Fredericksburg Nature Notes



Newsletter of the Friends of the Fredericksburg Nature Center

February, 2022 Volume 3 Number 2 http://fredericksburgNaturecenter.com

Editor's Musings: Lonnie Childs

Dear Friends of the Fredericksburg Nature Center,

We're already a month into 2022 and moving forward with actions from our Strategic Plan. The Trail Crew has continued with maintenance and improvements while the Gardeners will be into spring cleaning by early March. We had originally planned to conduct some brainstorming sessions in February to begin to define the scope of our proposed Interpretive Center but have moved them back to March due to the recent Covid surge. We are also thrilled to be renewing our Nature Series program in early April with more to come.

At the Butterfly Meadow, Bluebonnet rosettes appeared with last October's rains, and we have insured some level of spring bloom by providing supplemental water over the winter. We may have one of the few healthy populations in the area if the rains don't quickly show up. It's not often that you think about drought in winter, but that has been the case this past season. We did spot one Redstem Stork's Bill in bloom recently which piques my anticipation of spring much more than Punxsutawney Phil.

Travis Audubon reports that Purple Martins have appeared on the upper Gulf Coast, so we are watching for their arrival with great expectation. The typical wintering bird populations have been puzzling this year with fewer sightings of Cedar Waxwings and Robins, and the Goldfinches have only recently shown up at backyard feeders. Some suggest that last year's ice storm may have disrupted their normal feed sources resulting in shifts in feeding patterns. Others posit that the warmer temperatures may have provided plentiful food sources allowing for the delay in coming to feeders. Only Mother Nature knows at this juncture.

Plan to visit the trails and gardens in the coming months. I guarantee a new spring discovery every day Finally, thanks to the many who have responded to our membership drive. There is still time to renew!

Happy Nature Trails!

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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

Winter Projects at the Park

The **Gardening teams** have taken a well-deserved hiatus during the winter months as there is not much to do in this period of dormancy. They will resume in March, so get ready to volunteer!

Trail maintenance never ceases so the **Trail team** has been working bi-weekly on various projects. We have installed a new drain system to prevent minor flooding with its attendant mud deposits in the Bird Blind booth. Of course, we have not had a decent rainfall opportunity to test it. We are currently implementing some erosion remediation along the west Vista Loop trail. Next on the agenda is a clean-up and revamp of the Cactus Garden.

In December, we re-seeded the Butterfly Bench meadow with a successive variety of wildflowers after building berms and adding a temporary irrigation system. We have not seen germination of the early blooming species yet but have seen good germination and sustenance in the existing Bluebonnet seed bank. Look forward to a nice spring photo in the Butterfly Bench with a royal blue background.

Thanks goes to the Bird Blind team who faithfully keep our feeders full of delicious seed!

Nature Series Programs to Resumell

After a long interruption due to Covid, we are pleased to announce the resumption of our Nature Series programs this spring.

Save the Date! Join us for an entertaining evening on **April 2** as we welcome Bandera musician and storyteller, **Lee Haille**, who will regal us with tunes and tales. This will be an outdoor program and attendance will be limited. More information with how to register will be forthcoming in our next newsletter.

Guided Tours: We will initiate monthly guided tours of FNC beginning in the 2nd half of March. These will be Saturday morning tours led by FFNC docents. Look for details and registration info in the March newsletter.

Tuesday Fundays at FNC are always on! We gather every **Tuesday at 8:30am** near Pavilion #1 to split up into work parties on 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.



"The heart has its reasons, of which reason knows nothing." Blaise Pascal

Happy Valentine's Day!









Name this picture.

We were preparing a Valentine's Day Card and chose this image from Mother Nature as the cover. Even Mother Nature has a soft heart underneath that prickly exterior.

I need some help with the headline. The following titles are what I've come up with so far. Can you think of something more heartfelt and a little softer?

"Love Hurts"

"Even a Prickly Pear has a heart"

"What's the Opuntia of Love?"

"I only have spines for you"

"Won't you be my Valenspine?"

