

# Florida Coastal Everglades Long Term Ecological Research

# News from the Sloughs

News from the researchers, students, and educators of FCE LTER

This edition is dedicated to our FCE field researchers, crews, and field support teams!



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Do you know the lovely swoony tune belted out from jazz, rock, and blues divas birthed from Gershwin's Porgy and Bess, "In the Summertime when the living in eeeeeeaaaaasyyyyyyyy"? In the Everglades and South Florida it is summertime almost year round and no not necessarily easy for researchers frequently lugging half a ton of equipment along. Field work and science are daily business and in the hot hazy afternoons of an Everglades summer researchers are zooming back to campus with samples of water for bacteria, nutrients, stable istope and biochemical testing, to periphyton slides for microscoping and furnacing, to bull shark tags and tracking data, digital data downloads from robotic field samplers for CO2 and particulate and dissolved matter, field notebooks chock full of data, often bruises scrapes, sunburns and always with stories to tell. Join our courageous and ingenious FCE field researchers in this edition and feast your vision with perspectives of world-class photographer and FCE field researcher Franco Tobias. Above: Tarpon Bay by Franco Tobias.

Important Dates: FCE All Scientist Meeting Dates: January 5-6, 2015 August is our Field Researcher Appreciation month so hug a field researcher and ask for a field story!



# Take me to your LTER: Summer Address from Lead Principal Investigator Dr. Evelyn Gaiser

## Hi Everyone!

I'm glad that Susan ("Newsy Susy") decided to focus this newsletter on our research support teams. Being a recipient of field reports like: "took a little longer today because of the python wrapped around the flux tower...," it's always good to see our field crews getting the recognition they deserve. When we are working up our reams of data, it's easy to forget the challenges lying behind each point of collection. We are exceedingly grateful for the hard work and dedication of our incredible support staff!

The Science Council meeting at Konza Prairie last month was a blast. We got to tour all around the beautiful prairie and see and hear about all of the incredible-scale experimentation that the site has undertaken over the years. The science program focused on primary production was terrific and is leading to some really interesting cross-site projects (see my e-mails on this, and much more to come). The Tropical Botanic Artist's diatom exhibit also went to the Flint Hills and was enjoyed by scientists and bison alike.

Following the Science Council meeting, many of us attended the *Joint Aquatic Science Meeting* — what a thrill to have our major aquatic science organizations meeting in the same awesome town! Great to see FCE-ers leading workshops across different disciplines, especially things like the "*Early Career Workshop*" (thanks John Kominoski and Sylvia Lee!) that help young investigators navigate into successful careers.

I also wanted to send a big congratulations to Dr. Pamela Sullivan who moved our special FCE LTER issue of 20 publications through to production in the journal <u>Wetlands</u> this past month (vol 34:1)! This was a major collaborative effort with Everglades National Park, Everglades Foundation, SERC, and the SFWMD highlighting ecosystem response to restoration. We are also proud of Dr. Pam's new appointment as Assistant Professor at the University of Kansas. Go Pam!

A few reminders, as we move through summer, be sure to work your book chapter writing into your activities! We also look forward to an early All Scientists Meeting this year (Jan 5-6, 2015) and our mid-term review sometime mid-March! Onward!

Best wishes to all for a fun and productive summer! Evelyn



**KONZA Prairie LTER site** 



Photos by Dr. E. Gaiser

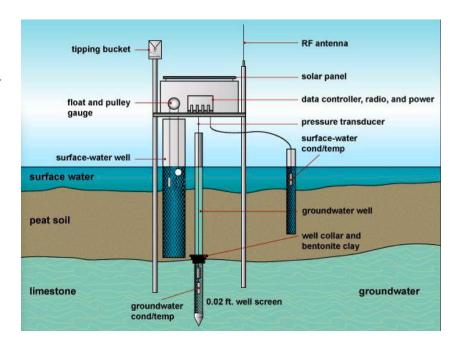
## FCE Digestions of a GIANT dataset

This quarter we highlight the publication of a monumental dataset from Gordon Anderson, USGS, and co-authors, from data he has been collecting and working with for the last 18 years. The field work that has gone into developing these data is daunting and the instruments of purpose are the data collections stations shown left from their report.

