



President's Message

Climate change – natural cycle vs anthropogenic

By Patrick Higgins

It was some ten thousand years ago that the last ancestral Paleo-Indians were able to make the foot crossing from Asia into North America. Behind them the sea would have swallowed up the Bering land bridge as huge ice sheets reaching as far south as Manhattan Island melted and retreated.

When these hardy souls were trudging through a tundra-like landscape clad in furs, past scraggly spruce, dwarf willow and shrubby birch, perhaps following a herd of woolly mammoths, the Florida peninsula was almost twice as wide as it is today. But as sea levels continued to rise, Florida slowly shrank to its current shoreline. As it did so, the world's climate became warmer and wetter, with our Everglades and precious Fakahatchee Strand developing about 5,000 years later.

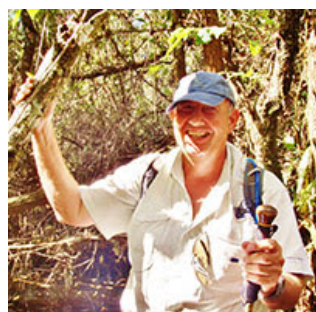
For the past million years the Earth's climate has alternated between warm interglacial periods of 10-20 thousand years and ice ages of some 80-90 thousand years. These climate oscillations correlate with what are called Milankovitch cycles. There are actually 3 different Milankovitch cycles at work, each with its own periodicity. They affect the shape of Earth's orbit around the Sun from almost round to quite elliptical and therefore our distance from it, as well as the amount of tilt in Earth's axis and the direction of that tilt. These all combine to vary the amount of solar energy Earth receives, which determines the advance and retreat of our glaciers.

A common question posed by our visitors is: how do we know that current global warming isn't just part of this natural cycle? The answer is that these natural changes occur extremely slowly over a 100,000 year timeframe. So if the warming was the result of the natural cycle it should have taken many thousands of years instead of just the few hundred since the industrial revolution.

There's another major difference, too: we know from ancient gases trapped in ice core samples that in prior interglacial warmings increases in CO₂ levels lagged behind (followed) rises in temperature, which is what we would expect if the rise was from the natural Milankovitch cycles instead of from a rise in CO₂. However, in our current warming the temperature rise is being led (preceded) by an increase in atmospheric concentrations of CO₂.

You may also hear people talk about fluctuations in solar output. In fact, over the past 35 years of global warming the sun has shown a slight cooling trend, so recent warming cannot be attributed to changes in the Sun's radiative forcing either. Our insulating blanket of greenhouse gases has a bigger climatic influence than any slight fluxes in incoming solar energy anyway.

No skeptic has come up with a viable natural explanation for the magnitude of climate change that has occurred over the last few decades, whereas the unnatural answer of increased greenhouse gas emissions fits the bill. The physics of the greenhouse gas effect is beyond dispute.



The final question we may have to answer is this. If we know that our planet has survived past warming episodes, why does it matter? Because our entire civilization – where we can live, where we can grow food, what food we can grow, where and whether we'll have sufficient water, our biodiversity and whether there'll still be an Everglades – is all dependent on the climate we have experienced for the past 10,000 years.

We are now past the point of being able to stop change. We are just struggling to limit the amount and rate of change, so we and the natural world have time to adapt to it. And that's just half of it. Right now we are being partially shielded from the full effects of our excess greenhouse gas emissions by the thermal inertia of our planet's vast oceans. In a few decades we can really expect temperatures to take off.

Patrick Higgins

President, Friends of Fakahatchee

Tickets available for Annual Members Dinner – Apr 14

Join the Friends of Fakahatchee for their annual dinner meeting Saturday, April 14 at the Everglades Adventure Center in Everglades City. The event will get underway at 5 p.m with a cash bar, followed by a buffet dinner.

Reservations at \$45 per person are required by 6 p.m. April 12. Tickets can be purchased at <https://www.eventbrite.com/e/friends-of-fakahatchee-annual-members-meeting-dinner-tickets-44559064361> The meeting is open to the public.

After a brief business meeting, naturalist Tonya Zadrozny of the Conservancy of Southwest Florida (pictured at right), will tell "Animal Tales" about the Conservancy's rehabilitation programs.

