

Fredericksburg Nature Notes



Newsletter of the Friends of the Fredericksburg Nature Center

April, 2022 Volume 3 Number 4

<http://fredericksburgnaturecenter.com>

Editor's Musings: **Lonnie Childs**

Dear Friends of the Fredericksburg Nature Center,

In addition to performing all the usual spring maintenance tasks on the trails and around the gardens, we have been a busy bunch of volunteers. Of note, we did finally mostly complete a long needed refurbishment of the Cactus and Hummingbird Gardens on the back loop of the Live Oak Wilderness Trail. If you venture back there, take a rest on one of the benches and appreciate the fresh look.

Outside of manual laboring, we held our first program in over two years on April 2nd. Local troubadour and storyteller regaled the crowd with entertaining and informative stories about Hill Country critters. Thanks to Gracie Waggener, Mary Ellen Terrell, Jane Crone, Nancy Persons, and all the others who made this event possible. On May 7th, we will hold our inaugural guided tour of the nature trails, so look for more information and how to register in this newsletter. The theme of our tour is "The Seven Micro-habitats of FNC" which showcases not only the great diversity of habitats and species that we nurture on our 15 acre tract.

On April 12th, we hosted the 2022 class of the Hill Country Master Naturalists at FNC for a lecture and guided tour of the trails, again featuring our great habitat diversity. We were excited to be hosting this class who are part of such a great program and are grateful for the support of the many Master Naturalists who have labored on our trails and gardens and also supported our educational program over the years.

Spring is the season of renewal, so renew your commitment to spend some time in Mother Nature's wunderhaus. Your spirit and body will say thanks.

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"

Volunteer Activities at FNC

The **Hummingbird and Cactus Gardens** on the back loop of the Live Oak Wilderness Trail received a much needed re-vamp over the winter and early spring under the leadership of Sharon Rodriguez. Plants were trimmed, transplanted, and added along with mulching. Contributing to the effort were (L-R) Carl Luckenbach, Sharon Rrodriguez, Billy Guin, Tom Hynes, and Tom Musselman



The Trail Crew recently reworked a downhill section of the **Vista Loop Trail** after enacting some erosion control measures. Contributing to the effort were Carl Luckenbach, Billy Guin, Tom Hynes, Frank Garcia, and Tom Musselman.



Photos by Lonnie Childs

April is National Volunteer Month

Thanks volunteers!

Tuesday Fundays at FNC are always on! We gather every **Tuesday at 8:30am** at the 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.

"Art is born of the observation and investigation of nature."

Marcus Tullius Cicero

The Appearing and Disappearing Rock Art

This amusing Rock Art recently appeared and then disappeared around various FNC locales. We hope that they all went to get homes. We have our own Banksy. Keep up the good work!



Photos by Lonnie Childs unless noted

Nature's News of the Weird

12 Fascinating Bird Behaviors

Right Click [here](#) & Open Link

Observations Along the Trail



The **Mountain Laurel (*Sophora secundiflora*)** near the Bird Blind burst out in bloom finally. Hurry by too see if you can still catch a whiff of its grape kool-aid aroma.

All photos by Lonnie Childs



Agarita (*Mahonia trifoliata*)

Blooming near the Butterfly Habitat

Common Buckeye (*Junonia coenia*)

Enjoying the Agarita nectar while giving you the evil eye(s).





*"In the spring, I have counted 136 different kinds of weather I
inside of 24 hours"*

Mark Twain

Observations Along the Trail



Pink Verbena is one of the few bloomers in numbers. Smaller flowers take less energy to get to bloom & must beat out the taller flowers in the competition for sunshine. When the big showy flowers don't show, look for the smaller dependables hugging the ground. You just need to slow down and look for them.

The Redbuds (*Cercis texensis*) were late this year but finally announced the arrival of spring. Note the Bumblebee coming in for a landing at the nectar bar.

