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# Friends of Brooker Creek Preserve

May - June 2023

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## Chairman's Message, By Cathie Foster

It's May, which means Mother's Day is just around the corner, with Father's Day not far behind. As a parent and grandparent, I am always thrilled to receive any heartfelt gifts given for these types of occasions, but my most memorable gift for Mother's Day happened a few years ago. My son, his wife and their kids invited the two consuegras to brunch. (An aside here: Consuegras is the Spanish word for the two mothers-in-law. Why don't we have a word for that in English?). Instead of going to a crowded restaurant filled with other celebrants, they packed a picnic brunch and took us to Brooker Creek Preserve. The weather was perfect, not yet too hot, and we enjoyed being able to share that delicious brunch in a most beautiful and peaceful setting! Of course, we followed that up with a hike along the Education Center Trail. It was a perfect morning!

If you suspect that a special person in your life would enjoy a similar "gift," I recommend it highly! And if you feel the need for a more tangible gift, see page 15 for some ideas from our Nature Store!

*Cathie*



Beautyberry and wild coffee in bloom at the Preserve.

## Upcoming Events

- May 6 Readers Club
- May 7 Beekeepers Club
- May 27 Wildflower Garden work day
- May 28 Beekeeper Club
- June 3 Readers Club
- June 4 Artists Reception: 24 Hands Printmaking Collective, 1-3 pm
- June 24 Wildflower Garden work day



## Volunteers Needed for FOBCP Art Gallery in the Auditorium

We are thrilled to be able to have several art exhibits throughout the year on display in the BCP Auditorium. Through July 16, we have on display beautiful prints created by the 24 Hands Printmaking Collective. In order to have the auditorium doors open to the public so they can enjoy this colorful, creative exhibit, we must have a volunteer in the building. **Please consider being one of our team of gallery volunteers!**

**What do I do?** It's really easy!

- Greet gallery visitors
- Explain a little about the current exhibit (cheat sheet provided)
- Relax and enjoy!

It's a great way to spend a few hours on a hot day - in a peaceful, cool (literally) atmosphere. Gallery visitors come in and out throughout the day. In between visitors, you can catch up on your reading, write letters, knit, do yoga , or just sit and enjoy the view out the windows!

**When?** Gallery shifts are:

Saturdays 9 am - 12 pm and 12 pm -3 pm (unless there is a program in the Auditorium)

Sundays 11 am - 3 pm. Shifts are flexible.

**Contact:** [info@FriendsOfBrookerCreekPreserve.org](mailto:info@FriendsOfBrookerCreekPreserve.org) or phone: 727-934-2680



The County's boardwalk crew (see page 20) is working on the final phase of the project, the section in yellow on the map. It's almost done! and looks beautiful!

## Native Plant Sale

I can't tell you all how gratifying it feels to be able to put native plants into the hands of folks who want to "do the right thing" in their yards.

On April 1 we did just that with over 300 plants being sold in under three hours! As always, we had a crew of native plant experts on hand to answer questions and to ensure that the plants found homes where they would thrive. We hold two Plant Sales each year - Spring and Fall, but are often asked where one can buy native plants in between. A great source in Pinellas County is Wilcox Nursery in Largo. They have a good selection and a very knowledgeable staff. Click [here](#) (Plant Real Florida) for a list of other walk-in retail nurseries in Florida that sell native plants. You can sort this list by county and by applying other filters.



Set up and ready to sell.



Almost gone. The few remaining plants were taken to the Nature Store "porch" to sell.

Friends  of Brooker Creek Preserve

### **ACRE ADOPTIONS FOR BROOKER CREEK PRESERVE**

With sincere appreciation for the Acre Adoptions:

**A one-acre adoption in memory of Lauritz Larsen**  
Given by Craig, Jane, Barb, and Eddie

**A two-acre adoption in memory of his parents  
Harry & Mildred Petersen**  
Given by Lou Petersen

**A two-acre adoption honoring Mark & Nancy Yeager**  
Given by the Friends Board of Directors

**A one-acre adoption in memory of Susan Wolf**  
Given by Mr. & Mrs. Lee Evans

**Five acres adopted by Doug & Sonja Eiland**

# Farewell and Happy Trails to Mark and Nancy Yeager

FOBCP Director Mark Yeager and his wife, Nancy, both long-time BCP Volunteers, are off to new adventures in New Mexico. For many years, Mark and Nancy have welcomed visitors to the Exhibit Hall as front desk volunteers, as well as leading an extended hike each month. In 2014, Mark joined the FOBCP Board of Directors and took on the role of "used book purchaser" for our Nature Store. Mark and Nancy have supplemented the many wonderful books that are donated to our Used Book Nook with books they have found during weekend outings to library sales, estate sales and thrift shops. Their knack for finding just the right books at bargain prices' will be sorely missed!

Additionally, in 2014 Mark took on the role of Night Hike Coordinator, adding monthly Night Hikes from October through April to the Friends list of activities. Mark's interest in astronomy eventually led him to a connection with the St. Pete Astronomy Club, which led to our first FOBCP annual Star Party in 2017. Mark and Nancy's enthusiasm for and knowledge of night skies and "Brooker after dark" have made both of these events overwhelmingly popular!

Since the southwest U.S. has the most "dark sky" sites of anywhere in the country, it is no surprise that the Yeagers would be enamored of the area, but we will miss them immensely! They plan to become involved with one of the many nature centers near their new home in New Mexico. They will be a tremendous asset wherever they land!

We wish them well on their new adventure and, of course, many happy nights of stargazing!



