



# The Ghost Writer

Newsletter of the Friends of Fakahatchee

## President's Message



**Heartfelt gratitude:** I want to extend my gratitude to all the volunteers who devoted countless hours to prepare the Park for the Sixth Everglades Ultras held Saturday February 18th. The Everglades Ultras consist of three distinct trail races of 50 miles and 50 kilometers (31 miles) and 25 kilometers (15.6 miles) through the Fakahatchee Strand Preserve State Park.

Once again, an enormous amount of work was done in the weeks before the race to clear the trails. This year—in contrast to last year's flooded and muddy conditions—the volunteers were able to render all the trails passable.

The day of the the race required vigilance from all our volunteers when 240 runners showed up bringing their friends and family along for the day. As the sun came up and the moon rose, volunteers could be counted on to make sure that the event was one that leaves everyone with appreciation for the Fakahatchee Preserve.

Bob Becker, Ultra Race director, tells me it was another successful event ([visit the Ultras Website for stats and photos](#))—I credit all the volunteers for its success and for the thousands of dollars in donations that the FOF received from the Ultra race runners. Their donations are testimony that the volunteers' hard work did not go unnoticed. I am extremely proud of our volunteers and their dedication to the mission of the Friends of Fakahatchee.

*Francine Stevens, President Friends of Fakahatchee*



*Distance runners from near and far experience the Fakahatchee's swampy areas, grassland prairie and wooded uplands as they strive to complete the Everglades Ultras.*

## News from Strand

### Local Senate & House Representatives Sponsor Supplemental Funding Bill For Big Cypress Bend Boardwalk Expansion

The Boardwalk Vision committee has been exploring a number of avenues to fund the parts of the Big Cypress Bend Board Walk (BCBB) expansion project not included in Phase 1, which is currently out for permitting. The CSO manual specifically permits advocacy on behalf of the park and educating our representatives on the positive economic impacts of the park on the local community. We've had the blessing of the Park Service Director to explore whether some supplemental funding might be available.

Several members of the Boardwalk Vision Committee met with State Senator Kathleen Passidomo and State Representative Bob Rommel early in the year to explain the benefits of the BCBB Expansion project and its potential economic impact on the surrounding area. Their Legislative Aides, Becky Kokkinos and Matt Spritz, were very helpful in navigating the process. Both Senator Passidomo and Representative Rommel appreciated the contribution the project could make to Collier County tourism.

We were advised that it is highly unlikely in the present climate that public funding will be available from the State Legislature for the entirety of Phase 2, but they asked us to prioritize the various Phase 2 elements and offered to introduce bills to fund the Interpretive Pavilion, restrooms and graphics in both the Florida House and Senate. This seems to be progressing steadily and on February 2<sup>nd</sup> Senator Passidomo spoke on the Fakahatchee and the project before the Senate Appropriations Sub Committee on Transportation, Tourism and Economic Development. Her formal supplemental funding request has now been entered. We will keep you posted on the progress.

In the meantime if you want to remind yourself of the Phase 2 elements, which will add the icing on the cake to the Boardwalk Expansion Project, please look at new appeal video by Jay Staton and Patrick Higgins at <http://orchidswamp.org/new-fakahatchee-video/>.

#### How you can help.

We will still need to raise private money for most of the project, and if you personally would like to help with either the legislative initiative or other fundraising routes please contact me; Tom Maish, Co-Chair Boardwalk Vision, (239) 992-5963, Tommaish@aol.com.



## The Face of the Park



This is the smiling face of Dee Leonard who has been greeting most of our visitors to the Park this season.

In her 7th year as a resident volunteer, Dee has taken it upon herself to man the visitor center on Janes Scenic Drive. Before a visitor's car door even shuts, she pops out of the newly refurbished office to make them feel welcome and offer advice about how to enjoy the park. Feedback has been wonderful.

