May 2021

Report from Your President:

by Lois Cantwell

Near the end of March FNPS shared the results of a recent "Council of Chapters Strategic Planning Session". This resulted in a four-page wish list of a wide range of topics of concern from an administrative view-point. Operating issues, advocacy, outreach logistics, and other strategies were itemized. We will be hearing more specifics in the coming months and years as certain priorities come into focus.

Getting the FNPS mission message out has typically been a "hard sell", so it appears as though we will see a more robust approach to accomplishing this in more tangible ways. Combinations of educational tools, improving availability of native nurseries/native plants, outreach, media visibility, landscape models, funding for community gardens, collaborations with other environmental groups, and updated land management practices are possible examples. The FNPS Chapters will most likely be involved in some of these projects at the local level, so volunteer opportunities will surely be on the horizon.

We are acquiring a fair number of new members who have the enthusiasm, energy, backgrounds and skills to contribute to our future role in assisting FNPS with their vision and accomplishing goals that are set before us. There will be more opportunities for our Chapter to become more active and visible in our local communities as we move forward.

Recognizing Our Field Trip Coordinators

We compensated for the lack of in-person meetings this season by increasing the number of monthly field trips. We are blessed with a number of Chapter members who devote a lot of time and effort to this pursuit. Reconnoitering various parks and numerous trails, writing up descriptions of the areas, planning dates and times, guiding the walks while lending their knowledge and experiences, and ultimately educating our attendees. This takes a lot of effort, devotion and the simple love of getting outdoors and sharing the experience with those who wish to learn about the natural world of ecosystems and the roles of those plants and animals of that realm.

Our guides led over a dozen Chapter-sponsored field trips during the 2020-2021 season, which got a late start the end of November and ended during the first week of April. In addition to that, many nature walks, led by our guides, were sponsored by a number of other environmental groups including Lemon Bay Conservancy, CHEC, Sarasota County

Parks, Venice Area Audubon Society, Peace River Butterfly Society, and North Port Conservancy.

All in all, this represents a total of 261 Volunteer Hours on the part of our coordinators and trail guides, plus a whopping 895 Education Hours (as of mid-April) for all members and guests who attended these walks as a learning experience. Just seeing this quantified should impress the individual with the importance of these outings and the impact they have on those who participate. A special Thank You to all who made these so worthwhile.

Please Welcome New Members: Janet Dwyer from Venice, Marianne Mohr from North Port, and Jetty Zarfos from Sarasota. As of the beginning of 2021, we have added 11 new members to our roster. Thank you for joining us!

Click here to Visit our Website

What's Up in Our Demonstration Garden

If you haven't stopped by the Demonstration Garden at Cedar Point Environmental Park lately, take a peek at the changes. Thanks to the hard work of our 'Garden Keepers' it continues to evolve and looks wonderful.







We are on Facebook!!!

Look for: Mangrove Chapter of the Florida Native Plant
Society

Nature's Best Hope by Doug Tallamy

Part 1 of a series of excerpts by Lois Cantwell

This book was on my Christmas wish-list, and Santa did oblige. I started to read this marvelous book shortly after the holidays. However, life in general got in the way. After escaping back to Michigan, I picked up where I left off. Having read the first 4 chapters, which were laying the foundation and historical background to the author's introduction of the concept of the "Homegrown National Park" in Chapter 5, I re-read Chapter 4, "Shrinking the Lawn". This chapter helps us to understand why so many Americans are so much in love with that expansive (and expensive) green lawn.

Look back about 300 years to the origins of landscaping on the American continent. It began with the tendency to copy the practices of rich Europeans, which included expansive lawns accented with gardens of exotic plants from exotic places. Although native plants here were readily available, they were seen as too common in the eyes of those who preferred using exotic plants from Europe and China as a symbol of status.

With the passage of time, most home gardeners continue to use non-natives in their landscapes, aided by the evolution of mass-production and distribution methods that make them readily available to all. This long-term behavior modification has had the negative aspect of introducing invasive plant species, devastating insect pests, and deadly plant diseases. Nearly 85% of invasive woody plant species in the U.S. are escapees from our gardens.

