

# Fredericksburg Nature Notes



## Newsletter of the Friends of the Fredericksburg Nature Center

April, 2021 Volume 2 Number 4

<http://fredericksburgnaturecenter.com/>

### Editor's Musings: **Lonnie Childs**

Dear Friends of the Fredericksburg Nature Center,

Spring is in the air along with a touch of summer heat already. Who's complaining after an ice storm and a lingering pandemic? Although Bluebonnets did not answer the clarion call of Spring this year due to the lack of rainfall, nonetheless, the small flowers that frequently go unrecognized are blooming and await your attention (see p. 10). Go walk the Vista Loop Trail, focus on the earth below, and you will find plenty to dazzle the eye. Nothing can top the renewal of Spring to brighten your spirits.

In the feature article of this issue, I write about the imperative to continually introduce our next generation of youth to Nature so as to make the spiritual connection that will inspire them to perpetually protect our natural wonders. Some may find my tone too strong, but who will argue with the benefits of a life immersed in Nature? Please take my core message to heart. What better place to introduce our local children to Mother Nature than at the Fredericksburg Nature Center?

I have consistently put out the call for articles and photos, and Virginia Sawin has answered the call. Read her interesting article on the mysterious creatures that you might find in your garden soil. It might take some of the yuck out of your response when you find one. Thanks to Virginia for leading the way!

FFNC is wholly dependent on the generosity of volunteers and supporters with their time and funds. In this issue, we recognize a few who donated in honor of Bill Lindemann and others who financially supported the creation of a resilient understory at the Bird Blind. We applaud those who share our vision and demonstrate their commitment.

Happy Nature Trails !

*Lonnie*

### In this issue:

- Volunteer Efforts & a Ribbon-cutting
- *Notes for Spring Gardeners* by V.L. Sawin
- Volunteer Spotlight—Laura Grant
- Birds, Blooms, and Butterflies are Arriving
- Feature Story: *Take 'em to the Woods* by Lonnie Childs
- Bird Feeder Tip of the Month
- Acknowledgement of our Supporters





**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 Work at FNC

### Butterfly Habitat

Our volunteers are in the midst of installing a new and improved irrigation system at the Butterfly Habitat. Following that, we will be installing some new plants to attract even more butterflies.

### Bird Blind

We continue to fill in the understory area with new plantings to enhance its beauty and add to the bird habitat.

### Trails

We will be installing some way-finding markers soon to direct hikers and steer them away from "cut-throughs." We also have a team working on creating identification signs for major plant species along the trail.

### Pollinator Garden

Typical Spring cleaning, weeding and trimming is well underway. The ice storm made for a little extra trimming this year!



**Join us for a Ribbon-cutting Ceremony at our new bridge on Tuesday, April 27th, at 11am.**

**We will be joined by members of City government and the Chamber of Commerce.**

**All are welcome!**



## Guest Article: Notes for Spring Gardeners by V.L. Sawin, PhD

As you start your gardening this spring, there are some things you might find helpful. There are a number of creatures you may uncover as you start to dig and turn the soil. Probably most common are the **larvae (grubs) and pupae of Beetles**. If these develop to the adult stage, many of them will be hungry and start to dine on your veggies! When you turn them up in the soil, you might put the grubs in a shallow dish, and leave them for the birds. They will really enjoy them and will spare you any damage from the adult Beetle's voracious appetite.