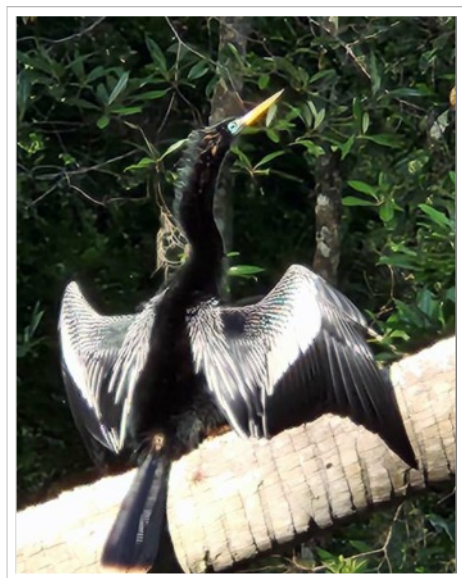
Cathie Foster presents Mark Yeager with a gift of appreciation from the FOBCP Board of Directors

## Water By: Craig Huegel

We often seem to look at rain as something that interrupts our fun, an inconvenience, as something we hope against. At least until we don't get any for an extended time. As I sit here at my desk writing this article, it has become obvious to me once more how strange this dichotomy truly is. I've got tickets to an event this weekend and I'm looking to see if there is a possibility that it might get "rained out" and I'm looking at my mostly parched landscape and I'm praying that it might rain, just not at the time and day of my event. To be honest, a big part of me would welcome the interruption of my event for a significant rainfall.

Jane and I took a short walk at Brooker Creek Preserve a couple of days ago. As I expected, the small amounts of rain we received this past week had little impact on the ecology of its wetlands. The Creek was nearly dry. Some of the deeper pools still held some water along with a covering of water spangles fern. I suspect that a few of the smaller minnows still had refuge in these pools, but the rest of the channel was mud. All of the surrounding wetlands that are fed by the Creek were devoid of surface water as well. Places where I used to take my classes into knee deep water were without.

This seasonality is normal for the Preserve. Brooker Creek itself is not a spring-fed stream like so many others in this state. It is fed by a series of cypress swamps northeast of the Preserve in Hillsborough County. As those swamps fill with water and spill over, they create a small channel that gets larger as it advances towards us. As those same swamps dry down, they have no water left to feed that stream and Brooker Creek starts to dry from north to south.



It will take quite a few significant rains to once again feed Brooker Creek and cause it to flow further south into Lake Tarpon. Perhaps by this time my parched home landscape will also return to normal. The vegetation at the Preserve is largely adapted to these extended droughts; my landscape not as much. In the meantime, I'll pray for rain and hope that it doesn't interfere with my other plans.



# Nature Inspired

exhibit on view

May 6<sup>th</sup>

through

July 16<sup>th</sup>, 2023

the auditorium gallery at

Brooker Creek Preserve  
Environmental Education Center

**24 Hands Printmaking Collective  
at Brooker Creek Preserve**

(Left) *Reflective Portal - Brooker Creek*, 2023 by Saumitra Chandratreya ♡ (Middle) *Brooker Creek Preserves*, 2023 by Elizabeth Coachman ♡ (Right) *Brooker Creek Wanderings*, 2023 by Rachel Stewart



## Artist Reception

**Sunday, June 4<sup>th</sup>, 1-3 pm**

**24 Hands Printmaking Collective at Brooker Creek Preserve**

Holly Bird / Saumitra Chandratreya / Tyrus Clutter / Elizabeth Coachman  
Marjorie Greene Graff / Mary-Helen Horne / Stephen Littlefield  
Ry Mccullough / Polly E. Perkins / Christine Renc-Carter / Rachel Stewart

## **Gallery open**

Saturday 10am-3pm / Sunday 11am-3pm

Some Fridays – please call

727-934-2680 • [info@FriendsofBrookerCreekPreserve.org](mailto:info@FriendsofBrookerCreekPreserve.org)

Friends  of Brooker Creek Preserve

Brooker Creek Preserve Environmental Education Center  
3940 Keystone Road • Tarpon Springs, FL 34688

# AUDITORIUM GALLERY

by Lynn Whitelaw

## ON VIEW IN THE GALLERY: *NATURE INSPIRED*

*24 Hands Printmaking Collective at Brooker Creek Preserve*  
*May 6 - July 16, 2023 (Artists Reception: Sunday, June 4, 1-3PM)*

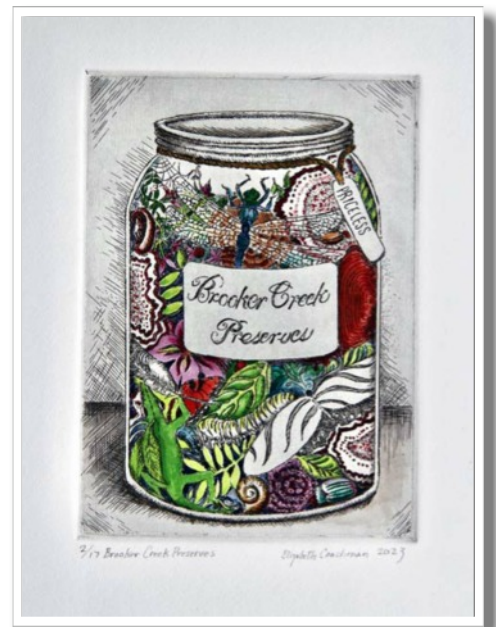
*24 Hands* is the name of a printmaking collective of up to twelve visual artists who work in the media of printmaking. The group was started in 2020 by retired St. Petersburg College art faculty member, Marjorie Greene Graff, who taught printmaking for 21 years. The goal of the group is to provide a forum for practicing printmakers on the Florida Gulf Coast to have opportunities to interact and have exhibitions of their work. They represent some of the area's best-known printmakers and are associated with various art studios, teaching institutions, and printmaking workshops. As artists, teachers, and collaborators, they work in both traditional and experimental techniques including intaglio, relief, lithograph, silkscreen, mono printing, digital, and mixed media.