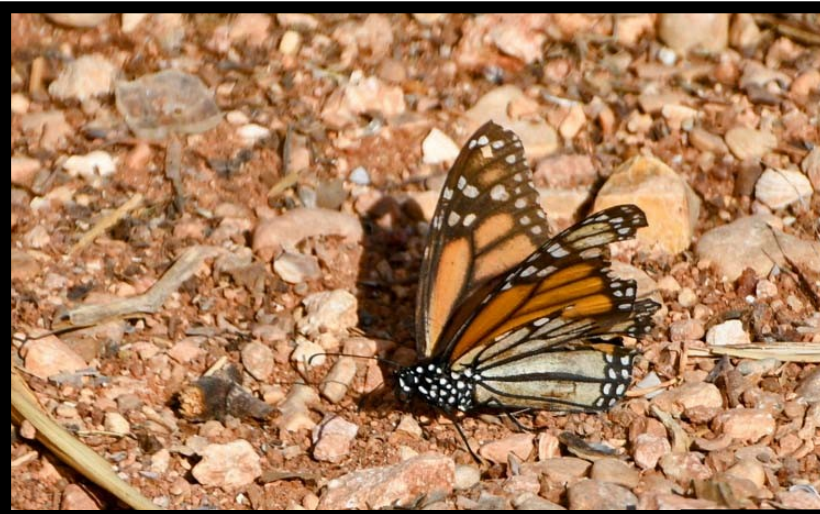


All photos by Lonnie Childs



"Metamorphosis has always been the greatest symbol of change for poets and artists. Imagine that you could be a caterpillar one moment and a butterfly the next." Louie Schwartzberg

Observations Along the Trail



Monarch (*Danaus plexippus*) at the end of life. Note the torn wing. It possibly is an individual who overwintered in Mexico & has arrived to lay their eggs in Texas. Let's hope they found an early Milkweed & were successful.

Bordered Patch (*Chlosyne lacinia*)

Their host plants are in the sunflower family including Sunflowers (*Helianthus*), Ragweed (*Ambrosia trifida*), Crownbeard (*Verbesina*), & Cockleburs (*Xanthium*). Imagine that—a beautiful butterfly that loves Ragweed & Cockleburs.



A **Red-ear Slider** lurks in the murk of Live Oak Creek. He looks like his shell could use a little scrubbing, but that would be quite a stretch for him!

All photos by Dot Maginot



"Spring is Nature's way of saying, Let's Party!"

Robin Williams

Some Blumen at the Pollinator Garden



Photo by Lonnie Childs

**Mexican Plum blossom
(*Prunus Mexicana*) left &
Pipevine Swallowtail on
blooms below**



Photo by Dot Maginot

**Coral Honeysuckle
(*Lonicera sempervirens*)**

Yaupon Berries (*Ilex vomitoria*)



Photo by Dot Maginot



Photo by Dot Maginot



*"...The hurl and gliding rebuffed the big wind,
My heart in hiding stirred for a bird,
the achieve of, the mastery of the thing."*

Gerard Manley Hopkins

Bird Happenings at FNC



Photo by Lonnie Childs



Photo by Dot Maginot

Dot Maginot captured this photo of a Purple Martin in flight. To watch them fly is awe inspiring as they gleefully chatter in seeming expression of their own joy at defeating gravity and rebuffing March winds. They are truly some of the most accomplished avian acrobats. Check them out at FNC!

Bird Lover Tip of the Month

Thanks to Mary Ellen Terrell for this tip!

The Hummers are here! For novice and expert feeders alike, here are some handy tips to remember that will attract more Hummingbirds and provide a safer and more hygienic feeding experience.

- 1) **Hang more than one feeder.** They can be territorial, and one bird may claim the feeder.
- 2) **Provide a nearby water source.** They need it mostly for bathing to maintain hygiene.
- 3) **Ward off ants and bees.** Hang your feeder with fishing line or investigate using a moat.
- 4) **Thoroughly clean all feeders regularly.** Mold and bacteria can sicken birds.
- 5) **Change the food frequently.** Nectar spoils quickly, particularly in our summer heat.
- 6) **Skip the red food coloring.** They will find the feeder without it, and the dye may be harmful to them.
- 7) **Keep your feeders up from spring through fall.** In our area, that means about mid-March to mid-October (two weeks after you see your last bird).

For more details, go to <https://bobvila.com/articles/hummingbird-feeder.er/>



“To walk in nature is to witness a thousand miracles”

Marie Davis

Coming Events at FNC

May 7th, Saturday

Guided Tour of FNC Trails

Time: 9:00-10:30am

Length: Approximately 1 mile

The tour theme will be “The Seven Micro-habitats of FNC” which the trails highlight along with whatever plants and animals that we may encounter along the trail.

Tour Leader: Lonnie Childs, President of FFNC

Difficulty: Easy to Moderate There are a few difficult, but short sections.