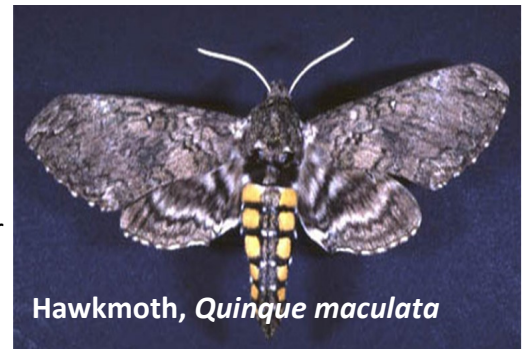
Grubs: Beetle Larva



Hornworm Pupa  
*Manduca quinquemaculata*

Another creature found in the soil in the spring is a **Hornworm pupa**. Both the tomato and tobacco Hornworms are very similar in appearance, and both feed on tomato (or tobacco) plants. The tobacco Hornworm is more common in the South, and the tomato is more common in the North. Both will consume tomato, pepper, eggplant and potato plants. Given the chance, the adult moth (**Hawkmoth, *Quinque maculata***) will emerge from

the Hornworm pupal state and be ready to mate and lay eggs on your plants. These eggs will then hatch to become the voracious green worms that consume tomato and related plants.



Hawkmoth, *Quinque maculata*



Hornworm parasitized by  
Braconid Wasp

Fortunately, there is another creature that will help protect your plants – a tiny **Braconid Wasp**. When the female finds a nice fat hornworm, she inserts her ovipositor and deposits a number of eggs. The first effect is to "freeze" the hornworm. It hunches up and stops moving or eating. The eggs hatch and the larvae of the wasp consume the internal structures of the Hornworm, and then they extrude pupal cases and go through their slow conversion from larva to adult form. They emerge leaving the empty

shell of the Hornworm and go on to find mates and another Hornworm on which to deposit their eggs.

If you find an egg case on a branch of a shrub or tree, you have hit the jackpot! Each small cell represents the egg of a **Praying Mantis**. When the egg hatches, the immature mantis emerges from its "shell" and starts searching for food – anything that moves! If you have put the egg case in an enclosed jar or terrarium, you will very shortly find only one rather large mantis remaining. It is best if you put the egg case in your garden where the young can start consuming any other



Praying Mantis egg case on twig.



*"Those who find beauty in all of nature will find themselves at one with the secrets of life itself."*

L. Wolfe Gilbert

## Notes for Spring Gardeners (continued)

by V.L. Sawin, PhD

creatures instead of each other!

Now, just one more helper for your garden – the **Wolf Spider**. These are relatively large spiders and may appear fierce, but they are very active predators for your garden and are definitely beneficial! Protect them! They will bite if harassed, but the bite is not poisonous. Just leave them alone, and they will consume many of the insect pests in your garden. The females are particularly interesting. With luck, you may find a female “dragging” an egg sac or covered with babies that have jumped on for the ride!



Wolf Spider

Wolf Spiders do not damage homes or threaten human health. They may bite, but only if threatened. Because of their large size, Wolf Spiders intimidate people and could be a nuisance in large numbers, but they do eat insects so are considered beneficial.

Enjoy your garden!

Thanks to Virginia for this enlightening article identifying the pupal and larval mysteries in our garden. Submitted articles and photos are welcome and appreciated by the editor. This is your opportunity to become a published author or photographer. Send them to [lonniechilds@utexas.edu](mailto:lonniechilds@utexas.edu)

# Nature's News of the Weird

**New Feature!**

**Bringing you the  
Humorous, Strange, &  
Awesome Stories  
From Mother Nature**

Texas has over 40 species of Cicadas, including some species of so-called “periodic cicadas” that have a 13 year life-cycle.

*“Giant Brood of Billions of Insects Set to Emerge in US in Mass Synchronized Event”*

Right click [here](#) & “Open Hyperlink” to learn more about the year of the Cicada.

Thanks to Errol Candy for this submission. Send me your stories.