For *Nature Inspired*, the artists twice visited Brooker Creek Preserve, in March 2022 and March 2023, to have their annual picnic, strategize the exhibit, and have impactful hikes around the Preserve given by Barbara Hoffman. Their love for Brooker Creek and nature has been inspiring and the exhibition includes work by printmakers: Holly Bird, Saumitra Chandratreya, Tyrus Clutter, Elizabeth Coachman, Marjorie Greene Graff, Mary-Helen Horne, Stephen Littlefield, Ry McCullough, Polly E. Perkins, Christine Renc-Carter, and Rachel Stewart. The artwork represents a variety of approaches to nature from

realist to comical to aesthetic abstraction.



Rachel Stewart  
*Brooker Creek Wanderings, 2023*  
Monoprint, linoleum print and hand additions, 16 x 20 in.



Elizabeth Coachman  
*Brooker Creek Preserves, 2023*  
Copperplate line etching, 7 x 5 in.

Please plan to meet the artists at the reception for their exhibition on Sunday, June 4, 1-3 PM in the Auditorium Gallery. Refreshments and a short program will be included.



Frank Pascoe

Jana Withers



Kathy Detrano (a seasoned plein air artist complete with her bug protection gear)

## Update: *Plein Air 2023: Brooker Creek Preserve*

*Plein Air 2023*, held April 7 and 8, was a huge success this year despite the early arrival of yellow flies that challenged the artists while creating their art work in the Preserve. This would have been our fifth annual Plein Air event, although for two years the event was canceled because of the Pandemic. Fifteen tenacious artists (painters and photographers) participated this year and produced twenty-five works for the exhibition that was on view through April 23. Five works sold during the show, with a 10% return to FoBCP, and the artists enjoyed meeting each other at the Closing Artists' Reception and sharing their "war" stories of surviving *Plein Air 2023*. Ann Larsen, retired director of the Leepa-Rattner Museum of Art, served as the Judge this year and stated it was a difficult decision because of the high quality of submitted works. Award winners included:

**Best in Show:** Kathy Detrano, *Brooker Kaleidoscope*, Pastel

**First Place:** M'rissa Rosenthal, *Friend's Trail*, *Observation Lookout*, Oil

**Second Place:** Ariel A. Cohen, *On the Way Home*, Gouache

**Third Place:** Sally Fuller, *Illusion*, Photography



**Best in Show: Kathy Detrano**



**First Place:**  
M'risa Rosenthal



**Second Place:** Ariel A. Cohen



**Third Place:** Sally Fuller

This year a Visitor's Choice Award was added and because of the number of events being held in the Auditorium, over 100 people signed in to nominate their favorite work for the Visitor's Choice award, which is pretty awesome! We truly appreciate everyone's input, and the award went to:

**Visitors Choice:** Bill Taldone, *Laurel Oak Archway*, Oil

The Friends of Brooker Creek Preserve wishes to thank all the talented artists who participated this year and hope they will return for *Plein Air 2024*. We promise to select a date that does not have yellow flies as such a challenge!



*Brooker Creek Preserve Ranger, Randy Goggin, an award-winning essayist, has written this science-based piece about the wonder of fireflies. Although lengthy for our newsletter, we printed it in its entirety, not wanting you to miss any of the fascinating facts about this now rare insect that lives in Brooker Creek Preserve. Thank you, Ranger Randy!*

## **The Wonder and Plight of the Firefly Beetles**

by Randy Goggin

As a child I watched them on humid, summer nights, their luciferase light appearing and fading beneath the stars. They'd light up in the back yard on beetles' wings flying, at the edge of the woods, and by the storm water ditch - their cold light displays leaving ephemeral impressions in my mind. Their glowing forms lead my domesticated thoughts back to nature - to a world before neighborhoods and grid works of streets. The mystery of their coleopteran signals evoked wonder - my pupils dilated and the darkness alive.

It would be decades before I read of their population declines, before the realization of how little I'd seen them through the years.

There are 56 species of fireflies on the Florida peninsula alone, with over 2,000 species inhabiting the Earth. *Homo sapiens* have observed them throughout the entirety of our existence, these luminous beetles that lived with dinosaurs in ecosystems long gone. Fireflies have inhabited the planet for the last 100 million years, all living species now classified within two divergent pathways of descent - with one set of related species populating the American continents and the other spread out across Europe and Asia (Marshall 2020).

Firefly bioluminescence has three different functions: attracting mates, luring prey, and deterring predatory threats - each function's presence or absence dependent on the species, life stage, or a firefly's individual actions at the time. Their flash displays begin in the darkness of dusk, with some species glowing throughout the entirety of the night. Others glow within a specific window of time, with certain species only flashing for about 23 minutes (University of Florida 2013).

To see their bodies filled with light is to experience wonder - the excitement of a child, the curiosity of a questioning soul. There is inherent beauty in their fleeting lampyrid forms, an aesthetics birthed in the mystery of their initial luciferase reactions - shaped over time along pathways of descent.