"Love is a many splintered thing"

"Heartfelt has a whole new meaning"

"Love is just an Ouch away."

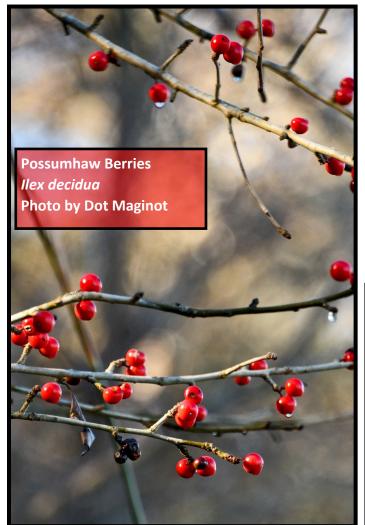




"Wilderness is not a luxury but a necessity of the human spirit." Edward Abbey

Observations Along the Trail

It's not the season for flowers and lovely vegetation, but the dawn of spring renewal is just around the corner. In the interim, seize the opportunity to discover the small even abstract details that, without vegetation to obscure your view, await your discovery. Enjoying the smaller beauty of nature breeds patience, wonder, and mindfulness.



Redstem Stork's Bill Frodium cicutarium
Photo by Dot Maginot



Various forms of Lichen, an Algal/Fungal organism, with Ball Moss (*Tillandsia recurvata*) on a Mesquite trunk.. Photo by Lonnie Childs



"If you truly love nature, you will find beauty everywhere."

Laura Ingalls Wilder

Observations Along the Trail—Sycamore Trees

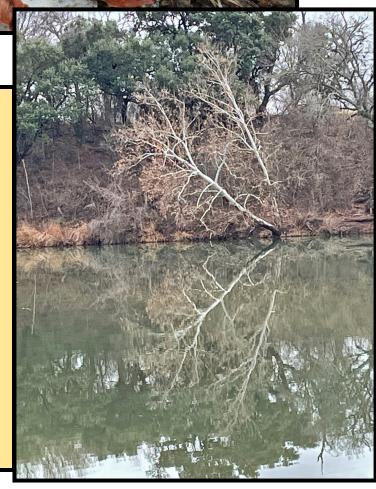


Photos by Lonnie Childs

Above, last year's leaves from a **Sycamore Tree(Plantanus occidentalis)** on the way to becoming this year's compost. Mother Nature recycles and reuses. The distinctive Sycamore at right marks the end of the Live Oak Spur Trail—"The Leaning Tree of Lady Bird"

Some Sycamore facts:

- > Known as American or Eastern Sycamore
- > Inhabits 2/3 of eastern Tx to the east coast
- > Grows to a larger trunk diameter than any other native hardwood
- > Grows in low moist riparian areas
- > Wood is suitable for furniture & flooring

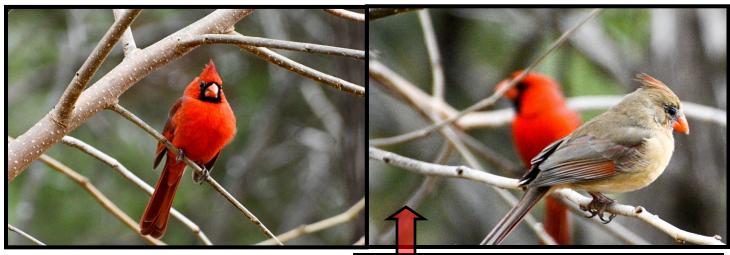




"In order to see birds, it is necessary to become a part of the silence."

Robert Lynd

Bird Happenings





Our constant **Northern Cardinals** (Cardinalis cardinalis) were out in numbers on this day. Dot reports counting 8 males & 2 females at the Bird Blind.

Another year-round regular at the feeders, **Black-crested Titmouse** (*Baeolophus aristocratus*) which translates to the small-crested aristocrat.