## The Queen B in a Season of Repose



*Lupinus texensis* Photo by Lonnie Childs

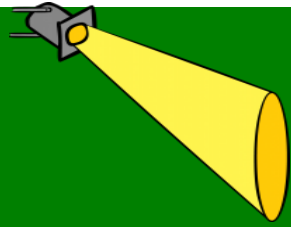


*Lupinus subcarnosa* Photo by Lonnie Childs

Did you know that Texas has 5 species of Bluebonnets, and we have 2 in the Nature Center? The larger, showier *L. texensis* at left is the species that dominates our local landscape. We also have the smaller Sandyland Bluebonnet (*L. subcarnosa*) which is mostly found east of IH35. This year individuals can be found on the sandstone bluff above the creek along Vista Loop trail and on Live Oak Trail near the dam. In 1901, the Sandyland Bluebonnet was designated as the original state flower. In 1971, the Legislature christened all 5 species by simply naming the Texas Bluebonnet as the state flower.

Bedecked in royal blue gown, crimson fringed, topped with a crown,  
My majesty in the Spring bloom is fully conveyed.  
But this year the noble burden cannot be borne, I will not sit my throne,  
With no moisture for the sprouting, no rain for the growing.  
Let the lesser denizens of Kingdom Plantae pretend to the regal role,  
They have their own magnificence, overshadowed by my fame.  
Look to the others so long ignored, for the beauty is there.  
And remember that Spring will return anew with my throne in waiting.

Mira Flores



# Volunteer Spotlight

## Laura Grant

*Although she has spread her talents and dedication around the various project locations at FNC, Gracie has most appreciated her efforts at the Pollinator Garden. In her own words, Laura tells us a little bit about herself.*

*Editor*

**Background:** I was born in Farmington, NM which is in the northwestern corner of the state. I was surrounded by 3 different rivers and the rocky mountain range. My childhood was spent exploring New Mexico and Colorado. My family often would pack a picnic lunch and go looking for arrowheads and pottery shards or exploring the old mining towns in the area. When I was 18, I moved to Lubbock to attend Texas Tech University. I received my master's degree in Physical Therapy from the Texas Tech Health Sciences Center in Odessa. I returned to New Mexico and was a practicing physical therapist for over a decade. In 2016, my family and I were given the opportunity to move. We chose Fredericksburg because of the beautiful scenery, good people, and the many opportunities to be part of the community. It was a great choice.

**Nature:** I have been interested in Nature for as long as I can remember. I collected hundreds of "rolly pol-lies" while I was growing up and would often watch the ants in our backyard to see where they were going. The bats at Carlsbad caverns were one of my favorite activities when I was in New Mexico, and I have been to Old Tunnel several times to watch the bats exit the tunnel. It is amazing to me how many bats can be in one small area. Several months after we moved to Fredericksburg, I saw a flyer for the Master Naturalists, and I quickly applied. I knew a bit about New Mexico ecology, but not much about Central Texas. The bats, bugs, and flowers of the area are amazing, and I still love watching the ants work.

**FFNC:** I started working at the FNC in 2017. I began working in the Pollinator Garden hoping to learn more about the plants that are native to the area. I am starting to learn the plants in the gardens, but I have a long way to go before I feel confident identifying plants outside of FNC. I tend to work in the Pollinator Garden, but have helped at the Bird Blind, Butterfly Habitat, and the Cactus Garden. I have helped with 3rd grade day at the Park and with the repair of the trails after the flood in 2018. One of my favorite activities is taking my friends through the park and showing them all of the wonderful gardens and ecosystems that are there. They are always surprised at the diversity we have at Lady Bird Johnson Park.





“  
“Love the world as your own self; then you can truly care for all things.”

Lao Tzu

## Some Common Avian Friends Dining at the Lake



### Great Blue Heron (*Ardea Herodias*)

- ⇒ Largest North American Heron
- ⇒ Commonly found in area lakes & streams
- ⇒ Only weighs 5-6 lbs due to hollow bones
- ⇒ Flight posture is craned neck & trailing legs
- ⇒ Moves slowly but specially shaped neck vertebrae allow them to quickly strike prey
- ⇒ To hear its call, Right Click [Here](#) & Open Hyperlink