Firefly bioluminescence is produced within a light organ found on the underside of their abdomen - with luciferase, luciferin, O<sub>2</sub>, calcium, and ATP all having a part in carrying out the biochemical reactions used to produce that light. Luciferase refers to a type of enzyme that bioluminescent organisms use to convert chemicals to light through the catalysis of light-producing luciferin

molecules (Lewis 2016). Fireflies activate and deactivate their flashes through the regulation of oxygen within their light organs - with bioluminescence occurring when oxygen is let in and ceasing when that O<sub>2</sub> supply is cut off. Somewhere within these signals of flirtatious intent, we encounter the confluence of genetics, instinct, and will.

Rivalling human technology, fireflies produce their cold light at a level of nearly 100 percent energy efficiency. Compare this with incandescent bulbs that lose as much as 90 percent of their energy to heat waste. Humans have improved in the field of light bulb technology over the last few decades, with CFL bulbs reaching levels of energy efficiency of about 55-70 percent and more recent LED bulbs reaching efficiency levels of 95 percent. We may one day match what fireflies have been doing for millions of years.

One nuance of firefly physiology and behavior is that although all firefly larvae glow, not all adults do; species not equipped with bioluminescence attract mates using pheromonal scents (Lower 2019). The most ancient fireflies in the fossil record left no traces of light organs and are assumed to have attracted mates through the use of pheromone scent signaling (Univ of FL 2013). In fact, there is a clear, directional shift in firefly morphology in the fossil record, with light organ-equipped species having smaller antennae and larger eyes and those lacking light organs having larger antennae and smaller eyes (2013). The implication of this shift is that larger eyes are used for spotting flash displays in the darkness, while antennae are used for detecting the pheromonal scents of potential mates.

A greenish glow came to life between the sidewalk and forest-hovering - then becoming one again with the darkness. -**flash**- The stridulations of crickets filled the gaps between the trees and shrubby plants: laurel oaks, swamp bays, elms, coffee, palmetto. It flashed again, closer, and I was tempted to catch it -**flash**- but the Preserve was its refuge from the chaos outside. Its species' natural spaces had been shrunken down or paved over. Another one called out from near the wax myrtle trees -**flash**- a scent of soil-borne fungus wafting up through the air. I saw the silhouettes of brittle seed stalks of frostweed from winter. My memories of summer fireflies emerged from within, fleeting images of a childhood I could faintly remember. -**flash**- Two more lit up down in the floodplain forest, reappearing near a tangled web of fox grape and *Smilax*. My synapses sparked incommunicative bursts of energy too -**flash**- thoughts of years at my dad's house behind Bailey's Bluff Road: the drunken fights and dad's friends always down from New York, nights outside watching fireflies and raccoons with hunched backs.

Fireflies live in a diversity of natural habitats: wetlands, meadows, dunes, and upland forests - with different species adapted to their own specific habitat types (e.g., *Micronaspis floridana* are found in salt marshes and mangrove forests along the coast). Like so many other flying insects, firefly beetles spend most of their lives as ground-based larvae, with some species living up to two years in their larval stage and only a couple of months as adults. The larvae live as carnivores down in or on the soil, thriving in leaf litter, rotting logs, and among other organic debris. They

consume worms, snails, and the scavenged carcasses of insects, while adults feed on pollen, nectar, or nothing at all. *Photuris femina* species feast on sexually driven males of other species, a feat accomplished by mimicking the flash patterns of receptive female mates - this adaptive behavior allowing them to acquire the defensive lucibufagen toxins their bodies naturally lack.

Firefly larvae glow as a strategy of aposematic deterrence, a warning signal to predators of the toxins contained within their bodies. Aposematism has been experimentally confirmed in adult fireflies too, with brown bats, *Epstesticus fuscus*, deterred by the toxins of *Photinus pyralis* in controlled laboratory settings (Leavell et al. 2018). The experiment confirmed that bats use multisensory detection signals to distinguish between palatable and unpalatable prey; they track down prey using echolocation, while learning to avoid fireflies through the association of displayed light and toxins (2018). The authors of the study argue that an evolutionary progression occurred in which bioluminescence was originally used as a warning to predators but was later co-opted in the signaling of sexually receptive mates (2018).

We understand fireflies more deeply than our ancestors did, but more and more of them are disappearing with each successive generation. What did the world look like before the apocalypse of progress and the Industrial Age?

Firefly populations are in states of decline; but until recently there have been no global baseline population assessments nor long-term monitoring efforts available to raise anything more than anecdotal concerns (Fallon et al. 2021). The IUCN (International Union for Conservation of Nature) performed the first global firefly assessments in 2021, confirming that at least 18 species are at risk of extinction, while 53% of species lack the data required for a population assessment - with North America topping the list of regions in need of such studies (2021). In fact, insects overall have been greatly underrepresented in IUCN assessments, with only 1% of insect populations having been included in IUCN assessments so far - this despite the fact that they make up the majority of animals on Earth (2021). Perhaps fireflies, with their flashy, charismatic ways, have the potential to help turn the tide of insect indifference - of course human indifference is now an opiate of the desensitized masses.

Light pollution, the loss of natural habitats, habitat degradation, the pollution of clean water sources, and the widespread use of chemical pesticides all contribute to the decreased health of global firefly populations (Lewis et al. 2020), all of the above correlating with our ever-growing human population. The effects of light pollution have been well researched in this age of industry and perpetual urbanization. From the disruption of Circadian rhythms and resulting sleep disorders to decreased melatonin levels triggered by the absence of natural darkness, artificial light has degraded our health and mental well-being, causing anxiety, stress, fatigue, and other health problems in humans (Dutfield 2022). Lowered melatonin levels have even been linked to certain forms of cancer (2022). And the health of other earthbound animals have been negatively affected along with us (2022).