"There is a way that nature speaks, that land speaks. Most of the time we are simply not patient enough, quiet enough, to pay attention to the story." **Linda Hogan**

And Now For Some News of the Duck

Bird Feeder

Tip of the Month

Many of our local citizens enjoy feeding the domesticated ducks near the low-water bridge. It's a great treat for the kids and grandchildren. Please help educate your friends and family that a loaf of white bread is highly detrimental to the health of our duck denizens. See the suggestions for healthy alternatives. Feed them well and feel good yourself.

Thank you for not feeding us bread



Why Not?

Bread makes our tummies hurt and makes us ill. Bread does not contain the right nutrition or calories that we need to survive. It makes us think we are full and then we don't eat the food we need.

It also pollutes our water and causes nasty surface algae, which kills our fish friends and gives us diseases.

What Should We Eat?

Half cut seedless grapes, chopped lettuce, birdseed, peas, corn, and oats.



This Northern Pintail (Anas acuta) duck

has decided that he enjoys wintering with our local flock of domesticated ducks better than his own kind. John Terry, winter resident and local birder, reports that *e-Bird* records indicate that this probable individual has wintered here for at least 5 years. Either he is from the shallow end of the gene pool and is terribly confused, or he is a clever fowl who has learned that hanging with this crowd will provide regular feeding opportunities from humans. Or maybe he is just the proverbial Odd Duck!



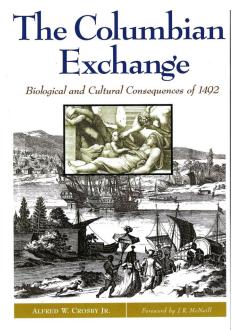
If we don't plant the right things, we will reap the wrong things."

Maya Angelou

Feature Story: Invasive Plants at FNC

by Lonnie Childs

In the global discussions today by scientists who are sounding the bell warning about the loss of habitat and biodiversity in our natural land-scape, one of the primary cited causes is the introduction of invasive floral and faunal species. Since the early stages of human civilization, as mankind migrated around the world, we have carried plants and animals with us. With the expansive European exploration and settlement beginning in the 16th century, the phenomenon known as the "Columbian Exchange" ensued which carried many European species to the Americas (ex. livestock, wheat, fruit trees, etc.) and in turn carried back to Europe many of our most popular vegetables (ex. tomatoes, potatoes, peppers, corn, etc.). The human enabled migration of species around the globe accelerated with our advancements in mobility and continues today. One of my personal eye openers was to visit Hawaii years ago to marvel at the gorgeous vegetation only to learn later that a large portion of it was introduced from other lands.



In the plant world, while many species were intentionally brought along as food sources, others were unintentional hitchhikers hiding in bags of

valued grains and grasses or attached to the furry hide of livestock. Large numbers of species that we consider as noxious weeds today were just such unwanted hitchhikers—henbit, bastard cabbage, or straggler daisy. If you have a manicured lawn you hate straggler daisy. Ironically, in a turn of opinion, native plant enthusiasts have actually now embraced straggler daisy as a naturalized ground cover! The curious lives of plants.

Many other invasive plants were brought intentionally to the US to solve agricultural problems such as erosion issues (Tamarisk and River Cane) to improve livestock forage (King Ranch bluestem and Johnsongrass), or as new agricultural products (Chinese Tallow— oil source), but subsequently became problems as they spread invasively and choked out native species. Botanical solutions with unintended consequences.

Another significant motivation for the import of foreign plants was the nursery trade. Gardeners are always looking for a new plant with unique characteristics and sex appeal. Many of these plants proved to be well behaved and were not considered invasive. Others easily adapted to the their environs and spread outside the bounds of their new gardening homes into the surrounding natural landscape. Numerous examples of this happening exist including Nandina, Japanese Ligustrum, Chinaberry, and Japanese Honeysuckle.

What is the definition of an "invasive plant"? According to a 1999 Presidential Executive Order (really) and later adopted by the state of Texas, the official definition of an invasive species is: "Invasive species means an alien species (not native to that ecosystem) whose introduction does or is likely to cause economic or environmental harm or harm to human health." Other typical characteristics of an invasive species include rapid reproduction and spread, and persistence over large areas. Invasive species succeed due to environmental conditions favorable to them and the absence of biological controls that would normally regulate their populations. In other words, they were transported to botanical utopia—a great new environment with



"A weed is a plant that has mastered every survival skill except for learning how to grow in rows."