Everglades researchers Gordon Anderson and Co-author Tom Smith provided the following information about this valuable resource:

#### From Gordon Anderson:

# **Long-Term USGS Dataset on Everglades Coastal Hydrology Released**



A hydrologic dataset from a network of 13 paired surface/groundwater gages along the coastal Everglades was recently published in a USGS Report, titled "Land-margin ecosystem hydrologic data for the coastal Everglades, Florida, water years 1996–2012", co-authored by Gordon Anderson, Thomas J. Smith III and Karen Balentine (FCE-LTER collaborators). This hydrologic network was comprised of a series of paired groundwater-surface water gages along transects designed to monitor sea level changes along the coastal mangrove-marsh ecotone. Data from the study has been useful in providing an empirical hydrologic baseline for the greater Everglades ecosystem restoration science and management needs. The report and accompanying dataset are available online at <a href="http://dx.doi.org/10.3133/ds853">http://dx.doi.org/10.3133/ds853</a>. Two USGS Hydrology gages at SRS-4 and SRS-6 were transferred to the FCE-LTER study (October 2012) under the oversight of Dr. Rene Price.

From Tom J. Smith III, Ph.D

The hydrology data collected during the Land Margin ecosystem project in Everglades NP is now available through SOFIA at this link:

http://sofia.usgs.gov/exchange/sfl\_hydro\_data/index.php

You'll see a map on the right side of the screen. The LME stations are in red.

For most sites we collected data for surface and ground water elevations, conductivity (and converted to salinity) and temperature. At marsh sites we also measured rainfall.

For more information please contact Gordon Anderson. It was primarily his blood, sweat and tears that went into the station building, maintenance, and data QA/QC.

We send a warm FCE Thank You and congratulations to Gordon and his co-authors!

## FCE Collaborator Spotlight: Dr. Henry Briceno

Dr. Henry Briceno shines in our FCE Collaborator spotlight in this issue. Dr. Briceno has had a productive year and has been featured prominently in the news. He also has kept up with an impressive publication rate that is a model steady state model for LTER contributions both centering on FCE research and data collaborations with other sites and organizations, ranging down to the central and southern Americas.

FCE researcher Dr. Briceno has been with FCE since year 2-that is 12 years now! and has logged more hours with FCE, LTER and supporting datasets than most of the rest of human population combined. He is the Co-Principal Investigator for the FCE III Cross Cutting Theme Climate and Disturbance Legacies.

Being bilingual and living in Miami, where almost everyone speaks enough Spanish to get by, for instance (en espanol) Listen! Or Look! And of course salutations, thank you's and a cortadito are not communication skills we generally list on our resumes. I would list Henry's though, if I had them. Our expert linguist who translated FCE webpages later told us how challenging the translations of ecology from English to Spanish are (because some terms just did not exist) and enlisted a panel from both University of Barcelona and University of Madrid to assist. So now imagine developing research and particularly to build ecological stewardship in other countries, then research program ties and funding building, then produce publications for not one but two audiences and often more simultaneously. On top of this, over the years Dr. Briceno has done a great job of keeping FCE aware of the conferences and proceedings of working groups and research events from both Spanish speaking countries and his home of South Florida. This only some of the work that Henry does, gracefully.

Henry is not only building research communication networks across the language barriers, he is also instrumental in helping create the research for his working groups and tying them together. How does Henry do all of this? With huge efforts and long hours. How do I know Henry's hours? I was lucky enough to have an adjacent office in the Southeast Environmental Research Center for several early FCE years and it was impossible not to notice the extraordinary hours and efforts each day from Dr. Briceno

Congratulations on your recognitions and accomplishments Henry and thank you for your continued extraordinary FCE efforts!

Story and photos by Susan Dailey, Ph.D.



Pictured Above: FCE Collaborator Dr. Henry Briceno presenting data findings at the Florida Coastal Everglades LTER All Scientists Meeting in Miami.