Their ship sinks, and ours does too - and vice versa.

Light pollution interferes with fireflies' courtship displays, with mating success decreasing in the presence of artificial light (Lewis et al. 2020). But nothing from the above list of threats to firefly populations should come as a surprise; fireflies, like all of the other creatures we'd like to protect, require clean water and functional habitats in which to live and reproduce, a well-ordered stage on which the dramas of their lives can unfold.

We're ever drowning in the catastrophic mess that we've made, but there are islands of life still worth protecting - a diversity of species not yet driven to extinction.

As an adult I've seen fireflies at Brooker Creek Preserve, Starkey Park in Pasco County, in the dunes of Honeymoon Island, and at Torreya State Park in the panhandle. In fact, the highest density of fireflies I've ever seen was at Torreya, their inherent beauty and ubiquity in the campgrounds and surrounding slope forests so wonder-provoking that even my daughter, a nature-disliking pre-teen at the time, admitted: "They're really cool," on a walk up to the bathroom at two in the morning. On a solo trip earlier that summer, I saw hundreds of them blinking on and off beneath the stars in a single night.

Brooker Creek Preserve, like Torreya, functions as a refuge of life, for fireflies and many other Florida species of interest. The Preserve provides clean water, food, habitats, and a relative absence of artificial light, helping keep local firefly populations alive and thriving - their sexual solicitations playing out across over 8,600 acres of protected land.

Every life form is an important part of the whole - in ways we know and in other ways we've yet to or will never understand. Fireflies too are a necessary part of the whole; conveying their importance (and plight) is one of the ways we can help them. Sparks take shape in the mind, in kindled imaginations, in stories, and in passed-down information. In addition to habitat restoration and conservation efforts needed to support firefly populations, science education programs can help inform a largely ignorant public, and community-driven science projects, like INaturalist and Firefly Watch, can help in monitoring and data collection efforts (Fallon et al. 2021). Getting other humans on board is a key to conservation success.

The firefly is a quaint, out-of-sight and out-of-mind organism to most of the public - a phenomenon some adults might remember seeing as kids. Younger generations might only know fireflies from sci-fi movies or Attenborough documentaries. But one real-life encounter has the potential to leave lifelong memories in the brain. I've talked to visitors who have memories of seeing fireflies on night hikes here at the preserve - their excitement apparent by that look in their eyes.

I've spotted them too on the road leading out of the Preserve - just a flash in the darkness that lured me out of my car. On more than one occasion, I've cut the lights and jumped out to pursue them, my bare feet touching down across warm, asphalt road. Even a single glow of one firefly still has the power to evoke my own wonder. I've seen them most often from the edges of our wetlands and floodplain forests - nocturnal animal sounds filling the dark habitat spaces: crickets, katydids, barred and great horned owls, coyotes sometimes yipping and chattering from the north. Firefly bioluminescence holds within it a music of its own, silent, ephemeral, ancient chemical reactions. They're sparks of mind, desire, and social behaviors - a mix of survival and sexual selection. Earth's fireflies have crossed vast spans of time and speciation - their conserved traits coalesced into serendipitous wonder. They send signals to predators and receptive mates alike, communicating in ways we'll never quite understand.

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Randy has worked as a park ranger at Brooker Creek Preserve since September of 2021. He's been with Pinellas County for almost three and a half years (and before the county he was a park ranger at Honeymoon Island State Park). Randy's writing has appeared in The Dillydoun Review, South Florida Poetry Journal, Kairos, Sandhill Review, Fourth River, and the Tampa Bay Times. Three of his published essays were birthed in experiences here at Brooker Creek Preserve, "Coyotes at Dawn," "An Ancient Deliberation," and "Bobcat Hunting in a Preserve in Central Florida," that last of which won second place in the Clyde Butcher essay contest in the TBT in 2022. His flash fiction story, "Luna Moth," published in Kairos, is a fictionalized account of his trips to Torreya, one of which was with Dr. Craig Huegel's conservation class through St. Petersburg College.

"I've never worked anywhere like Brooker Creek Preserve. This island of conserved land has been a source of inspiration, healing, and reflection. There are no wild places like this anywhere in Pinellas County, and I'm grateful for the time I've gotten to spend working here so far."

# Gift Ideas from the Nature Store



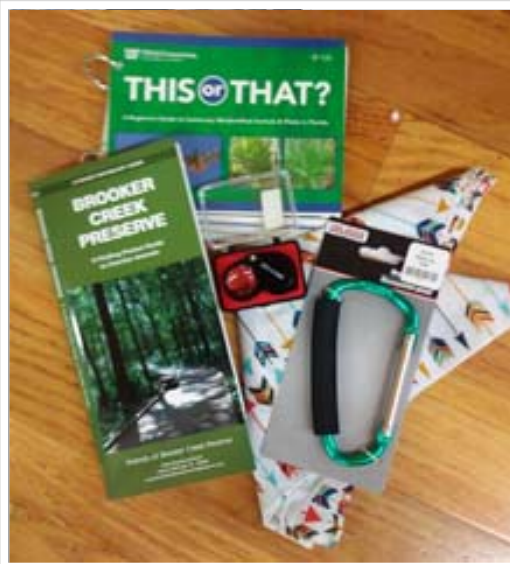
Jabebo earrings



Matted and framed photos



Hiking supplies



Recycled paper jewelry



Notecards - These and other photos were taken at Brooker Creek Preserve.

Friends  of Brooker Creek Preserve

## Reader's Club

A group of readers interested in discussing books, articles or other pieces about nature and our environment.

