



FOSSIL CLUB OF LEE COUNTY

JULY 2017

Letter from the President

Last month we had a fun meeting, with lots of members bringing fossils to show off, and some to trade and some to sell. Many members acquired new fossils for their collections! We try to have a few different types of meetings scattered throughout the year so as to make the meetings even more interesting than they are! Thank you to all the members who attended the June meeting!

This month, July, we will have a speaker. Her name is Kim Westberry. Kim spoke to the club, but it was several years ago, and she will be speaking this time on fossil hunting out west. She recently returned from another Nebraska trip and will be showing us some of her finds from there as well as others. Kim is a member of several fossil clubs in SW Florida and participates and hunts this area regularly. Please try to attend and listen to Kim's presentation.

The speaker for August will be our own Aimee Hankel. She has her own monthly newsletter column--AIMEEE'S CORNER, and also a blog which many of you guys read on our FCOLC facebook page. Fossil club members make great speakers! Yes, at first, a bit shy, but we all can believe them and listen and learn and enjoy. So, thanks Kim, and Aimee, for doing this for us.

The September meeting will be our annual hands on micro-matrix fossil hunting! Usually we provide small sieved, washed gravel from the Peace River. We also try to have some shelly matrix from a shell pit. But, this year, we have acquired some washed, sieved, unsearched matrix from the famous Lee Creek Phosphate mine in Aurora, North Carolina. It contains some excellent tiny shark teeth, as well as other fossils. If you like to hunt through the small vertebrate stuff, this is for you! Try to remember to bring a magnify glass and a tweezers. We provide the matrix, paper plates and small containers to put your finds into. Anything you find, you keep! The new display cases we sell in the club store may make an excellent display for your new finds, so, check them out at the meeting.

A sign-up sheet will be at this meeting for the FCOLC trip to Rucks pit, for the crystal clams. We have eight members so far. The cost is \$60, but if we get 10 members, or more, it is reduced to \$50 for us. For those of you unfamiliar with Rucks, it is a mine just north of lake Okeechobee, where many shells, primarily large Mercenaria clams have dog-toothed calcite crystals formed inside. This is the only place in the world this occurs. What a great opportunity to dig and acquire some world class crystal clams. Usually, the value of what you find is much more than the admission price, so it's a good value as well. Allow a couple of hours to get there, and we will discuss the details at the meeting. In the meantime, if curious, check out their website. Or Google Ft Drum Crystal mine. And, I put a picture of some of the crystal shells I have from there.

Thanks goes to John and Sue Rhodes for last month's refreshments! And this month will be presented by Leslie (and me!) Stieffel. August has been volunteered by Edgar Jestes. Thanks, guys!

WE ARE GOING TO TRY SOMETHING DIFFERENT, WITH THE REFRESHMENTS. Since I usually get to the meetings early, and we have sodas and water left over, I fill the coolers and ice them up. The refreshment person usually brings more, which we stock for next time if not needed then. So, Treasurer Al Govin, and I, have made an executive decision for the club to purchase the soda, water and ice, with the refreshment person not getting involved in it. We feel this will help members be even more willing to volunteer to do refreshments. The club (we) will get the drinks and ice and the club pays for it. Refreshment volunteers can still get reimbursed, up to \$40, with receipts, if they want, for the food/snacks. But as of now, no longer have to worry about the drinks.

Upcoming events for the calendar:

FCOLC July meeting--July 20

Rucks Pit--July 22

August FCOLC meeting--August 17

September FCOLC meeting--September 21

October FCOLC meeting ---October 19

Orlando fossil show--October 28 & 29

National Fossil Day Celebration--Gainesville, Florida, FLMNH, November 4

Southwest Florida Fossil Society fossil EXPO--November 11

It was good to see Dr. John Taraska at the June meeting! He had a terrible life-threatening scare over the winter months, but survived it well and is happily recovering. We all wish him the very best.

Inside you will find directions from our May speaker, Sean Moran, on how to access the FLMNH database and view fossils in the collection. More fossils are being added all the time, so log in, save to favorites, and check back in from time to time. Here's a great way to learn about various fossils that are in the basement collections of one of the best fossil accumulations in the world!

Again, I urge you to check out our Face Book FCOLC page. If not a member of it, just ask to join. Then you can and will see lots of ongoing happenings with the club, and with members fossil adventures!

SEE YA AT THE MEETING!!

Louis Stieffel
President
Fossil Club of Lee County



OFFICERS

Louis Stieffel, President
239-851-7499, cape187@earthlink.net
Leslie Stieffel, Vice President
239-980-6311, cape187@earthlink.net
Al Govin, Secretary, Treasurer
239-910-2339, algovin1@hotmail.com

DIRECTORS

Dean Hart.....941-979-8217
Dave Seehaver
Jeanne Seehaver
Dr. John Taraska

COMMITTEES

Al Govin, Club Trips Director
Curt Klug, Web Master
Cherie Jacobs, Newsletter Developer
Al Govin, Badges, Membership, Trips
Cindy Bateman, Librarian
Dave and Jeanne Seehaver, Merchandise
Dean Hart, Refreshment
Joe Larkin, \$1 Raffle
Lou and Valerie Rahn, Festival Organizers
Louis Stieffel, Auctioneer, FOSSIL project representative, Newsletter editor, Speakers, Vertebrate Education

Here is a site that has every river and creek mapped **for the whole state**, separated by county. Click on the zoomify tab below each map to zoom in. Enjoy !