### Great Egret (*Ardea alba*)

- ⇒ Fly slowly but powerfully: with just two wing-beats per second their cruising speed is around 25 miles an hour.
- ⇒ Almost hunted to extinction in early 1900's for plumes, sparking conservation movements & first laws to protect birds
- ⇒ Siblicide occurs in nests where large chicks frequently kill their smaller siblings
- ⇒ To hear its call, Right Click [Here](#) & Open Hyperlink



### Mallard (*Anas platyrhynchos*)

- ⇒ The most familiar of ducks, Mallards occur throughout North America & Eurasia in parks & wilder wetlands and estuaries
- ⇒ Most domestic ducks come from this species
- ⇒ Estimated flight speed is 55 miles per hour
- ⇒ To hear its call, Right Click [Here](#) & Open Hyperlink



**"I think nature's imagination is so much greater than man's, she's never going to let us relax. "**

**Richard Feynman**

## Birds Going and Coming



Male



Female

### American Goldfinch (*Spinus tristis*)

Common visitors to our winter feeders preferring sunflower seed and nyjer. They are almost exclusively vegetarian. The male molts twice yearly—the above male molted in late winter and is showing his mating feathers. They will migrate north in the next month and are late breeders. not nesting until June-July. Right click [Here](#) & Open Hyperlink to hear their calls.

### Scissor-tail Flycatcher (*Tyrannus forficatus*)

These birds will be arriving at any moment from their breeding grounds in Mexico. They often congregate in large numbers to migrate. As a child, I could never understand how they could catch a fly with their tail and transfer it to their mouth! Right click [Here](#) & Open Hyperlink to hear their calls.



Source: allaboutbirds.org  
Photos by Bill Lindemann





**"The fairest thing in nature, a flower, still has its roots in earth and manure."**

**D. H. Lawrence**

## **Be on the Lookout for these Early Spring Butterflies**



**Henry's Elfin (*Callophrys henrici*)  
enjoying the nectar of a Texas Redbud**



**Juniper Hairstreak (*Callophrys gryneus*)  
enjoying the nectar of a Texas Redbud**



**Pipevine Swallowtail (*Battus philenor*)  
enjoying the nectar of Standing Cypress**



**Pipevine Swallowtail (*Battus philenor*)  
Larval stage prefers Pipevine as Host**



**"Every day, I supply oxygen for up to 4 people. Don't you think I'm worth saving?"**

**A Tree**

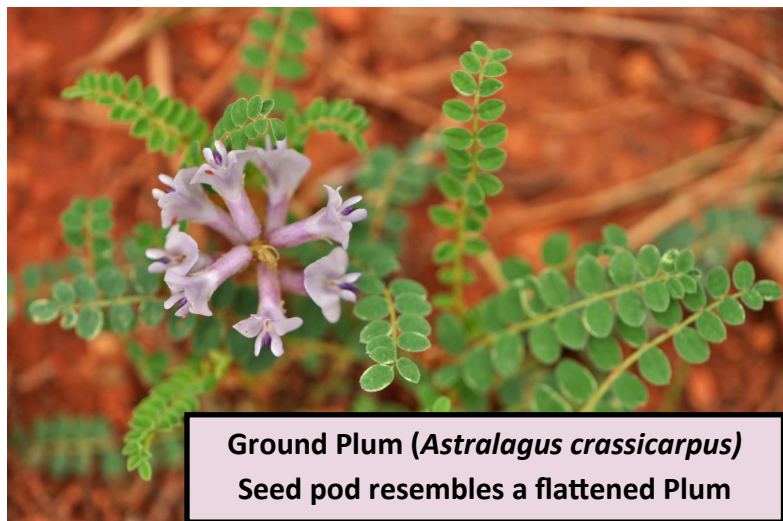
## **Early Spring Bloomers Along the Vista Loop Trail**