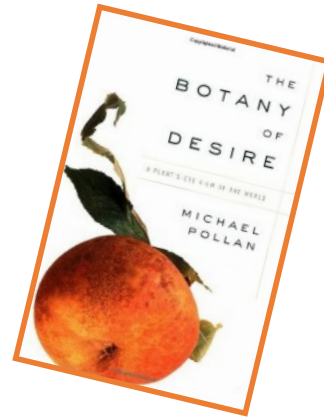
*All readers welcome!*

**Saturday May 6 @ 2 pm**

**Exhibit Hall Conference Room**

***The Botany of Desire: A Plant's-Eye View of the World***

**by Michael Pollan**



**Saturday June 3 @ 2 pm**

**Exhibit Hall Conference Room**

***Hoot***

**by Carl Hiaasen**



**Brooker Creek Preserve Environmental Education Center**

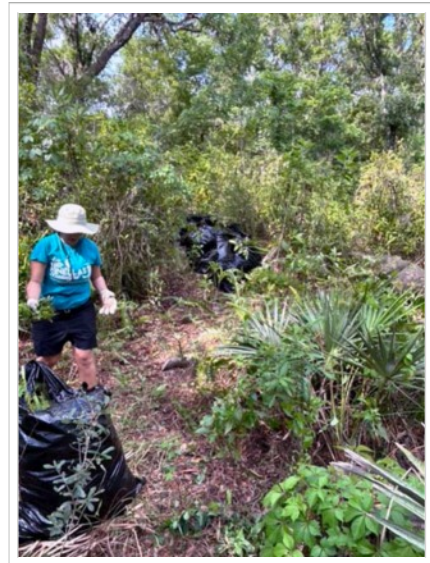
**3940 Keystone Rd, Tarpon Springs**

**Questions? 727-934-2680**



## Return the Preserve by Evan Earle Jr

Our Friends of Brooker Creek Preserve (FOBCP) Return The Preserve (RTP) Work Days are always fun. When they take place near Earth Day, they seem to be a little more fun. On Saturday, April 15, five hard working volunteers showed up, ready to go. And go they did! We tackled the "invasion" of Boston fern growing between the Classroom building and the boardwalk. Three plus hours of hard work and weeding resulted in 23 large garbage bags of ferns, weighing a total of 354 lbs.! What a great way to celebrate the 53rd year of Earth Day! Thank you volunteers!



A shout out to Keep Pinellas Beautiful for partnering with us and providing the supplies: garbage bags, gloves, bug spray (and we needed it with the yellow flies), sunscreen, hand sanitizer, and a scale to measure our results!

We still have more fern to remove and remove it we will. Please consider joining us for our RTP Work Days as we work together to help return the Preserve to its natural environment. What A Team!

## News from the Wildflower Garden By Pam Brown

The wildflowers planted at the end of February are nearly established, with some of them even blooming. The daily watering encouraged the established plants to bloom as well. The lyreleaf sage put on a lovely late bloom.

The garden has a lovely new butterfly house to shelter caterpillars as they morph into butterflies in their chrysalises. The house was built, painted and donated by Friends volunteer Skip Holmes. We really appreciate this lovely addition.

Hopefully we will start getting some regular rain soon. We will most likely have to water the new plantings every four or five days if we do not get significant rain. The drought takes a toll on even drought tolerant plants.



Our next work days will be May 27 and June 24, with our summer work hours of 8:00 to 10:00 am. If you would like to join us, please register by emailing me at [pamperedgardeners@gmail.com](mailto:pamperedgardeners@gmail.com). Due to the fragility of the plants in the garden, we limit the number to five volunteers, including any children 10 or more years old. Bring your gardening tools, gloves, hat, and bug repellent, and wear closed-toed shoes. We will provide a light snack.

## Pam's Thoughts

We have been experiencing summer-like temperatures off and on for a couple of months, but without the rain. These drought conditions, and above-normal temperatures along with low humidity, have caused some plants to die back if they have not received sufficient irrigation. I do not irrigate my landscape since we have primarily a drought tolerant landscape that contains many native plants. Even some of these drought tolerant plants are suffering from lack of sufficient water. My yaupon holly tree, firebush, Asiatic jasmine, and some of the sunshine mimosa are all showing signs of water stress. Some symptoms that you will see when plants are drought stressed include yellow leaves dropping, wilted leaves, and drooping small branches. When you see this you should provide some supplemental irrigation especially to alleviate the symptoms.

Reduce mowing of grass. Mowing can cause even more stress. When you do mow, always mow at the highest setting to encourage a deeper root system, which increases drought tolerance. And remember to keep your mower blade(s) sharp. Grass heals faster and loses less water when cut by a sharp blade.

Don't fertilize as this increases the plant's need for water. Fertilization stimulates plant growth and increases water needs.

Irrigate landscape trees and shrubs when they start wilting and have not "perked up" again in the morning. Use drip irrigation or hand water to minimize evaporation. Use irrigation when grass shows signs of drought, such as leaf blades folded in half, grass turning a bluish-gray color, and footprints remaining in the lawn. Watering grass only as needed encourages a deeper root system which increases drought tolerance. Water  $\frac{1}{2}$  to  $\frac{3}{4}$  inch of water each time you water your lawn.