Originally from Illinois, an ex-special education teacher and girls' high school golf coach, Dee also works on grant applications for the Friends and Park and manages FOF's Facebook account. She lives in a motorhome on site with her husband Don who is an FOF board member and the person most often seen driving heavy equipment along Janes Scenic in our constant struggle to maintain it. For the rest of the year Don and Dee live in Rhinelander, Wisconsin, which is at the lofty elevation of 1,549 feet compared to barely 4 at her motorhome here. *We are lucky to have them both!*

## Fakahatchee's Bay Trees fall Victim to Globalization

by Patrick Higgins

It happens over and over again. A foreign shipment arrives in some U.S. sea or airport. Only a tiny portion of the cargo can be inspected. Unnoticed, hitch-hiking in the wooden packing material of something as innocuous as kitchen tiles, may be a non-native insect's eggs or larvae. The tiles and infested wood quickly move through the distribution chain, and the insects freed from their native controls and with plentiful hosts, rapidly multiply. Another invasive species has arrived that will probably remain undetected until it's too late and out of control.

In this horde of invaders are numerous species of bark beetles belonging to the weevil subfamily *Scolytidae*. Over 55 different exotic scolytids species have now established themselves in the USA. Among their ranks are some of the most damaging insects our North American forests. In western United States alone, aided by shifts in temperature and increased water stress from climate change, they are felling as many as 100,000 trees a day.

Here in the Fakahatchee you've probably noticed rust-colored dry leaves suddenly appearing in many of our hardwood hammocks. These are redbay trees (*Persea borbonia*) that have succumbed to laurel wilt. The disease is vectored by a tiny bark-boring beetle, the redbay ambrosia (*Xyleborus glabratus*) which arrived on wooden pallets from Asia in Georgia in 2002.

Most ambrosia beetle species only attack dead and dying trees and can actually be considered beneficial to forest ecosystems as they speed the recycling of nutrients. The redbay ambrosia beetle, however, attacks healthy trees. These are in the Laurel family and include avocado, sassafras, spicebush, swamp-bay and of course redbay.

The beetle has a symbiotic relationship with a pathogenic fungus (*Raffaelea lauricola*) whose spores it transports in special pockets in its mandibles. When it initially attacks, the redbay ambrosia beetle bores through the tree's trunk without ingesting the wood tissue, leaving behind telltale frass in the form of a sawdust straw on the outer bark.

The beetle doesn't create galleries directly below the bark like most bark borers, but heads straight for the sapwood where it injects its symbiont's spores into the vascular system, effectively farming it. The growing fungus leaves a streaky black discoloration in the xylem. This is the 'ambrosia' upon which both the adults and larvae feed. Most of the life cycle takes place within the galleries, where beetles mate and lay eggs. It takes about 30 days to develop from egg to adult. As the next generation of female beetles matures, they collect fungal spores to carry to another hapless tree. It is thought females can fly 2-3 km in search of a host, whereas the males are flightless.

The fungus quickly spreads throughout the tree's vascular system clogging it and depriving the tree of water. The tree wilts and dies within a few weeks of initial infection. It happens so fast the tree doesn't even have time to form abscisic acid, the usual reaction to severe stress that causes leaf loss, hence the characteristic brown dried leaves that persist well after the tree is dead.

Because our bays evolved on the opposite side of the world from this disease, they haven't had an opportunity to develop resistance. So far there's nothing we can do to stop this plague other than monitoring it and avoiding transporting dead wood.

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*The rust colored leaves of a red bay killed by laurel wilt. Photo by Patrick Higgins*



*The characteristic sawdust toothpicks at the entry point of an ambrosia beetle. Photo Patrick Higgins*

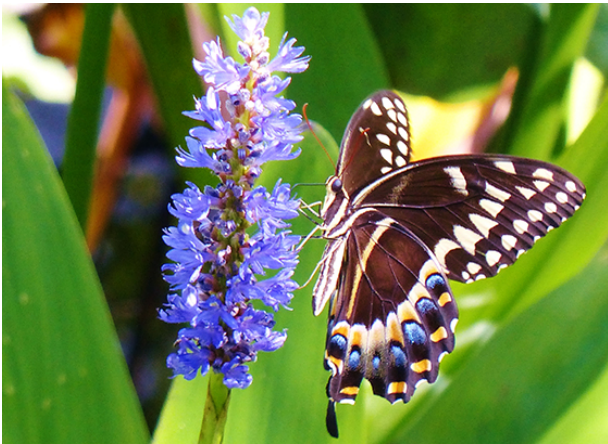
During a field trip to Naples Botanical Garden, however, my wife's 4th grade class members were involved in transplanting and tagging bay tree seedling into specialized air-pots. (Photo of healthy redbay plants by Chad Washburn.) The Garden has been working with several local conservation organizations to collect bay tree seeds that they have been growing indoors. The idea is to preserve a pool of the tree's genetic diversity. They currently have about 150 plants.