**Fringed Puccoon (*Lithospermum incisum*)**  
Puccoon from an Indian word



**Fragrant Mimosa (*Mimosa borealis*)**  
Small prickly shrub



**Ground Plum (*Astragalus crassicus*)**  
Seed pod resembles a flattened Plum



**False Nightshade (*Chamaesaracha sordida*)**  
In the Nightshade Family

**Photos by Lonnie Childs**



**"We do not inherit the earth from our ancestors;  
we borrow it from our children."**

**Wendell Berry**

## **Editorial: *Take 'em to the Woods* (REVISED) by Lonnie Childs**

People with an affinity for Nature will generally tell you that seminal experiences in their youth established their connection to the natural world. The diversity of Mother Nature plays out in the variety of those experiences—an encounter with an animal, the beauty of a botanical wonder, or a mountaintop vista that displays the wonders of the natural world. If they were lucky, they might have had an adult mentor to offer additional knowledge, add context, or most importantly convey the sanctity and value of the natural world. Their epiphany may have been unrecognized at the time, but the reverential seed was planted for future germination. With a timely drop of inspiration, the love of Nature would emerge.

My own Nature awakening began at an early age. We lived on the outskirts of a small town south of San Antonio which allowed us to be surrounded by open fields. The open areas had probably suffered the ravages of agriculture but were repairing themselves in their own way and offering us natural wonders to explore. There were Sunflower forests that towered over a 6 year old, and a field full of Devil's Claw (*Proboscidea louisianica*) seedpods that we found strange but aggravating when they clung to our shoes. Large, cleared areas were populated by Harvester Ant mounds whose flurry of activity proved interesting, although they also suffered our childhood cruelty at times.

No doubt attracted to the ants, the crowning species that fascinated us most were Horned Toads that still roamed numerously in those days. What miraculous creatures they were—our own miniature dinosaurs. My Mother always laughed about once reaching into my blue jean pockets before washing them only to encounter a confused Horned Toad—my apologies to the poor creature. My initial experiences with Mother Nature could be described as being at the micro level, species oriented, limited by the intellectual abilities of a 6 year old, but no less important. My fascination with the natural world was born.

Opportunities to elevate my interactions with Nature were about to receive a real step-up with a trip to Colorado and the towering, Rocky Mountains. By the 1950's, with increased prosperity, improved automobiles and highways, and the advent of travel trailers and pop-up campers, the West was opened to adventuring families who were motivated to visit our magnificent national parks.

In 1959, towing a home-made camping trailer, my family set out to visit Rocky Mountain NP. I recall hiking through alpine forests which I had never known to see a glacial lake although I could not quite fathom what the glacial part was. We toured Mesa Verde NP where we were completely enthralled by the cliff ruins and the myth of the *Lost Ones*. Today of course, we understand that an environmentally ravaged landscape lacked the resilience to withstand a prolonged drought. In the 1200's, the effects of even a relatively small civilization could be quite harmful but were little understood.





***“Plans to protect air and water, wilderness and wildlife are in fact plans to protect man.”***

***Stewart Udall***

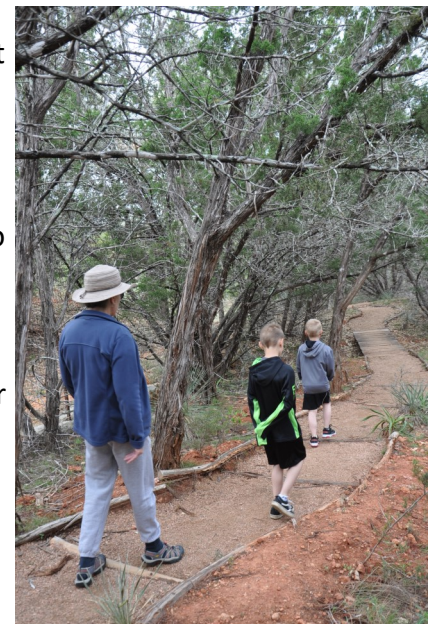
**Editorial: (cont'd)      *Take ‘em to the Woods*      by Lonnie Childs**

The highlight of my mountain experiences were of course the mountains themselves. Snow-capped peaks have a way of making adults feel miniscule, even more so for a young child. The scale and breadth of the Rockies were simply unfathomable. The climax involved a drive up the harrowing road to the summit of Pikes Peak where the view was both disconcerting and mesmerizing, despite the altitude sickness. Mother Nature was displaying all of her grandeur, and I was having my macro level view of the natural world.