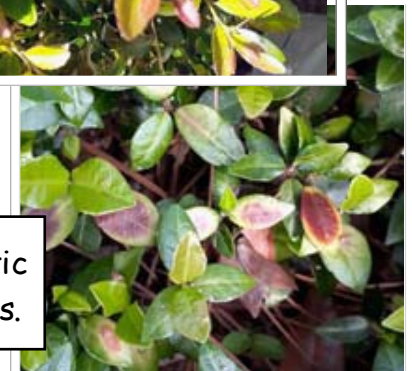
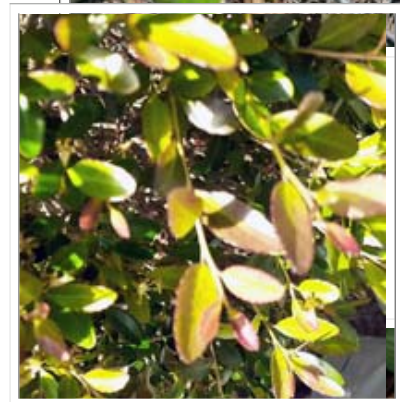
Remove weeds which compete with plants for water and nutrients. Hand-pull weeds instead of using herbicides. Herbicides are not as effective when weeds are stressed and not actively growing.

Use mulch to help retain the moisture in the ground and help moderate the soil temperature. Mulch also curtails weed growth.

Move containerized plants out of full sun and into the shade to reduce their water needs.

And pray for rain!

From top, firebush, yaupon, Asiatic jasmine, all showing drought stress.



## Volunteer News

Education Center Updates  
May/June 2023

By Julia Myers, Education Support  
Specialist, Brooker Creek Preserve



**Volunteer Appreciation (April 23):** We had a blast honoring the incredible volunteers of Brooker Creek Preserve at our long overdue appreciation celebration! We enjoyed each other's company, ate a delicious lunch, and celebrated everything that this dedicated team has accomplished this past year. Volunteers are the heart of the Preserve and essential to our operations. We have endless gratitude for the Brooker Creek Volunteers, their passion and dedication is what makes the Preserve so special.



**Thank you Brooker Creek  
Volunteers!**

**(ECO) Educator Workshop:** Lara will be offering her 11th annual Exploring Environmental Education Curriculum Options (ECO) Educator Workshop in July! This workshop provides participants with tools and information to interpret the natural world, and activities and resources to help foster environmental knowledge and good environmental stewardship in their students. This is a wonderful opportunity for anyone interested in leading/helping with youth programs. I encourage anyone considering this opportunity to just go for it! It's free and incredibly educational. Details can be found here: <https://www.eventbrite.com/e/2023-eco-educator-workshop-registration-569806846617>



**Our Ranger Team:** We are lucky enough to have four amazing rangers looking after our Preserve. Their general duties include maintaining all trails and boardwalks, enforcing rules, cleaning litter, mowing, exotic control, and making sure all visitors are safe. Recently they have been rehabbing our various public signs and re-mulching the horse trail. Our rangers go above and beyond and are always more than ready to lend a hand to staff and volunteers as needs. Thank you to this hard-working team!

BCP Rangers - left to right, Randy Goggin, Kaitlin Jenkins, Tony Contarino and John McGlone (in front).

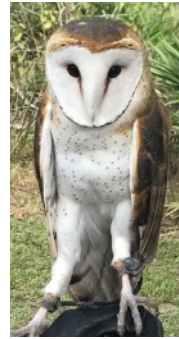
The boardwalk crew



**Boardwalks:** The project is continuing to progress smoothly and well ahead of schedule. The crew is currently working on the main bridge by the parking lot, and that is the final phase of the entire project! The sections that have already been completed look beautiful and we all look forward to having all areas accessible again in the near future!

**BCP Volunteers featured in 'The Pen':** The Pinellas Employees Newsletter highlighted Pinellas County Volunteers for National Volunteer Month and featured our very own Julie Wade and Margaret Rosar! Way to go, ladies! Check out their feature on page 9: <https://pinellas.gov/wp-content/uploads/2023/04/pen04-2023.pdf>


  
**ADOPT AN ANIMAL - \$35/adoption**



*A program to enhance restoration and land management programs to help provide improved habitat for wildlife in **Brooker Creek Preserve***

The **ADOPT AN ANIMAL** program was established by the Friends in 2020 to give individuals the opportunity to help keep intact the ecological integrity of the Preserve. Funding will be used for:

- Removing exotic and invasive plants
- Restoring natural water flow
- Fire management
- Restoring natural plant communities

Animal adoptions make perfect gifts for birthdays, anniversaries, memorials, and more!

Upon receipt of your donation, the honoree will be sent by mail an adoption package with an adoption certificate, a fact sheet about the adopted animal, and a cuddly plush animal chosen for adoption. The donor will receive a thank you letter that can be used for tax purposes.

Donor Name: \_\_\_\_\_

Phone: (\_\_\_\_\_) \_\_\_\_\_ Email: \_\_\_\_\_

in honor of      in memory of      for myself

Honoree Name: \_\_\_\_\_

Send packet to this address. This is the donor or honoree address (circle one):

\_\_\_\_\_

I wish to adopt (\$35 each):

- |                                          |                                    |                                  |                                |                                 |                                    |                              |
|------------------------------------------|------------------------------------|----------------------------------|--------------------------------|---------------------------------|------------------------------------|------------------------------|
| <input type="checkbox"/> Gopher Tortoise | <input type="checkbox"/> Deer Buck | <input type="checkbox"/> Raccoon | <input type="checkbox"/> Eagle | <input type="checkbox"/> Otter  | <input type="checkbox"/> Alligator | <input type="checkbox"/> Owl |
| <input type="checkbox"/> Gray Squirrel   | <input type="checkbox"/> Deer Fawn | <input type="checkbox"/> Opossum | <input type="checkbox"/> Bat   | <input type="checkbox"/> Coyote | <input type="checkbox"/> Bobcat    | <input type="checkbox"/> Fox |