The Conservancy's von Arx Wildlife Hospital provides for the rescue, rehabilitation of sick, injured, or orphaned wildlife. Each year the Hospital cares for over 3,500 animal patients. Aided by live animal companions, Zadrozny will describe how humans affect native species and what you can do to prevent injury to wildlife.

Don't miss this timely presentation – and the chance to bid farewell to your departing snowbird friends. Not yet a member? Why not join now? It's easy!

Visit orchidswamp.org/support/memberships/



New date for the 4th Fakahatchee Grind – Sunday, April 22

Due to the recent wildfires in the area, the Fakahatchee Grind has been rescheduled for Sunday, April 22. This is a great opportunity to ride your gravel bike or mountain bike through one of the most diverse and unique ecosystems in the state. Chances of seeing an alligator, panther, or bear on this ride are in your favor.

This year the Park is offering camping for only five dollars each night, Saturday, April 21 and Sunday, April 22. This is a spectacular opportunity to camp in one of the most unique habitats in the southeast. *Camping in the Fak photo by Jay Staton.*

More information and tickets are available at <https://www.eventbrite.com/e/the-fakahatchee-grind-tickets-43187316426>

You can also e-mail Ranger Mike Duey at michael.duey@dep.state.fl.us for more information or questions.



News from the Strand

Fearless FakaHacker Report

by Dino Barone



All the park rangers and close to 20 different volunteers have spent many days since Irma clearing trams and trails. They continue to work (and sweat!), often using the chainsaw with a 28-inch bar!

Since my last update your Fearless FAKA-hackers have been busy most weekends. We are still working to open up all of East Main. Hurricane Irma, with her strong east winds as she passed by the Fakahatchee, knocked over some very large trees from east to west across the east main tram. Our Stihl Magnum 460 chainsaw with its 28-inch bar has seen a lot of action since Sept 2017, along with our MS250 with the 18-inch bar. All the park rangers and close to 20 different volunteers have participated in these continued clearing efforts. You guys ROCK!!!

Opening up Gate 2 for eventually creating a loop trail is still a work in progress. So far we have opened up three-quarters of a mile. The last quarter-mile we have encountered some nasty Brazilian Pepper thickets, and there are more as we head south.

The barbed wire removal project was set on the back burner during the high water months. Now that the prairies are dry, we can head back out there to continue this project. One of the many benefits of the recent wildfires in Dan House Prairie is that the cut grasses were burned down to ground level. This will make it easier to access the posts and the mid-span holders. *continued >>>>*



From going in to prepare for the chainsawyers to working on the Gate 3 trail, 'Uncle Dave' Pickering is another valued member of the FakaHacker team!

Trails for the Everglades Ultra Marathons had some last minute clearing to ensure the runners did not get any unexpected hugs from a stray branch or dangling Smilax vine.

The bike event (originally scheduled for March 11), was pushed back to April 22, due to the recent wildfires in the area. We will drive the routes to make sure these are cleared by the new event date. Uncle Dave (Dave Pickering), continues to work on his beloved Gate 3. He has also been doing some pre-clearing on Gate 2, so that the sawyers can march on in with their chainsaws to open the tram about tractor wide.

The FOF Board of Directors threw quite the picnic for volunteers. We had perfect weather to sit down with other volunteers and park staff, swapping swamp stories. "Thank You!" to the FOF Board of Directors along with the awesome park employees who made this magic happen.

There are plenty of diverse volunteer opportunities in the park. Please contact Ranger Extraordinaire Mike Duey and let know your areas of interest. I am confident he can find opportunities that will enrich as well as enhance your volunteer experience. You can e-mail him at michael.duey@dep.state.fl.us or call 239-695-4593.

Spring is in the air. Let's get outside and enjoy the sunshine!

Dino

Fearless Fakahacker



Dino takes a well-deserved break on a just-cleared cypress, one of many knocked over by Hurricane Irma's winds across the East Main Tram.

You too can Volunteer at the Fakahatchee!
<http://orchidswamp.org/support/how-to-volunteer/>.

Private tours bring special guests to the Strand



Tom Maish organized a legislative familiarization tour on Saturday March 3rd for Florida Senator Bob Rommel's staff, who were so helpful with the funding for the Boardwalk Expansion project. Left to right: FOF's John Kaiser intrigues his audience – the Senator's wife Sandra, a keen naturalist, and District Secretary Priscilla Grannis and her family.