Fast-forwarding to the era of environmental stewardship, we are (slowly, but increasingly) embracing the reduction of turf grass while encouraging more native vegetation and sustainable ecosystems as the norm, rather than the exception. We can only hope that people get on board this train quickly, as time is of the essence. So, get out there and widen those plant beds, remove excess turf wherever you can, create pathways as an alternative to grass, fill in those open spaces with more native plants that support pollinators and caterpillars. Share this concept with the neighbors, set an example. Offer to do the digging!

Mangrove Chapter Field Trip Reports

by Lois Cantwell

Field Trip Report for April 7th, Don Pedro Island State Park (land side)

We had quite a turn-out on a beautiful day for what would be our last Chapter-sponsored outing for the month of April. There were 30 of us who met Bill in the parking area. He outlined our plant of attack, beginning with meandering the 1.7-mile loop to experience a mixture of habitats, followed by a trek out through the mangrove-lined tidal area down to the causeway.

The theme of this exercise was to identify the numerous halophytes or salt-loving plants that typify the salt marsh/flatwoods area not dominated by mangroves. Plants such as glasswort, sea oxeye daisy, saltwort and cordgrass were seen there. As we returned to the road that led back to the parking area, I noticed numerous Cherokee or Coral Beans dotting the roadside. They were in various stages of blooming, and I had never seen such

a large collection of these stunning plants.

Bill talks about plants found in the facultative wetlands





Bill Describing salt marsh habitat



From there, a number of our group headed off in the direction of the causeway. We then saw water pimpernel, a first for me, and identified more coastal plants for our inventory list. Cue the mangrove buckeyes, as they made their appearance among their namesakes.

I was a bit tuckered out from the long walk, so it was a welcome relief to ditch the walking sticks and climb back into the car. A long drink of water and the A/C perked me up, so I decided to make a detour through the little bakery at Placida and Rotonda Blvd. West for a bit of "comfort food" on the way home. A fitting end to a lovely walk in the park. Left a ground cherry "nut" is unveiled.



Red mangrove propules



Oodles of Hatpins, Tenangle Pipewort, Eriocaulon decangulare*



Marsh scene with Great Egret

*Blooms May to October (we have seen it March and April); Habitats include freshwater wetlands and flatwoods throughout mainland FL.

The name *decangulare* means "ten angled", referring to the typical number of angles on the flowering stem. Prefers strong sunlight, benefits from fire burning of competing vegetation. This species is native across the eastern U.S. south into Mexico and

Nicaragua. There are 6 members of this genus in FL, more than 400 species worldwide, mostly distributed in tropical regions of southern Asia and the Americas. (Roger Hammer, Complete Guide to Florida Wildflowers, 2018); Works well in dried floral arrangements, WKT, Florida Wildflowers, A comprehensive Guide, 2013

Nature Gets a Quick Fix from a Humble Bumble Bee

by Kate Borduas

NATURE GETS A QUICK FIX FROM A HUMBLE BUMBLE BEE

An ecosystem is not simply a collection of species, rather it is the *function* of species acting in concert. The health of an ecosystem is measured by the strength and numbers of *interactions* between all of its components. The successful interactions between plants and insects have co-evolved over millennia and rely entirely on the synchronicity of numerous factors including photoperiod and temperature. In this time of climate disruption what could possibly go wrong?

The symbiotic relationship between insect pollinators and flowers is tight and fragile, and the synchronized timing critical for its success is unravelling. Insects respond to rising temperature to trigger their emergence in spring while flowers rely heavily on the time of exposure to light for blooming to occur. Climate disruption (warming) has resulted in insects emerging before there is any food available for them. This phenomenon, referred to as temporal-trophic mismatch, is a major factor in plummeting populations of birds and insects worldwide. One insect has found a way around this mismatch. Maybe others will follow.