Things to Wear & Bring: Wear good hiking shoes, comfortable clothing, & a hat. Bring a bottle of water & a hiking stick if needed.

Location: Meet at the entrance kiosk at the FNC parking lot across from the LBJ Municipal Park office.

How to Register: Send an email to info@fredericksburgnaturecenter.com



What do you call various groups of animals?

Murder of **Crows**

Wake of **Vultures** (while feeding)
Committee of **Vultures** (when in flight)
Kettle of **Vultures** (as a group)

Nursery of **Raccoons**

Flock of Gaggle of **Geese**
Skein of **Geese** (in flight)

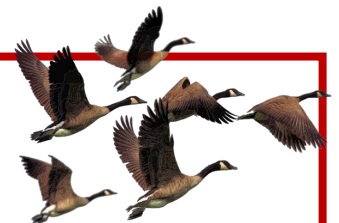
Roll of **Armadillos**

Flutter of **Butterflies**

Badling of **Ducks**

Convocation of **Eagles**

Intrusion of **Cockroaches**





“What is a fish without a river? What is a bird without a tree to nest in?”
Jay Inslee

Feature sStory: What is the Value of a Habitat? Priceless! **By Lonnie Childs**

Many of us have seen the Mastercard advertisement where they preview a litany of items that you can purchase with your card and then end the sequence with an experience upon which a price cannot be affixed. The natural world offers a corollary analogy when we try to place a value on our natural resources. Yes, we can value in monetary terms singular natural resources such as timber allotments, mineral deposits, and oil or gas reserves. We price out grazing leases and now even sell Carbon credits supported by land that is left in a natural or semi-natural state for the purposes of carbon retention. But what is the value of a functioning, resilient ecosystem or habitat? It’s kind of like trying to understand the worth of a healthy body. Priceless.

What is a habitat? The term can be applied at two levels in the natural world. At the **Species level**, we define it as *“the natural environment of an animal, plant, or other organism which provides food, water, shelter, and the opportunity to reproduce.”* In this context, we talk about Bird habitat or more specifically, Golden-cheek Warbler habitat.

On a more macro scale, the concept of **Habitat** is interchangeable with **Ecosystem** which is *“an assemblage of animals and plants together with their abiotic (i.e. physical) environment.”* Based on a defined set of characteristics, we might identify a natural area as Riparian, Prairie, or even a Cedar Break habitat which are three habitats represented at FNC. Indeed, our featured theme at FNC, which makes it so special, is the fact that we harbor seven different habitat types in only a fifteen acre tract.

What is biodiversity? In 1980, the conservation biologist, Thomas Lovejoy, coined this term to represent the variety of life in the world or in a particular habitat or ecosystem. Its acceptance replaced the usage of the phrase “species diversity” as a richer expression of the concept.

Scientists can assess the biodiversity of a particular habitat and use it as a quantifiable measure of the health of that habitat. Although biodiversity is not evenly distributed around the earth (i.e. tropical habitats are the most biodiverse), still we can perform species surveys of a particular habitat for comparison purposes amongst similar habitat examples, and over time assess whether the biodiversity of a specific habitat



Riarian Habitat



“Nature is the mother and the habitat of man, even if sometimes as a stepmother and an unfriendly home.”

John Dewey

Feature Story: *What is the Value of a Habitat? Priceless!*

is increasing or decreasing by performing periodic specific surveys. Decreasing biodiversity in a habitat indicates that the health of that habitat is declining.

What is the relationship of Habitats and Biodiversity? Habitat health and resilience is inextricably linked to Biodiversity and vice versa. Loss of habitat results in loss of Biodiversity, and equally important, the loss of a keystone species can negatively impact the natural processes of a habitat. As an example of that phenomenon, when wolves were extirpated from Yellowstone in the 1920’s, the Elk population exploded because of the elimination of its natural biological control (i.e. wolves). As a result, the increasing Elk population decimated the vegetation and threatened succession of the tree population while also creating boom/bust cycles of starvation within the Elk population. e

The main point that I would re-emphasize is the strong link between Habitats and Biodiversity. We cannot afford to lose either. Much has been written about Habitat loss over the years, but the mutualistic relationship between the two has increasingly come into focus in more recent decades. The resounding mantra has become **Loss of Habitat=Loss of Biodiversity**

Ecosystems Services—a method for valuing Habitats. In 1981, the concept of Ecosystems Services was presented by scientists, Paul and Anne Ehrlich, as a method to better understand and articulate the foundational importance of habitats to human life. Ecosystem Services have been variously defined as

“the benefits human populations derive, directly or indirectly, from ecosystem functions.”