Reflecting back, I know that I am prone to embellishing the moment. But no matter, I can say without reservation that my connection to the Mother Nature was unconsciously confirmed with that trip to the mountains. I have wanted to explore her wonders ever since. Fortunately, my parents offered me many more opportunities throughout my youth to explore Nature. Even when we later moved to the suburbs of Houston, my friends and I had empty spaces populated with towering pines (“the woods”) where we could play uninhibited and enjoy the outdoors. Being in “the woods” became a natural and pleasurable experience for me.

**Why am I waxing nostalgically about my youthful experiences with Mother Nature?** Because I and many experts with much greater insight than I are concerned that Mankind is losing its connection to Nature one child at a time. Today, approximately 82.5% of the US population lives in urban environments which comprise about 3.5% of our landmass, and these numbers are accelerating. According to The Trust for Public Land, *“more than 100 million people in the United States—including 28 million children—don’t have access to a park within a 10-minute walk of home.”* In Texas, with our lack of public lands and large geographic landmass, access to state parks is limited and not accessible to many urban youths. There are emerging programs like Cities Connecting Children to Nature (CCCN) and the Texas Nature Conservancy’s programmatic work on learning to build sustainable cities that offer pockets of Nature and provide hope for the future. Still, the risk is real that many children will not have the opportunity to connect with Nature. What they do not encounter, they cannot understand, and they will not love.

These statistics may not resonate as much with we lucky Hill Country inhabitants. We have the Fredericksburg Nature Center, Enchanted Rock SP, other public spaces, and private lands that provide access to natural spaces. We are surrounded by natural beauty, but are we taking advantage of our natural bounty? Are we working hard enough to introduce our youth to Mother Nature’s bounty?



**Why is connecting to Nature so important?** The eminent evolutionary biologist, E.O. Wilson, wrote a book in 1984 entitled, *Biophilia*, which introduced us to the concept serving as the book’s title. According to Encyclopedia Britannica, *“the biophilia hypothesis (also called BET) suggests that humans possess an innate tendency to seek connections with Nature and other forms of life.”* More specifically, Wilson defines Biophilia as “the urge to affiliate with other forms of life”. He posits that *Homo sapiens* and our ancestors lived in Nature for hundreds of thousands of years evolving in the natural world and adapting to survive in that environment. Without our connections to that evolving world and its natural cy-



**"The earth is what we all have in common."**

**Wendell Berry**

## **Editorial: (cont'd) Take 'em to the Woods** by Lonnie Childs

cles, we would not have survived as a species. As a result of that co-evolution, our connection to the natural world is literally hard-wired in our brains.

However, the seeming benefits of technology and human civilization have begun to erode those natural bonds between Man and Nature. Life lived inside buildings and self-contained automobiles and the adoption of a world view experienced through an electronic screen presents few opportunities for communing with Nature (although the *Our Planet* series is very inspiring!). The challenge becomes obvious—less screen time, more Nature time. Otherwise, we become a “fish out of water.”

***Last Childs in the Woods—Saving Our Children From Nature-Deficit Disorder.*** Richard Louv wrote this important book in 2005 which investigates the relationship of children and the natural world in current and historical contexts. He defined the term, “Nature Deficit Disorder”, to describe the potential negative effects to individual health and the social fabric as children spend increasing time indoors to the detriment of physical interaction with the natural world in unstructured, solitary settings. Louv cites research from practitioners of many disciplines pointing to an array of physical and mental problems in youth associated with a nature-deficient childhood.