Jim Winger drives the Naples Garden Club members to the Hilton as part of their private tour, which also included a swamp walk. The interpretive tour was deemed a great success.

Orchidswamp.org team meets at the Fakahatchee

Cindy Liberton, creator and manager of the FOF website and newsletter, along with her assistant Sue Blakeman, recently spent a short vacation in the Everglades. Bruce Bunch, Dee Leonard, and Francine Stevens joined Cindy and Sue on a swamp walk. It was a much awaited opportunity to spend time with Cindy, who resides in Hernando county. Cindy loves to camp and spend time in the Everglades as often as she can get away.

The quality and beauty of orchidswamp.org and the Ghost Writer is a result of her creativity and attention to details. Thanks to a team effort, we can be proud of how the organization is represented on the internet for the entire world.



Cindy Liberton, Sue Blakeman, Dee Leonard, and Bruce Bunch ready for a swamp walk.

New tour guides are FOF assets



Tom DeFosses and Andrew Tyler have been very quick studies on their first season as tour volunteers. Jim Winger has been a great coach, sharing his several years of experience on the tours program with our newest tour guides.

FOF PR & Media Chair, Bruce Bunch, joins Tom DeFosses, Andrew Tyler, and Jim Winger on a tour.

Seen in the Strand

Big cats rumble on Jones Grade!

by Mark A. Slack

On Sunday, March 25 we rode our bikes on Jones Grade to Pennington Post to Uplands Hiking Trail down to Janes Scenic Drive and back. Catherine, riding ahead of me, first spotted a juvenile panther up close, just walking down the trail in front of us. We were about halfway between Pennington and Janes Scenic. It was around 10:30 am, we were down wind, and I think it never knew we were only about 20 yards behind. After about a minute or so, a small bobcat jumped out onto the trail in front of it! The young panther then gave chase, and they both disappeared into brush.

Wildfire in the Fakahatchee



A prescribed burn in the Picayune Strand State Forest in early March was named the Faka-Union fire after the winds shifted, and it jumped the boundary into the Fakahatchee Strand Preserve SP. Visit our Facebook page for more photos of the fire and of animals and plants seen in the Strand. <https://www.facebook.com/orchidswamp/>

The distant Sabal palms hint at the size of the March wildfire in the Strand.



*Barred owl (*Strix varia*) unabashedly taking a swamp bath in view of our Naples Garden Club tour. Photo by Patrick Higgins.*



*Swallow-tailed kites (*Elanoides forficatus*) up from the Amazon's Pantanal, swooping with barely a wingbeat over Janes Scenic*



*Larva of the Spanish Moth (*Xanthopastis timais*) – the so called convict caterpillar – feeding on swamp lily (*Crinum americanum*). Photo by Patrick Higgins.*



*Sweetbay magnolias (*Magnolia virginiana*) blooming along lower Janes Scenic Drive on the edge of the borrow ditch and Lee-Cypress Prairie. Photo by Patrick Higgins.*

Membership News

A fresh face for the visitor center

Along with a group of volunteers and Park staff, Dee Leonard has spent hundreds of hours this season to improve the public's experience when they visit.

A grant awarded by the Lee County Electric Cooperative helped the Park install interactive displays of mammals, reptiles, and fossils at the visitor center, along with improved trail maps. Visitors are now better informed for their drive or hike along Janes Scenic Drive. We hope their experience brings a sense of responsibility for preserving the unique and fragile habitat of the largest State Park in Florida.

Dee's daily presence in the Visitor Center also helped the Park collect entrance fees, more than ever recorded in any previous season. Visitor's on-site donations to the Friends of Fakahatchee topped \$1,000 this season, probably also due to Dee's influence. As if that wasn't enough, Dee also actively manages the FOF Facebook page. Bravo!



Volunteer Appreciation Picnic: Good food, great weather, fine Friends

The Volunteer Appreciation Picnic, hosted by the Friends of Fakahatchee, was as enjoyable as the weather was lovely. Park Service Specialist Mike Duey, who coordinates volunteers, did an excellent job managing the set up of the picnic. Mike extended his appreciation to the volunteers, citing their names and the projects they work on in the Park.