FCE researcher Dr. Henry Briceno was featured in an interview on NBCNews.com discussing sea level rise

Latino Scientists, City Managers Sound Alarm on Miami's Rising Seas

http://www.nbcnews.com/news/latino/latino-scientists-city-managers-sound-alarm-miamis-rising-seas-n114716

# Surviving the FCE Field Day OR Tips for When You Find You Are Out Standing in the Field



I hope you never see a beast of these proportions and I hope you never get stranded in the field. But if you do there are a few important tips to remember. First, always stay with the boat. This has proven to be a very effective way to be found. Second, unless you are Bear Grylls (and I do not recommend the frog bit on Eating Through the Everglades), even if it is getting dark and you are hungry, sunburned and thirsty, do not leave the boat. Third, my best piece of advice; while you are waiting for your rescue, never leave the boat.

Resources on survival abound from the U.S. Army Field Manual to field tips from Sporting and Hunting magazines and I implore you to study all and any resources to glean your own survival tips and gear choices. But there is no singular go-to guide for field advice for FCE researchers who can find themselves on an airboat, marine boat, or left with gear from a helicopter at any time and must prepare field gear accordingly.

Here are a few field tips that I did not find online: Secure it! Airboat engines are powerful shredders of meters sticks, lunches, your favorite field jacket, and any unsecured objects like your field notebook you were just flipping through. Care in packing is the same for waterproofing for both marine and glades trips and who wants a soggy snack? Carry extra field food like nuts and crackers as well as several extra gallons of water for you and your crew. An icy pop under loads of edible ice for each crew member is an excellent way to hydrate and stay a bit cooler. When working wear lightweight breathable clothes with a giant ridiculously large brimmed hat. Put ice in your hat on hot days and get the extreme physical labor completed in the cooler morning hours of summer so you can race out of the field before the first afternoon thunderheads.

Above all be safe and have fun! A data point is not just a data point- it is an adventure.

Story by the editor and picture from "Neverglades" Oil on canvas by S. Osentoski

#### An FCE Field Crew Tribute

Field crews from both FCE and Everglades National Park have been teaming up to pick up our massive flume study leavings from the pre and early days of FCE. Franco Tobias, Rafael Gonzalez, and many more worked with long time FCE-er Damon Rondeau who works for ENP. Damon told me it was extreme work and the pontoon floats had become even heavier over time. Damon pushed the barges of field equipment and floats through the marsh to where they could be picked up with the tram. Cables and nutrient delivery lines from site A bulge from an airboat in the picture below. And the next shows the flume walls folded on top of the remaining pontoons. The fate of the wooden boardwalks is still being decided but personally? I am keeping my fingers crossed for 3 new chickees! Huge thank yous to our outstanding field researchers! Story contributed by S.Dailey Photos by Rafael Travieso





## FCE Student highlights

Check out this fabulous record from our FCE student group!

Summary of what the FCE student board accomplished last year May 2013-May 2014
Blog (13 blogs articles in past year, 3,892 views!!)
Facebook (93 likes of our page to 156, 669 total reach, averaging 15 visits a day)
U-Stream (52 videos, 510 viewers!)
Research and travel awards (10 grants)
3 BBQS
9 First Fridays
Concordia Symposium
Maximum First Friday Attendance!

Student Led Working Group at ASM (Cold Snap)
Largest Student Group Ever! 83 students, 37
institutions
3 articles in FCE Newsletter
Student led issue initiative
Best Student Award Ross Boucek
And Check out Student group president Julia
Gehring's research presentation from the Botany
2014 conference in May

https://www.youtube.com/watch?v=xKCk1oS6yd 8#t=65

AND DRUMROLL.....

#### 5 FCE Graduates in one semester! Woo hoo!

Congratulations to our five new FCE LTER graduates!!!!!