A fertilized Queen Bumble Bee overwinters in a hibernation-like state (diapause) and rouses to create her new colony when the temperature is exactly right. This is taking place many weeks earlier than in the past. The first generation of sister bees has the highest nutritional requirement, but they are emerging to famine conditions. One humble Bumble Bee (*Bombus terrestris*) has developed a technique to overcome this problem. Pollen starved bees deliberately damage leaves of a variety of plant species which makes those plants bloom much earlier than normal – in the case of tomatoes they will blossom a full four weeks earlier than usual.

This behavior is observed only in colonies that are pollen deprived. There does not appear to be any immediate benefit – like drinking sap – for the individual cutting bee who may not live long enough to benefit from early blossoming. While not yet fully understood this phenomenon has been shown to be far from random.

F.G. Pashalidou, et al. Science 22 May 2020.





Snapshots of a Maturing Native yard over 13 years

You purchase a 10-year-old house in Florida with an established landscape in a large HOA-managed community. You are snowbirds who spend mid-October to mid-May here. Fast-forward about 13 years and look back at old photos of your yard. It's amazing how much a yard can change over time. The expanse of turf grass has been reduced by 60%. A collection of non-native palms, hibiscus and shrubs have given way to native shrubs and trees, adding much shade, creating bird habitats. Understories were accented with a myriad of small native flowering shrubs and wildflowers.



2008

The front yard matures, beginning with a photo taken in 2008: Two Christmas palms, growing too close to the Bismarck were removed and replaced with plantings of Simpson stopper, dwarf holly, and firebush. Note the open area in the left background. 2009: The new plantings had survived a year and forward progress was anticipated. Kind of the sleep-creep-leap concept. (A foggy day added a bit of artistry to this photo, taken from the front sidewalk). 2015: Seven years later, everything has matured into a nice grouping. The additional plantings in the left background (in front of the house) include Paradise tree, with an understory of stoppers, wild coffees, lyre-leaf sage, wild petunias and rouge plant.



2009



2015

2021: The front "island" now fully matured partially screens the house from the street, provides cover for birds, nectar for

pollinators, and fruits for birds. Hidden from view, a mass of corky-stem passion vine winds up into the trees adding more wildlife value to the mix.





Meanwhile, in the back yard we start with a photo from 2009: Here a trio of Sabal Palms, original to the property, is accompanied by exotic ferns and bromeliads--an island surrounded by an open expanse of lawn. Three Queen palms across the back yard were also left in place (may not be in view). So many developers plant them for that "tropical" look.

2015: Six years later the sabal palms are surrounded by young wild coffees and dwarf viburnum. Some of the queen palms are seen here. A large red cedar has displaced turf grass on the left side of the sabals. A slash pine in the right foreground was planted at the same time (2010).





Across the pathway, more coffees grow in front of an existing mango tree. 2018: Both the mango tree and the red cedar were casualties of tropical storm Erma. The wild coffees are now 4 to 5 feet tall and very productive of both blossoms and berries. The palmetto in the foreground, planted a few years after the slash pine, completes a "miniflatwoods habitat".

Note the grassy pathway of remnant St. Augustine grass. Tall arborvitae in the left background were originally intended as a lanai privacy screen by the previous owner. Having overpowered the area, they were removed in 2019. Several sweet acacia tree blossoms overhang the foreground.

2020 (Dec): Due to passive "neglect", much is overgrown. Note the narrowing pathway, grass becoming shaded out. Wild coffees now 6 to 8 feet tall. A strangler fig

(planted in 2017) is growing tall around the front sabal palm. With the arborvitae gone, the struggling wild lime had reached a mature height with a broad canopy and birds love it! Adjacent privet, fiddlewood, and stoppers are maturing as well. 2021 (April): After overgrowth is pruned down and thinned out, much of the understory is cleared of a confluent growth of 2-inch wild coffee sprouts. Who knew they would be so prolific!





2021 (April): After overgrowth is pruned down and thinned out, much of the understory is cleared of a confluent growth of 2-inch wild coffee sprouts. Who knew they would be so prolific!