“the conditions and processes through which natural ecosystems, and the species that make them up, sustain and fulfil human life.”

“the direct and indirect contributions of ecosystems to human well-being.”

The UN Millennium Ecosystem Assessment (2012) utilized this framework for evaluating the health of global ecosystems which subsequently established its prominence in the scientific world as an important concept.

Biodiversity at FNC

Habitat Types	7
Wildflowers	265
Birds	180
Butterflies	100
Odonates	50



Prairie Habitat



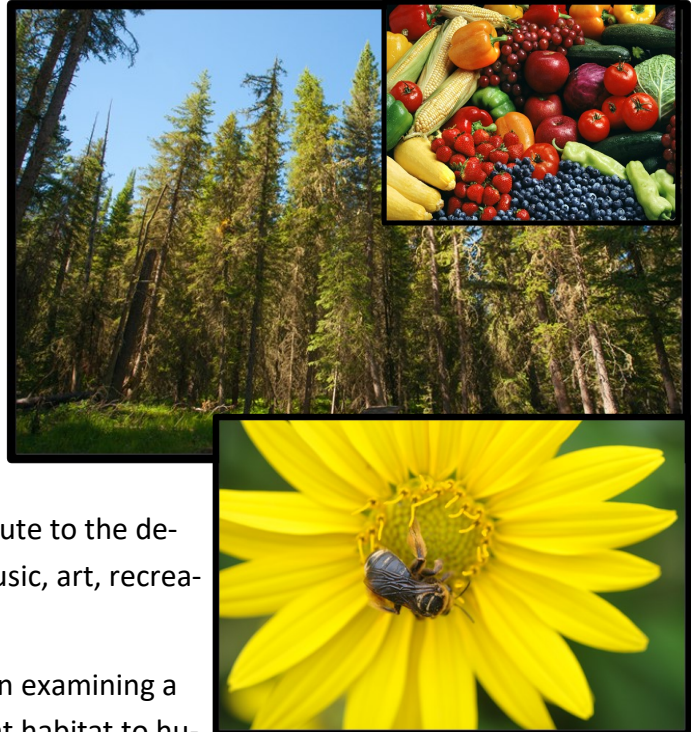
“Conservation of any endangered species must begin with stringent efforts to protect its natural habitat...”

Dian Fossey

Feature Story: *What is the Value of a Habitat? Priceless!*

Ecosystem Services can be broken into four different categories.

1. Provisioning Services - any type of direct benefit to people that can be extracted from nature - food, drinking water, timber, fuel, etc.
2. Regulating Services - basic services that make life possible for people. Plants clean air & filter water, bacteria decompose wastes, bees pollinate flowers, & tree roots prevent erosion.
3. Supporting Services – fundamental processes that sustain basic life forms - photosynthesis, nutrient cycling, soil creation, & the water cycle.
4. Cultural Services - non-material benefits that contribute to the development and cultural advancement of people – music, art, recreation, nature bathing.



Scientists or amateurs alike can use this framework when examining a habitat to assess and appreciate the contributions of that habitat to human life and culture. For purposes of simplicity, amateur naturalists do not have attempt to dissect the habitat value down into one of the four categories, but rather can utilize the approach to provide a new perspective for appreciating that habitat.

All habitats and ecosystems offer some value to humans, some more than others. But in all cases, **healthier, more resilient Habitats provide higher outputs of Ecosystem Services**. Riparian habitats perhaps afford the greatest worth to humans with services from all four categories. But even a Cedar Break offers significant services such as erosion control, timber (fenceposts!), and berries for gin. I’m not sure which category Cedar Fever fits in.

My call to action for you is this. On your next hike through FNC or any natural environment, try to view it through a new set of lens that allow you to appreciate it in a new way. Recite the contributions that it makes not just to people, but to the rest of the natural world.

What else can you do to support Habitat preservation? Join us at FNC for some habitat restoration exercise, or create a functioning habitat in your backyard that mimics the natural world. I’ll write on that subject next month and highlight the work of Doug Tallamy who advocates for the “Home Grown National Park.”



"A walk in nature walks the soul back home." -

Mary Davis



Crossvine (*Bignonia capreolata*)

Photo by Lonnie Childs

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**Comments, questions, or future newsletter submissions can be sent to
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