Pictured left to right: Dr. David Lagomasino (Advisor: Dr. Rene' Price), Dr. Sylvia Lee (Advisor: Dr. Evelyn Gaiser), Dr. Liz Harrison (Advisor: Dr. Joel Trexler), Dr. Bryan Dewsbury (Advisor: Dr. Jim Fourqurean), Dr. Phil Matich (Advisor Dr. Mike Heithaus)

We are really proud of you! A special congrats to Phil Matich who received special recognition for winning the one Ph.D. presidential "World's Ahead" award. Photo by Dr. Evelyn Gaiser



### FCE's Short Announcements:

# Highlights of FCE researchers and research accomplishments so far This Summer

Our newest FCE collaborator, Dr. Katrina Schwatz who we highlighted in our winter newsletter is in our news again with two contributions from her latest work this quarter: Katrina Z. S. Schwartz, "Panther politics: neoliberalizing nature in Southwest Florida," *Environmental and Planning A* 45 (2013): 2323-2343

Katrina Schwartz was awarded a nine-month residential fellowship for AY 2014-2015 at the Woodrow Wilson International Center for Scholars in DC. She will be affiliated with the Center's Environmental Change and Security Program, and will be writing a book on the politics of implementing Everglades restoration.

Congratulations Katrina!



The CAST fishing tournament ended June 1, 2014! Congratulations to Jessica Lee and the Rehage Lab

Visit: <a href="http://cast.fiu.edu/tag/fishing/">http://cast.fiu.edu/tag/fishing/</a> for more tournament results and to read about the CAST program and developer and FCE researcher Jessica Lee

FCE's Favorite Diatom Art Trucks To Where the Buffalo Roam! FCE focused art was displayed at the Science Council Meeting at KONZA Prairie LTER May 18 2014- The Tropical Botanical Artists' <a href="http://www.tropicalbotanicartists.com/">http://www.tropicalbotanicartists.com/</a> work featuring (photos shown are sections of their displayed art) Diatoms! as studies from their time spent with FCE researchers was moved VERY carefully up and across country to where the buffalo roam and was

received with wonder, glee, and a thank you note from LTER's Executive Director. And the artists? "We are over the moon!" says TBA .Pauline Goldsmith



The TBAs (pictured above at the Deering Diatom exhibit), will be showing the Diatoms for about two weeks in February 2015 at the Frost Art Museum. The TBA were also featured in our Spring News from the Sloughs V4N1 To learn more about diatoms and the diatom art ventures of FCE with TBA you can visit Dr. Gaiser's Virtual Periphyton lab at <a href="http://algae.fiu.edu">http://algae.fiu.edu</a>





Special issue of Wetlands devoted to "Ecosystem Response to Everglades Restoration" is now published. The 18 publications are available at <a href="http://link.springer.com/journal/13157/34/1/suppl/page/1">http://link.springer.com/journal/13157/34/1/suppl/page/1</a>.

PDFs of all of the papers from the special issue are available to FCE researchers on our intranet at <a href="https://fcelter.fiu.edu/intranet/documents/publications/Wetlands\_2014/">https://fcelter.fiu.edu/intranet/documents/publications/Wetlands\_2014/</a>

If you have questions or comments or would like to learn more about any of the short announcements please contact the editor. Thank you!

#### FCE In the News!

FCE Researcher Dr. Steve Davis was named Leader in Science in Miami for 2014! (From MiamiToday June 5, 2014) in an engaging article about Steve's science communication and Everglades research communications



Congratulations Dr. Davis!

Click here to read the article: http://fcelter.fiu.edu/about\_us/news/2014-06-Miami\_Today-Steve\_Davis.pdf

In our Upcoming Newsletter issues look for these stories and MORE!

Take me to your LTER addresses from FCE Lead P.I. Research Highlights

New Collaborator features

Collaborator spotlight

Student Spotlights

Stories from the Field

FCE Research Digestions (urp!)

FCE's Short Announcements

And YOUR CONTRIBUTION HERE

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Please send submissions for our Fall newsletter by September 2, 2014 to drskdailey@gmail.com

For more Florida Coastal Everglades LTER News and our older newsletters- Check out our webpages under **About Us** http://fcelter.fiu.edu/

And News- http://fcelter.fiu.edu/about\_us/news/

http://www.ustream.tv/channel/florida-coastal-evergaldes-lter

http://floridacoastaleverglades.blogspot.com/

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Please address questions or comments about this edition of the newsletter to: <a href="mailto:drskdailey@gmail.com">drskdailey@gmail.com</a> or sdailey@fiu.edu