Earth Day Celebration at Cedar Point Environmental Park

Photos by Linda Manley



This was one of the many Earth Day events elsewhere. Anne posted it on our FB page, but Alligator Creek was having a much bigger event . Very few people were there in the "middle" between 9:30 and 11:00. The hike had about 6 people or so, led by Greg Brezicki. About 11:00 we got a small flurry of people and some had kids, so Gerald got to do his crafts with them. Peace River Wildlife Center brought five volunteers, two owls, two armadillos, and something else.







We made \$35 on plant sales, but the majority of that was from members: Anne and Kate (who both helped today), Gerald, and I all bought something. A couple other women took home several pots. We had a couple people who were very interested in joining and they went home with membership forms. Others took home literature of one sort or another.

Alice White's People for Trees Tree Fair was going on in North Port and they had a large crowd. We stopped there after CP closed. Barbara Lockhart had asked for some of our literature to hand out at her booth, but because it was so windy, she took it off the tables. She said she would include it again in her booth at NP Newcomer's Day on May 15.



Nature's Corner April 2021 On a Wing and a Prayer

by Kate Borduas

As I write this column in late February, things are starting to change around here. I've been watching Palm Warblers glean insects from my cage as they fatten up for the journey to the far north. Yellow-rumped Warblers are picking late berries and early fruit from the Wax Myrtles that are particularly abundant between Holes 15 and 16. Every

additional gram of fat packed on represents 125 miles in the air for these small birds that normally weigh in at 12.5 grams. Some species are known to gorge and triple their weight before taking off into the night skies.

By the time you read these words in April, their northward migratory journeys to the boreal forests and Arctic Tundra will be complete. After fledging their chicks, they will then undertake the arduous return journey in the fall. Why do they do it? How do they do it?





Yellow Rumped Warbler

Palm Warbler

As I write this column in late February, things are starting to change around here. I've been watching Palm Warblers glean insects from my cage as they fatten up for the journey to the far north. Yellow-rumped Warblers are picking late berries and early fruit from the Wax Myrtles that are particularly abundant between Holes 15 and 16. Every additional gram of fat packed on represents 125 miles in the air for these small birds that normally weigh in at 12.5 grams. Some species are known to gorge and triple their weight before taking off into the night skies.

By the time you read these words in April, their northward migratory journeys to the boreal forests and Arctic Tundra will be complete. After fledging their chicks, they will then undertake the arduous return journey in the fall. Why do they do it? How do they do it?

For most of our history humans have observed that most birds are seasonal. Fantastic theories were floated about what the birds got up to while out of sight. They buried themselves in mud banks, they became fish for a while, or perhaps they went to the moon. In the last one hundred plus years we have learned a great deal about what birds actually get up to during the year: Ornithologists had historically killed birds in the field in order to study or paint them in the lab. Austrian ornithologist Otto Herman's proposal that behavioral observation was a more fruitful line of inquiry was widely adopted; Public outcry over the carnage of the plume trade led to the adoption of the Migratory Bird Treaty Act in 1918; and the availability of inexpensive binoculars for the general public created an army of citizen scientists submitting observations.

Why should the birds travel as far as the Arctic? The short northern summer results in a veritable explosion of biomass that makes foraging efficient for the breeding birds. It is light for 24 hours a day which is perfect for birds that are capable of uni-hemispheric sleep. That means that half their brain can sleep and rest while the other half is catching food and feeding it to the chicks. Over countless millennia these and other factors have become winning adaptations for thousands of species of birds.

How do they do it? This is where it gets really interesting! For simplicity's sake we will stay with our warblers. The spring migratory flight is triggered by the length of daylight when birds experience *Zugunruhe*, an irresistible urge to fly north. Small birds fly at night in order to avoid hawks that rely on daytime thermals to get aloft. These birds fly in large flocks as they navigate by the stars, always oriented by the North Star. These flocks are so large they can be seen from the space station. What about overcast nights? In those

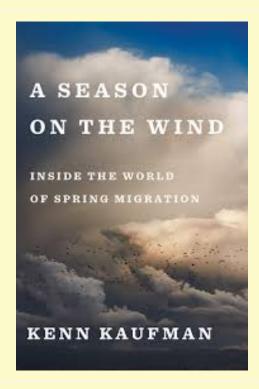
conditions they navigate by following the earth's magnetic field – vision made possible by small mineral deposits in the retina. Birds also have the ability to hear the earth as the tectonic plates grind and crunch at a super low frequency. Long distance migrants alternate waking and sleeping each half of their brains in order to cover huge distances without setting down to roost.