Doug Larson

Feature Story: Invasive Plants at FNC

(continued)

Chinese Tallow

nothing to eat, infect, or compete with them.

Several other clarifying comments are in order. Many alien (Non-natives) species have been brought to the US and are well-behaved and do not become invasive. We also have native species such as Juniper which have aggressively spread to the detriment of other species, because the environment was degraded in some way to favor them (i.e. agricultural practices) and/or their natural biological control (fire) was eliminated.

At FNC, we are fortunate to not suffer from too many invasive species, and they have not taken a significant hold on our landscape. The fact that we have a healthy, resilient natural landscape that has remained untouched for many years provides some defense against invasive species. Our dense biodiversity allows the environment to fight back against incursions. Our risk is that Live Oak Creek runs through the middle of our preserve and enables a natural distribution vector for upstream invasive species. Waterways in urban environments serve as stark indicators of the invasive species problem. Check out Town Creek behind Mamacita's restaurant, and you will find a riparian area choked by towering Chinaberry and Chinese Ligustrum trees.

Here are some of the invasive plants that we have found at FNC or to which we are at risk.

Disclaimer: The Texas Department of Agriculture controls the "official" list of invasive plants in Texas. The species that I highlight are generally recognized by many scientists and other botanical organizations as invasive.

Chinese Tallow (*Triadica sebifera*) This tree originates from China of course (avoid plants with China in their name!) and grows and reproduces prolifically from seed or roots in the southeastern US. Ironically, it is a highly useful plant in Asia as a producer of industrial oil, soap, and honey. Because of its fall color and handsome stature, it has been one of the most popular landscaping trees in the Houston area. However, Chinese Tallow has massively invaded the Gulf Coase plain, especially in areas of disturbed soil.

The prevailing myth is that Ben Franklin imported Tallow

seeds as a potential oil producer and is thus responsible for this environmental debacle. However, subsequent genetic analysis reveals that our current strain of invasive Tallows derive from seeds imported to the US by federal biologists in 1905 (yes, our own scientists were often the source of invasive imports!).

In this area, the cold temperatures have mostly kept Chinese Tallow in check, and you do not find it sold in the nursery trade here. However, we have one individual growing along the creek that no doubt floated in at some point. Being nestled in the warmer creek bottom has kept them alive thus far, even through last years ice storm and despite my hopeful thoughts. Its' location makes removal highly problematic.



"The best time to plant a tree was twenty years ago. The second best time is now." (But not a Chinese tree!) Chinese proverb

Feature Story: Invasive Plants at FNC

(continued)

Japanese or Chinese Ligustrum (*Ligustrum japonica or lucidum*) Two more Asian species brought in to the US for their evergreen, waxy foliage and creamy blossoms. They escaped cultivation and now are considered invasive in the southeastern US. The Japanese species grows into a shrub while the Chinese variety makes a 30 foot tree. While we have luckily not found these species in our rich riparian zone yet, it represents prime habitat for these species, and we will have to continue to survey for it.

Chinaberry (Melia azedarach) Another Chinese species (getting the picture?) that was imported into the south as an ornamental tree in the late 1700's-early 1800's, became very popular in horticulture, and capitalized on the temperate climate. Who didn't have a Chinaberry Tree in the neighborhood of their youth conveniently located to supply the Chinaberry Wars?

Chinaberries spread from their plentiful berries or roots to form dense thickets with trees up to 50 feet tall. They have almost no value in our natural landscape. All parts of the plant are poisonous. Some birds and cattle can eat the berries and subsequently spread the seed, but the purple flowers are not palatable to bees and butterflies. Their decaying leaves even negatively alter the chemical composition of the soil.

We possibly had some individuals growing on the sand bar thicket which was wiped out by the 2018 flood. However, this species is one to vigilantly watch for as it is prevalent in our area, and berries no doubt wash downstream frequently.