Chad Washburn, the Garden's Deputy Director shared an interesting thought. Since juvenile bay trees don't seem to be susceptible to the ambrosia beetle, Chad is considering experimentally coppicing healthy bay trees to protect them, i.e. cutting them right down to the ground so they will re-sprout. Hopefully this can buy time while a long term solution is sought, or at least allow the bell curve of the epidemic to peak. Other strategies involve chipping infected wood. The fungus dies within a couple of days of chipping but can persist in a standing tree for at least a year. Chipping also disrupts the beetle's life cycle. Unfortunately this is not practical on an ecosystem scale.

However the damage doesn't stop with the trees' demise. Apart from losing a valuable shade tree in our hammocks, there is a knock-on effect in the food web. White-tailed deer forage on new bay leaves; black bear, and wild turkey and other birds feed on the redbay's fruit. But most serious of all, our redbays are the major host plant for two of our swallowtail butterfly species; the palamedes (*Papilio Palamedes*) and the spicebush (*Papilio troilus*). If the redbays, go so may they.

If this was not enough, there's an even more menacing invader looming over the horizon. It's the emerald ash borer (*Agrilus planipennis*). Although not a *scolytid*, it's also a native of Asia that probably arrived on wooden packing material. In common with many invasive species, in its native range it's not a significant pest. But here in North America it is decimating our native ash trees, threatening the entire *Fraxinus* genus. It hasn't reached Florida yet, but on November 8, 2016, the Emerald Ash Borer was confirmed in neighboring Alabama.



*Palamedes swallowtail butterfly endangered by the loss of their host plants in the laurel family. Photo Patrick Higgins*

The State of Alabama has just issued a quarantine order "prohibiting the movement of firewood of all hardwood (non-coniferous) species, ash nursery stock, non-heat treated (green) ash lumber, and any other living, dead, cut, or fallen, material of the genus *Fraxinus*, including logs, stumps, roots, branches, and composted and uncomposted chips that have not been ground to a small enough size to destroy Emerald Ash Borer in any life stage, by any means of conveyance whatsoever."

Alabama's quarantine will slow, but probably not stop the emerald ash borer's spread. Unfortunately, 85% of our iconic ghost orchids grow on pop ash trees (*Fraxinus caroliniana*). Globalization is a real threat to biodiversity.

## The Deeds of Volunteers are Essential Indeed

by Mike Duey, Park Ranger and Volunteer Coordinator



*Some of the essential volunteers who worked the trails and trams to prepare the Strand for the Everglades Ultra. Photo by Dee Leonard.*

Our volunteers donate thousands of hours each month to Fakahatchee Strand. The park would not function without the wide variety of services that volunteers provide. From the trail maintenance provided by the Fakahackers to the educational tours and interpretive programs provided by our volunteer naturalists, Fakahatchee needs its volunteers.

There are also volunteers that work hard every week to maintain and repair the Big Cypress Bend Boardwalk, the most visible and accessible site in the park—a site that sees thousands of visitors a week through the season. We also have wonderful resident volunteers that work to maintain the equipment, structures and roads in the park.

Just this past month over 40 people volunteered their time to help the day of the Everglades Ultra, the 50-mile race through the park. There were also hundreds of volunteer hours of race preparation. The event simply would not have happened without the help of so many great volunteers.

On March 18<sup>th</sup>, the Friends of the Fakahatchee are hosting a volunteer appreciation picnic. It is a chance for the staff of Fakahatchee Strand to say thank you for all the hard work and all the services that our volunteers provide. If you can't make it, know that you have our gratitude.