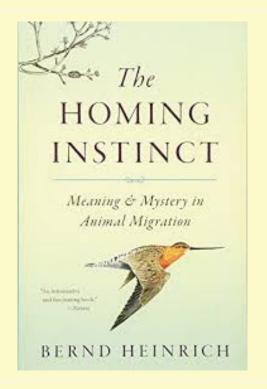
Migration is very risky for individual birds but is a proven success for species as a whole. They can be blown off course or killed by storms. Light pollution interferes with celestial navigation. Climate disruption has altered the timing of the Arctic biomass explosion. If they arrive too early, they may not find enough food to thrive. If they arrive late, they may fail to find a mate. The risk to reward ratio is sufficiently good to drive billions of birds to take these risks twice a year. Our lives are truly enriched by having these amazing creatures in our midst.

If you would like to know more about migration you may enjoy these books:

The Homing Instinct Meaning and Mystery of Animal Migration by Bernd Heinrich

A Season on the Wind Inside the World of Spring Migration Kenn Kaufman





CHEC NATURE WALKS FOR MAY

Charlotte Harbor Environmental Center and the
Charlotte County Natural Resource Department will be conducting the following
free programs to the public in **May 2021.**

All programs can be found at www.ChecFlorida.org

Nature Walks

All walks begin at **9:00 AM**. On these casual walks with CHEC volunteers, you will search and learn about plants, animals, fungi, and more that live in Charlotte County preserves.

Prepare for each walk with plenty of water, insect repellent, sunscreen, and

clothing that will protect you from insects and plants.

Advance registration is required for all walks and all participants are required to wear face masks. For more information or to register, call at 941-475-0769.

Monday, May 3rd Join CHEC on a guided walk through Charlotte Flatwoods Environmental Park, a 487-acre Charlotte County property of mature pines, dry prairie, marsh wetlands, and freshwater ponds. Its location adjourning state lands make it an important wildlife corridor. Meet at the parking lot on US 41. Please call 941-475-0769 to register or for more information. All participants are required to wear face masks during the program.

Wednesday, May 5th Join CHEC on a guided walk through Cedar Point Environmental Park. This 115-acre preserve consists mostly of pine flatwoods as well as some areas of scrub, salt marshes, mangrove swamps, and wetlands. Meet in the parking lot nearest to the restrooms. All participants are required to wear a face mask and to register. Call 941-475-0769 to register or for more information.

Thursday, May 6th Join **CHEC** on a guided walk through 308-acre **Tippecanoe**

Environmental Park. This Charlotte County park includes habitats such as scrub, pine flatwoods, marsh, and wetlands. Meet behind the Charlotte County Sports Park. Please call 941-475-0769 to register or for more information. **All participants are required to wear face masks during the program.**

Monday, May 10th Join CHEC on a guided walk through the old-growth pine flatwoods and mangrove fringe of 125-acre Ann Dever Regional Park in Englewood. Meet at the San Casa entrance. Please call 941-475-0769 to register or for more information. All participants are required to wear face masks during the program.

Wednesday, May 12th Join CHEC on a guided walk through Cedar Point Environmental Park. This 115-acre preserve consists mostly of pine flatwoods as well as some areas of scrub, salt marshes, mangrove swamps, and wetlands. Meet in the parking lot nearest to the restrooms. All participants are required to wear a face mask and to register. Call 941-475-0769 to register or for more information.