Total Due: \$ \_\_\_\_\_ Questions? [info@FriendsOfBrookerCreekPreserve.org](mailto:info@FriendsOfBrookerCreekPreserve.org), 727-934-2680

Check endorsed to: **FOBCP**. Mail to: FOBCP, 3940 Keystone Road, Tarpon Springs, FL 34688

FEID #59-3302182 tax-exempt, non-profit corporation

A COPY OF THE OFFICIAL REGISTRATION AND FINANCIAL INFORMATION MAY BE OBTAINED FROM THE DIVISION OF CONSUMER SERVICES BY CALLING TOLL-FREE (1-800-435-7352) WITHIN THE STATE. REGISTRATION DOES NOT IMPLY ENDORSMENT, APPROVAL, OR RECOMMENDATION BY THE STATE. REGISTRATION NUMBER CH. 16077

Friends  of  
Brooker Creek Preserve

## ADOPT AN ACRE



*A program to enhance restoration  
and land management programs in  
**Brooker Creek Preserve***

The **ADOPT AN ACRE** program was established by the Friends in 2016 to give individuals the opportunity to help keep intact the ecological integrity of the Preserve.

100% of funding will be used for:

- Removing exotic and invasive plants
- Restoring the natural flow of water
- Fire management
- Restoring natural plant communities

Acres make great gifts for birthdays, anniversaries, memorials and more!

Upon receipt of the donation, the donor or honoree's name will be placed on the **ADOPT AN ACRE** display inside the Environmental Education Center for one year. A certificate will be sent to the honoree acknowledging the adoption.

Donor  
Name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Phone: (\_\_\_\_\_) \_\_\_\_\_

Email: \_\_\_\_\_

\_\_\_in honor of \_\_\_in memory of \_\_\_for myself

Honoree  
Name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Phone: (\_\_\_\_\_) \_\_\_\_\_

I wish to adopt \_\_\_\_\_ acres @ \$100/acre

Total Due: \_\_\_\_\_

Make check payable to: FOBCP

Mail to: 3940 Keystone Road  
Tarpon Springs, FL 34688

[info@FriendsOfBrookerCreekPreserve.org](mailto:info@FriendsOfBrookerCreekPreserve.org)

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**Friends of Brooker Creek Preserve - Mission Statement:** The mission of the Friends of Brooker Creek Preserve is to provide public support for the Preserve through fund raising, volunteer programs, and education to ensure that the Preserve remains a natural wilderness for future generations.

**Friends of Brooker Creek Preserve - Land Use Position Statement:** The Friends of Brooker Creek Preserve support land uses within the boundaries of Brooker Creek Preserve which have a main purpose that furthers the preservation, conservation, restoration or protection of the land and resources of the Brooker Creek Preserve.

**Friends of Brooker Creek Preserve:**  
[www.FriendsOfBrookerCreekPreserve.org](http://www.FriendsOfBrookerCreekPreserve.org)  
Email:  
[info@FriendsOfBrookerCreekPreserve.org](mailto:info@FriendsOfBrookerCreekPreserve.org)  
Voicemail: (727) 934-2680

**Brooker Creek Preserve:**  
Phone: (727) 453-6900  
Website: [www.brookercreekpreserve.org](http://www.brookercreekpreserve.org)  
**Brooker Creek Preserve Environmental Education Center** is located at 3940 Keystone Road, Tarpon Springs, Florida, 34688. Phone: (727) 453-6800  
Hours: Thurs. - Sat. 9am - 4pm, Sun., 11am - 4pm.

**Friends Nature Store** is located in the Education Center. Hours: Thurs. - Sat. 9am - 4pm, Sun., 11am - 4pm.

**Preserve Hiking Trails** open 7 days a week, 7:00am to 30 minutes before sunset. Closed the day after Thanksgiving and Dec. 25.

**Horse Trails** open 7 days a week, all year, sunrise to sunset.

**This newsletter is published every other month.** Please submit articles to Newsletter Editor Dr. Craig Huegel (727) 422-6583 or email [Huegelc55@aol.com](mailto:Huegelc55@aol.com)

**Pinellas County PCR Mission statement:** The mission of the Parks and Conservation Resources Department is to maintain and protect the inherent value of the County's natural, cultural and recreational resources through sustainable access, education, and stewardship that enhance quality of life for our community and future generations.

## FOBCP Leadership 2023

### Board of Directors

#### Officers

Chair: Cathie Foster  
Vice Chair: Robert Burkard  
Secretary: Allyn Childress  
Treasurer: Ed Helvenston  
Business Director: Barb Hoffman

#### Directors:

Pam Brown: Wildflower Garden  
Robert Burkard: Beekeeping  
Allyn Childress: Grants  
Evan Earle, Jr.: Return the Preserve Work Days  
Cathie Foster: Nature Store Manager  
Barbara Hoffman: Membership/  
Owl-O-Ween  
Walt Hoskins: Guiding Documents  
Dr. Craig Huegel: Land Use/Newsletter  
Editor/Off-the-Beaten-Path Hikes  
Chuck Parsons: 4th Grade Coordination  
Ray Poynor: Craftsman, Night Hikes  
Barbara Schultz: Publicity  
Cathy Vogelsong: Newsletter Publisher  
Julie Wade: Communications/Outreach

#### Further Leadership

Alexa DeJoannis: Readers Club  
Mona Gardner & Dixie Mills: Nature Store  
Bookkeepers  
Cathy Ordiway: Website Master  
Lynn Whitelaw: Art Gallery Curator

Registration Info: FEID #59-3302182 tax-exempt, non-profit corporation

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