## Seen Around the Strand

**Keep up with the Fakahatchee Scene on Facebook [@orchidswamp](#)**



### The Nature of the Friends

Attendees of the Marjorie Stoneman Douglas Festival in Everglades City Feb 21-25 were treated to a special tour of the Fakahatchee "trams" by Friends of Fakahatchee Volunteers Dee and Don Leonard. At the beginning of the hike, the trekkers spotted a beautiful barred owl, and a visitor, Linda Mumpower, shared her pictures. Look for more photos of wildlife on our Facebook page, <https://www.facebook.com/orchidswamp/>, and at our website, <http://orchidswamp.org>.

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***“A beautiful walk in nature...”***

*"I was so glad I stopped here and did the boardwalk. Upon getting out of my car I got to see my first Alligator and baby right next to where the cars park.... There is a suggested donation of \$3.00 which is well worth it. I was so happy with the amount of wildlife I saw on the trail. I saw 3 other alligators, lots of fish in the water, and many different birds. Gorgeous walk and views! "*

— Visitor, Union Bridge, MD

## A Day on the Big Cypress Bend Boardwalk



*The wading birds, such as this Great Blue Heron, don't seem to mind sharing the pond at the end of the boardwalk with the American Alligators.*



*Visitors enjoyed this Anhinga's antics – swimming, catching fish, juggling fish, swallow fish, repeat! Then the return to a branch to groom, dry and pose for the cameras.*



*You'll often see several banded water snakes minding their own business, basking in the sun.*

*Photos courtesy of William Breeden (birds), Patti Boesche (snakes).*

## Membership News

### Election of Board of Directors Members

Nominations for the Friends of Fakahatchee Board are officially closed. Elections will be held via e-mail ballot to the membership. If you are a member, and do not receive ballot notice by March 28th, please contact the Nominating Committee Chair: Ted DeGroot, [ted@southnaplesrealestate.com](mailto:ted@southnaplesrealestate.com), [239-774-1535](tel:239-774-1535)

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## Welcome New Members

Seven new official *Friends* memberships this month include Patricia Boesche, Pamela Durrant, Thomas Kasprik, Celina Roy, Gary Spragg, Tejada Manuel, and Sara and Alan Tipka. This brings our numbers up to 365.

### Thanks to our lifetime and business members!

#### Lifetime Preservers

Bruce & Janet Bunch

#### Lifetime Individual Members

Rita Bleasdale  
Warner Blow  
Elsie Caldwell  
Peter Haffenreffer  
Don Harmon  
Patty Huff  
James Nici  
Wendy Becker Payton  
Ken Shapiro  
Carol Vartanian

#### Lifetime Family Members

Tom & Judy Maish  
Noel Nation  
Van & June Saylor  
Glen & Laura Stacell

#### Business Patrons

North American Canoe Tours  
(Ivey House B&B)  
  
Shurr Adventures

## 2016-2017 Board

#### President

Francine Stevens

#### Vice-President

Patrick Higgins

#### Secretary

Jinny Ball

#### Treasurer

Ken Shapiro

#### Members at Large

Ted De Groot  
Dennis Giardina  
John Kaiser  
Don Leonard  
Howard Lubel  
Tom Mash  
Glen Stacell

## Save the Date for the Annual Members Meeting and Dinner

# SATURDAY, APRIL 8

Featured speaker and naturalist  
Kevin Sandel from the  
Conservancy of Southwest  
Florida will present "*Alien  
Invaders, research techniques  
to study the Burmese Pythons,  
exotic plants and more...*"

*A special invitation bulletin will  
be sent to the membership.  
Join the Friends of Fakahatchee  
[http://orchidswamp.org/support/  
memberships/](http://orchidswamp.org/support/memberships/)*

*Dinner will be served at  
Everglades Adventure Center  
102 Collier Avenue  
Everglades City, FL 34139*

**Become a Friend of the Fakahatchee**  
Visit <http://orchidswamp.org/support/memberships/>

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