Nandina or Heavenly Bamboo (*Nandina domestica***)** One more Asian species gone wild in the southeastern US. Unfortunately, for all of these Chinese invasives, we are located just at the western edge of their naturalized distribution, but they still survive here.

Nandina was brought to the US in the 1800's and became an extremely popular ornamental shrub due to its attractive foliage, upright form, bright red berries, and hardiness. The berries are actually poisonous to birds, but it is believed that migrating birds may tolerably ingest small amounts and spread the seed. Growers now advertise cultivars that are sterile and do not produce berries or root spread. Nandinas are not true bamboos but are classified in the Barberry family.

Sadly, Nandina grows profusely in the ecologically important Barton Creek Greenbelt in Austin. At FNC, an individual plant grows on the Live Oak bank along the Live Oak Trail. We plan to remove it this year to curtail its growth and spread downstream.









"A society grows great when old men plant trees whose shade they know they shall never sit in."

Greek proverb

Feature Story: Invasive Plants at FNC

(continued)

Japanese Honeysuckle (*Lonicera japonica*) is a woody perennial, evergreen to semi-evergreen vine that can be found trailing or climbing over other vegetation and smothering it in dense mats while girdling saplings.

This eastern Asian native was first introduced into North America in 1806 in New York and readily naturalized. It has been planted widely throughout the US as an ornamental, for erosion control, and for wildlife habitat. In a recurring theme, Japanese Honeysuckle is now considered invasive throughout the southeastern US.



We have a dense mat of it covering trees and shrubs on the

Vista Oak Trail near the Bird Blind. The uneducated visitor will think what a beautiful vine and aroma. Wrong! You can plant our native Coral Honeysuckle as a great substitute without the attendant ecological harm

These five examples of locally invasive plants just scratches the surface of all the possible candidates which could plague us—Vitek (Chaste Tree), River Cane (prevalent along the Pedernales), Tamarisk (huge problem along the Rio Grande), and running Bamboo species to name just a few. Again, our healthy and resilient riparian habitat at FNC helps fend off some of these invaders. The geographic fact that Live Oak Creek traverses several miles west of Fredericksburg allows for avoidance of urban runoff from residential landscapes which might harbor invasive plants. But still, we remain vigilant in keeping watch for evidence of unwanted species.

What can you do to help? Educate yourself, and commit to not introducing invasive species.

- 1. I would always advocate for utilizing native plants in your landscapes for many reasons. Increased purchase of native plants will encourage nurseries to grow and offer more native species.
- 2. If you find a plant that you must have, first ensure that it is well adapted to our climate and soils. Next, check to be certain that it is not invasive.
- 3. If you currently have invasive plants, please consider replacing them over time.
- 4. Recognize that the actions that you take in your home gardens can actually impact the natural landscape around you. Plants and animals do not respect property lines and governmental boundaries.
- 5. If you really take up the banner against invasive species, you can become a Citizen Scientist and report the presence of invasive species, for more information, go to https://www.invasives.org.

Other resources about Texas Invasive species.

- To determine if a species is invasive: https://www.texasinvasives.org/invasives_database
- For alternatives to invasive plants:
 - >Edwards Plateau Ecoregion...Invasive Species https://npsot.org/wp/fredericksburg/invasives/
 - > Austin Grow Green booklet: Native & Adapted Plant Guide for Central Texas
 - https://www.austintexas.gov/watershed protection/publications/document.cfm?id=198301
- > Native Plant Replacements for Invasive Species courtesy of Deedy Wright and Kerrville NPSOT
 - https://npsot.org/wp/kerrville/files/2022/02/Native-Replacements-Kerrville-22.01.29-3.pdf
- Resources for Learning More About Invasive Plants courtesy of Deedy Wright and Kerrville NPSOT https://npsot.org/wp/kerrville/files/2022/01/21.09.01-Invasives-Committee-Resource-Document.pdf



"Of all the paths you take in life, make sure a few of them are dirt."

John Muir



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