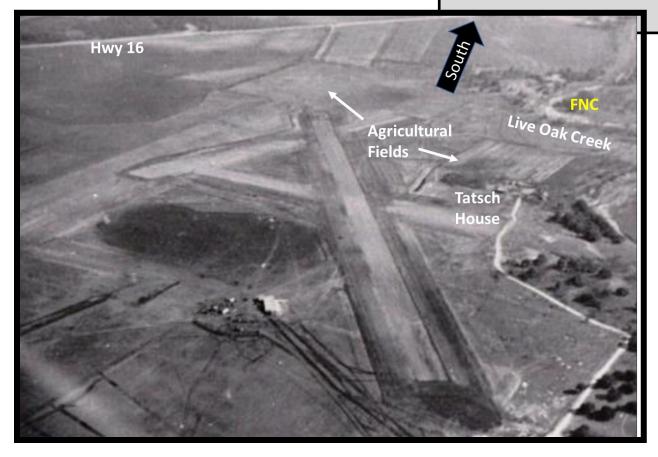


A History of LBJ Municipal Park



John Peter Tatsch House built in the mid 1800's

Airport under construction ca. 1947. Entrance road from Hwy 16 & dam are not yet constructed.





"The sun after the rain is much more beautiful than the sun before the rain."

Mehmet Murat Ildan

Damming Info





The **Live Oak Creek Dam** was built in 1968 by the city of Fredericksburg to create a lake as a recreational amenity. Our neighbor, Mr. Ernst, reports that he does not ever recall the water flow over the dam being this low. In his lifetime, he has never known Live Oak Creek to stop running. The worst drought year that he remembers was 1950 followed by 2011 and 2022 which is still a drought in process. While the creek is no doubt still flowing, the stream below the dam will soon have to rely on springs and seepage. Think rain. Pray for rain. Dance for rain. Whatever it takes!





Cool it!!

Photos by Lonnie Childs



"Hummingbird is the spirit of pure joy! She is the messenger of beauty and wonder, and she reminds us to taste the sweet nectar of life."

Unknown

Hoverin' at the Pollinator Garten

Hummingbird wings beat from 720-5400 times per minute when hovering, depending on the species. The avian acrobats can hover, pivot in place, and are the only bird species that can fly backwards while upside down.

How do they do it? About 15 million years, Hummingbirds evolved these capabilities to take advantage of the abundant nectar offered by flowering plants. Their flight capability results from their rotating shoulder structure which allows their wings to move in a figure eight pattern creating lift on both the up & down stroke.





Photos by Dot Maginot

Resting or guarding her territory? Humming-birds spend 80% of their time at rest, and yet they must feed every 15 minutes to support their ultra-fast metabolism. They do not have fat reserves to even sustain themselves through the night. Their nightly technique is to enter a state of torpor, similar to hibernation, which lowers their heartrate by 90% & conserves energy. They live always just one hour away from starvation.

Want to learn more about Hummingbirds? Watch the documentary, "Hummingbirds" narrated by David Attenborough & now streaming on Amazon Prime.



"Streams and mountains never stay the same. " Gary Snyder

Anchoring the Stream Bank







Eastern Gamagrass (*Tripsacum dactyloides*) is perhaps the most palatable of the bunch grasses. It produces dense, fibrous roots & rhizomes which make it a superb anchoring plant along stream banks. Although it prefers wet locations, it is drought tolerant. Live Oak Creek is host to nice stands of the species.

Jamaiican Saw-grass or Swampgrass

(Cladium mariscus ssp. Jamaicense)

This grass-like plant is actually a giant sedge that grows in wet areas along streams & ponds. It produces tough leaves with sawtooth margins that are capable of slicing your skin, the cause for its common name. The attractive rust colored seed heads persist all summer & aid in identification. This species inhabits an area from west Texas to Florida where it is the namesake for the phrase "River of Grass" given to the Everglades.



Photos by Lonnie Childs





"Communing with Nature is a lot harder when you're allergic to it."

Melanie White

Crawlin' & Flutterin' at the Pollinator Garten

Bordered Patch (Chlosyne lacinia)

The classis "Ugly Duckling"story—from creepy crawler to beautiful butterfly.







Gulf Fritillary
(Agraulis vanillae)

Queen (Danaus gilippus)
on Butterfly Milkweed
(Asclepias tuberosa)

Photos by Dot Maginot





"We hope that, when the insects take over the world, they will remember with gratitude how we took them along on all our picnics."

Bill Vaughan

Buzzin' at the Pollinator Garten

Beefly (Poecilognathus sp.) on Simpson's Rosinweed (Silphium simpsoni)

Note the bee's evolutionary adaptation of camouflage. They are well hidden when perched on many of the yellow Aster/Composite flowers.



Photos by Dot Maginot

Widow Skimmer

(Libellula luctuosa)

This is the FNC logo species. They are part of a group known as king skimmers. This species is found commonly in muddy substrates, or still bodies of waters such as ponds, lakes, streams, and creeks. They are predators that prey on other insects such as mosquitoes. They catch their prey using their legs and use their fangs to bring prey into their mouth





"The clearest way into the Universe is through a forest wilderness."