Park Manager Steve Houseknecht (with plenty of help from his son), Mike Owen, Steven Bass and the latest addition to Park staff, Guy DiGiovanni then provided details while recognizing each of the volunteers individually. The staff conveyed their heartfelt appreciation to all the volunteers.



Valinda Subic, Chief of Parks District 4, continues to be a big fan of the FOF and enjoys meeting the volunteers one on one. The Friends are always happy to see her, especially given the 2 1/2 hours she has to drive to spend time with us.

The picnic's success was also dependent on Dee Leonard and Board Director Don Leonard, who are also both Park resident volunteers. The way they manage to cook on the grill to feed nearly sixty folks – and still have so much fun – is impressive!

Closing a perfect afternoon, dessert was a special cake to celebrate FOF's 20th year anniversary. Francine, Steve and FOF president Patrick Higgins display the FOF anniversary cake moments before it disappeared.



Boardwalk ambassadors on the scene



Dave and Patti Boesche spend numerous hours at the Big Cypress Bend Boardwalk with the visitors. Their good cheer and knowledge enhance visitors' experience. Between the Boardwalk hours and volunteering on the FOF Janes Scenic tours, it's entirely possible Dave spends more time in the Fakahatchee than at home! Thanks, Dave and Patti!

Dave and Patti Boesche are friendly and willing to share their knowledge with Park visitors.

Faithful FOF members continue from afar

Executive Director Francine Stevens recently had a long phone conversation with FOF member Richard Scott who resides in Ontario, Canada. He told Francine that he and his wife Margaret can no longer travel to Naples, and that they miss being in the Fakahatchee. Francine passes along their best regards to all the Friends volunteers they have worked with in the Park.

The Scotts were among the first donors to the Boardwalk Expansion fundraiser after it was announced in the September 2010 Ghostwriter. Despite their absence from Naples, the Scotts intend to continue their 18-year membership with the FOF. We miss you too, Richard and Margaret!

Did you remember to donate to the Annual Fund?

Thanks to the generosity of our members, we have received nearly \$10,000 for the Pole Barn project to protect the FOF and Park vehicles, but we need a bit more. It's not too late to donate by sending a check to the FOF or donating via PayPal at <http://orchidswamp.org>. **Give to the Annual Fund. Let's build that pole barn.**

Members make a difference.

Welcome to our new members: Ellen Bor, Pompano Beach, FL;
John Caminiti, Brooklyn, NY; Sebrina Carle, Boynton Beach, FL;
Brian Hill, Naples, FL; Tony Szymanowski, Naples, FL.

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

Susan Hauze

Patty Huff

James Nici

Wendy Becker Payton

Ken Shapiro

Carol Vartanian

Lifetime Family Members

Tom & Judy Maish

Noel Nation

Van & Jane Sayler

Glen & Laura Stacell

Business Patrons

North American Canoe Tours

(Ivey House B&B)

Shurr Adventures

Business Benefactor

Everglades Day Safari



The Friends of Fakahatchee, Inc., a 501(c)(3) not-for-profit corporation Citizen Support Organization, provides financial and volunteer support to preserve the unique ecology and cultural heritage of Fakahatchee Strand Preserve State

Park and to educate the public about its importance. The Fakahatchee is the largest cypress strand in the world and the deepest slough in the greater Everglades.

The Ghost Writer, named after the endangered Ghost Orchid which blooms in the Preserve, is currently edited by Next Steps Collective, LLC, which also manages the Orchidswamp.org website. Contributions to Ghost Writer that relate directly to the business and purpose of the Friends of Fakahatchee, Inc. are welcome. Please write news@orchidswamp.org, subject line: Ghostwriter.

A COPY OF THE OFFICIAL REGISTRATION AND FINANCIAL INFORMATION FOR THE FRIENDS OF FAKAHATCHEE, A FLORIDA-BASED NONPROFIT CORPORATION (REGISTRATION NO. CH9223), MAY BE OBTAINED FROM THE DIVISION OF CONSUMER SERVICES BY CALLING TOLL-FREE 1-800-HELP-FLA (435-7352) WITHIN THE STATE OR VISITING THEIR WEBSITE HERE (<https://csapp.800helpfla.com/>)



Stay up to date with what's seen in the Strand on our FOF Facebook page.
<https://www.facebook.com/orchidswamp>