Thursday, May 13th Join CHEC on a guided walk through the scrub and pine flatwoods of 217-acre **Amberjack Environmental Park** in Rotonda. Meet at the end of Gasparilla Pines Blvd. Please call 941-475-0769 to register or for more information. **All participants are required to wear face masks during the program.**

Sunday, May 16th Join **CHEC** on a guided walk through **Tippecanoe II Mitigation Preserve** in Port Charlotte. This 150-acre preserve is home to several families of the threatened Florida scrub jay. Meet in the parking lot. Please call 941-475-0769 to register or for more information. **All participants are required to wear face masks during the program.**

Wednesday, May 19th Join CHEC on a guided walk through Cedar

Point Environmental Park. This 115-acre preserve consists mostly of pine flatwoods as well as some areas of scrub, salt marshes, mangrove swamps, and wetlands. Meet in the parking lot nearest to the restrooms. **All participants are required to wear a face mask and to register.** Call 941-475-0769 to register or for more information.

Wednesday, May 19th Join CHEC on a guided walkthrough the 81-acre Bill Coy/Buck Creek Preserve in Englewood. The scrubby flatwoods and mangrove swamp border Buck Creek, which flows into Lemon Bay. Meet in the parking lot. Phone 941-475-0769 to register or for information. All participants are required to wear face masks during the program.

Saturday, May 22nd Join CHEC on a walk at **Bayshore Live Oak Park** along the shoreline of Charlotte Harbor to explore the various mangrove species found there. We will cover mangrove identification, general ecology including special adaptations that allow mangroves to thrive in salty environments, and why mangroves are important and protected in Florida. Call 941-475-0769 to register or for more information. **All participants are required to wear face masks during the program.**

Tuesday, May 25th Join CHEC on a guided walk through **Charlotte Flatwoods Environmental Park**, a 487-acre Charlotte County property of mature pines, dry prairie, marsh wetlands, and freshwater ponds. Its location adjourning state lands make it an important wildlife corridor. Meet at the parking lot on US 41. Please call 941-475-0769 to register or for more information. **All participants are required to wear face masks during the program.**

Wednesday, May 26th Join CHEC on a guided walk through Cedar Point Environmental Park. This 115-acre preserve consists mostly of pine flatwoods as well as some areas of scrub, salt marshes, mangrove swamps, and wetlands. Meet in the parking lot nearest to the restrooms. All participants are required to wear a face mask and to register. Call 941-475-0769 to register or for more information.

Friday, May 28th Join **CHEC** on a guided walk through 308-acre **Tippecanoe**

Environmental Park. This Charlotte County park includes habitats such as scrub, pine flatwoods, marsh, and wetlands. Meet behind the Charlotte County Sports Park. Please call 941-475-0769 to register or for more information. **All participants are required to wear face masks during the program.**

Monday, May 31st Join CHEC on a guided walk through the old-growth pine flatwoods and mangrove fringe of 125-acre Ann Dever Regional Park in Englewood. Meet at the San Casa entrance. Please call 941-475-0769 to register or for more information. All participants are required to wear face masks during the program.

Go to www.CHECflorida.org for a complete program calendar.

Field Trips

For All Events:

If you are not feeling well, please don't attend this gathering.

Properly worn masks or face coverings are always required for participation.

Participants must maintain appropriate 6' social distancing at any event.

Please do not gather in groups.

Use provided hand sanitizers as needed.

Nearby restrooms are available for hand washing.

Additional Guidance for Indoor or Outdoor Meetings:

Participants must maintain appropriate 6' social distancing inside and outside the meeting room, following the markings on the floor.

Entrance/exit signs and arrows may be posted for directional traffic flow.

Chairs are placed at least six feet apart.

Surfaces of tables and chairs in use are sanitized before and after use.

No food or beverages are served. Attendees may bring a personal beverage.

Attendance may be limited, depending on state/county/city mandates.

Additional Guidance for Outdoor Walks and Activities:

Properly worn masks or face coverings are always required for participation.

Social distancing of 6' is emphasized for sitting, standing, and walking activities.

Surfaces of tables, chairs, and benches in use are sanitized before and after use.

Attendees are encouraged to bring their own chairs, beverages, packaged snacks, and hand sanitizer.

Visit our website