John Muir

Feature Story: The Bald and Stately Cypress

by Lonnie Childs

Before you hike the Live Oak Creek Wilderness down to the creek crossing, stop, look to the right, and then gaze upwards to the sky. You will be treated to the visage of a grand Bald Cypress tree, *Taxodium distichum*, the tallest tree species in the park and probably the Hill Country environment. Our proud specimen towers over the riparian area of Live Oak Creek and reigns as the arboreal royalty at FNC, although there are three larger specimens residing further up the creek near Pavilion #5.

Bald Cypress are a member of the *Cupressaceae* family of conifers which includes Junipers and Redwoods. It is a global family of 27-30 genera. *Taxodium distichum* (translating to "yew-like", "two ranked" for its two rows of leaves) is native to the swampy or riparian areas of southern North America. Its common name derives from its deciduous habit of dropping its leaves early in autumn and not sprouting new ones until late spring.

The **Pond Cypress** of southeastern US swamps is most often considered a sub-species of Bald Cypress, but some taxonomists classify it as a separate species (*Taxodium ascendens*). Far south Texas also hosts the more drought tolerant, but also riparian **Montezuma Cypress** (*Taxodium mucronata*) which most consider a separate species, but a few scientists also consider it as a sub-species of Bald Cypress.



<u>Distribution:</u> Gillespie County is on the northwestern edge of the distribution of this species in Texas. In the Hill Country, they inhabit the river and stream beds of the Balcones Canyonlands where they enjoy slightly cooler micro-climates, perhaps representing relict species of earlier, cooler Paleocene climates. From their presence along the Balcones Escarpment, you must travel 200 miles east to find their next geographic distribution in southeastern and eastern Texas along rivers and lining the man-made lakes around which they have colonized.

<u>Characteristics:</u> Bald Cypress are large, slow-growing, and long-lived arboreal species that can typically reach 50-100 feet tall with a crown that stretches 20-40 feet wide. The tallest known specimen in Virginia, is 145 ft tall, and the stoutest known specimen resides in Real County near Leakey with a circumference of 39 ft. Although most individuals live from 600-1200 years, there are two specimens in North Carolina and Florida that are aged at about 2,700 years old. Scientists recently discovered a forest of Bald Cypress buried in an exposed sand bank underwater in the Gulf of Mexico off the Alabama coast and have determined it to be over 50,000 years, which provides some rough idea of the age of the species. Bald Cypress are not only one of the



"Ancient trees are precious. There is little else on Earth that plays host to such a rich community of life within a single living organism."

Sir David Attenborough

Feature Story: The Bald and Stately Cypress

largest of our Hill Country species, but they are ecological elder statesman with tales to tell.

Bald cypress trees inhabitating swamps may grow conical, woody projections from the root system which project above the ground or water and are referred to as

"knees" (scientifically known as pneumatophores). Their function was originally thought to be to provide oxygen to the roots when growing in the low dissolved oxygen waters of a swamp. The scientific evidence for this function is scant, and when swamp-



dwelling specimens had their knees removed, they did not decrease in oxygen content and the trees continued to thrive. Another more likely function is structural support and stabilization in softer mud-bottoms. Note that our central Texas specimens growing in river beds do not typically grow knees but do grow massive above-ground root systems which are anchored in rock. My speculation is that the scientific verdict for whether trees sport knees for stabilization or oxygen is still out for study and deliberation.

<u>Cultural Uses:</u> Since their natural habitat along waterways or in swamps and lakes involves suffering "wet feet", their wood has evolved to be water-resistant which makes it a highly desira-

ble species for constructing waterresistant structures. It also makes for a beautiful landscaping specimen in the right application with its stately form and rusty colored fall foliage.

Ecological Value: Aside from its beauty, the greatest value of Bald Cypress involves their ecological contributions as a keystone species in riparian and swamp habitats. It is the most effective stabilizer and defender of waterway banks as it diffuses and slows floodwaters, traps sediments as the precursor to building the soil bank along the wa-





"There is always music amongst the trees in the Garden, but our hearts must be very quiet to hear it."

Minnie Aumonier

Feature Story: The Bald and Stately Cypress

terway, and serves as a filter of pollutants. Bald Cypress provide habitat for many species including wild turkey, wood ducks, and squirrels. Their branches provide nesting places for bald eagles and osprey. Rotting knees are used as nesting cavities by warblers. Many animals feeds on the seeds contained in their cones. Fish use their underwater roots and submerged logs as hiding and spawning sites.

Next time that you are hiking down the trail, give our reigning Bald Cypress a respectful nod, enjoy its stately beauty, and appreciate the fact that it has been making huge contributions to the local ecology since long before we were here and will continue to do so for long after we depart this earth.





Photos by Lonnie Childs



"Thankfully, Nature has no USB port or social media account!" Saje Anwise



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