*Last Child in the Woods* presents the outline of the problem and creates the imperative for action. His subsequent book, *The Nature Principle* identifies seven basic concepts that can help battle the risks of Nature Deficit Disorder by tapping into the restorative powers of Nature. By pursuing his ambitious ideas, he proposes that we can improve mental and physical health; build smarter and more sustainable businesses, communities, and economies; and ultimately strengthen human bonds.



**What are the benefits of “Nature Bathing?”** The Japanese pioneered the term of “forest bathing” as expressed in the phrase *shinrin-yoku*, which represents their strong belief in the healing powers of immersion in Nature. Is spending more time in Nature some kind of New Age hocus pocus or is there scientific evidence for the benefits? The simple answer is the latter. Intuitively, we all know that a walk in the woods calms the nerves, but there are numerous scientific studies that demonstrate that spending some time under the calming influence of the natural world has health benefits. In one study, a 20 minute walk in Nature resulted in a 13% decrease in the stress hormone Cortisol which in term helps boost the Immune System. Additionally, study participants experienced a 5.8% decrease in heart rate.

Beyond the benefits to the physical body, mental benefits accrue from immersion in Nature. “One study of a group of *Outward Bound* participants found they performed 50 percent better on creative problem-solving



***“Teaching a child not to step on a caterpillar  
is as important to the child as it is to the Caterpillar.”***  
**Bradley Miller**

## **Editorial: (cont'd) *Take ‘em to the Woods* by Lonnie Childs**

*tasks after three days of wilderness backpacking,”* according to the Association of Nature and Forest Therapy. I could go on ad nauseum citing medical studies that purport the health benefits resulting from increased Nature time, but I speculate that we could all agree that Nature is a great antidote for the stresses of modern life and particularly for our youth.

**Take ‘em to Woods.** Our natural world is challenged today with issues related to climate change, loss of diversity, and loss of natural habitat. There is much debate about these issues and how or whether to address them. At some level, a course correction is in order, and it will take generations to implement. If we lose our connection to nature, we lose our will to be the stewards of the natural world that will be required for us to rehabilitate Mother Earth.

I am an optimist! I look at our youth and recognize that they will have the resolve and intelligence to continue the work that our generation only began to realize was needed. But we have to educate them, and take them to the woods (or the prairie, nature center, garden...) to make the connection.

Take your children, your grand-children, or a friend’s children. Remember what I said earlier— what they do not understand, they will not love, and they will not preserve.

Along the way, stop to admire the details. The sum of all the small beauties in Mother Nature is much greater than all of Yellowstone or the Grand Canyon combined. Bend down to show them the flower that absorbs the sun’s energy and produces the primal food for all of life. Show them the caterpillar that eats that plant and metamorphosizes into a butterfly that will pollinate the flower that fed its young. Listen for the melodious bird that will feed on the caterpillar or butterfly and maybe become some other creature’s meal or may spread the seed of a tree and on and on... Explain the web of life, and how we are part of that web. Make sure that they have their “Nature moment” that plants the seed that will motivate them to plant the seed for the next generation.

### **Notes:**

**The opinions expressed are the Editor’s.**

**FFNC does not advocate on specific environmental issues and policies. Our mission is simply to educate our youth about the wonders of nature and help them to connect with it. Their knowledge and love of nature will provide them a foundation for making their own decisions on the issues in the future.**

**One of FFNC’s signature programs since 2004 has been 3rd Grade Day. Each year, over 200 children from Fredericksburg Elementary School have visited the FNC for nature walks and presentations on various topics. Due to the Covid pandemic, we were forced to cancel the program in 2020 and 2021. We hope to reconvene the outing in 2022 and create more “Nature moments” for future classes.**







*"I cannot do all the good that the world needs. But the world needs all the good that I can do."*

*Jana Stanfield*

**Go to our website for online renewal or print & mail our membership form.**



**Please consider continuing to support FFNC.**

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