Save to your desktop so you can find and use it often!

<http://fcit.usf.edu/florida/maps/galleries/hydrography/index.php>

Meetings are on the third Thursday of the month, 7:00 pm, in the Fellowship Hall at
Zion Lutheran Church , 7401 Winker Road, Fort Myers, FL 33919

Websites & Locations of Interest

Fossil Club of Lee County: www.fcolc.com

FCOLC Fossil Club of Lee County, Inc. c/o AL GOVIN
TREASURER
3584 MIDDLETOWN ST. PORT CHARLOTTE, FLORIDA 33952

The FCOLC website is a source for links to Fossil websites of interest, archived monthly club newsletters, details on club meetings and officers.

Museum of Natural History @ Gainesville www.flmnh.ufl.edu/

The Fossil Project www.myFOSSIL.org

Randell Research Center PO Box 608, Pineland, FL www.flmnh.ufl.edu/RRC/

Smithsonian Natural History Museum www.mnh.si.edu

Southwest Florida Museum of History 2031 Jackson St., Fort Myers www.MUSEUMofHISTORY.org

The Bailey-Matthews Shell Museum, 3075 Sanibel-Captiva Rd, Sanibel, FL www.shellmuseum.org

Cracker Museum at Pioneer Park in Zolfo Springs, FL Tel 863.735.0119

www.hardeecounty.net/crackertrailmuseum/about.html

Cape Coral Friends of Wildlife Burrowing Owls

www.ccfriendsofwildlife.org

Calusa Nature Center and Planetarium 3450 Ortiz Av, Fort Myers Tel 239-275-3435

www.calusanature.org

Imaginarium 2000 Cranford Ave, Fort Myers

www.i-sci.org

Florida Fossil Clubs

Southwest Florida Fossil Club

www.southwestfloridafossilclub.com

Tampa Bay Fossil Club

www.tampabayfossilclub.com

Orlando Fossil Club

www.floridafossilhunters.com

The Fossil Forum

www.thefossilforum.com/index.php

Fossil Treasures of Florida

www.fossil-treasures-of-florida.com

Florida Paleontological Society

<http://floridapaleosociety.com/>

Collecting Vertebrate Fossils on Florida state lands **requires** a permit. A fossil hunting permit is also part of being an ethical Florida fossil hunter.

Florida Vertebrate **Fossil Permit** <http://flmnh.ufl.edu/natsci/vertpaleo/vppermit.htm>

Peace River Water Levels

<http://waterdata.usgs.gov/fl/nwis/rt>

Picking Up Isolated Native American Artifacts www.flheritage.com/news/faq.cfm

Not a fossil, but a cute BAT picture!



JULY SPEAKER!!

We will have a speaker this month at the July meeting. It will be Kim Westberry! She will be speaking about fossil collecting in Nebraska and showing some of her great finds! This is a good time to attend and learn about that type of fossil hunting because you never know, you just may want to do it!

PEACE RIVER STATE FOREST

A RECENT ACQUISITION BY THE STATE AND DESIGNATION AS STATE FOREST HAS PUT ABOUT 8 MILES OF THE PEACE RIVER AND HORSE CREEK OFF LIMITS TO FOSSIL COLLECTING. YOU SHOULD CHECK OUT THESE LINKS AND READ AND FAMILIARIZE YOURSELF WITH THESE BOUNDARIES SO YOU KNOW WHERE IT IS.

Peace River State Forest--Links:

<http://www.heraldtribune.com/news/20141227/preservation-potential-on-the-peace-river>

<http://www.freshfromflorida.com/Divisions-Offices/Florida-Forest-Service/Our-Forests/State-Forests/Peace-River-State-Forest>

Aimeee's Corner!!

Beekite rings

I was taking a close up photo of a Devonian gastropod that I found in West Virginia when I noticed that it's surface was incised with beautiful patterns and whorls. I knew it was something that had happened during the fossilization process but didn't realize what until I posted the photo and someone said the gastropod had "beekite" rings.

Beekite rings? That sounds like some made-up stuff!

So I engaged in a bit of light research and learned about the very real world of beekite.

Borrowing from Wikipedia (and why not?), "beekite is a...form of chalcedony usually associated with silica replacing carbonate minerals in fossils," and it was named after Henry Beeke who first brought it to the attention of geologists in the early 1800's. There is not a lot of current information available on beekite but I've seen similar patterns on chalcedony geodes I found in Arizona and there are various examples to look at on line.

My gastropod was the first time I'd ever noticed this phenomenon and the patterns are so small, I feel the need to go back through my fossil collection and see if I've missed it on other fossils.

I'll be headed back to West Virginia next May in the hopes of uncovering some more of these Devonian beauties.



Base of the scleractinian coral *Microsolena* showing beekite rings;
Middle Jurassic of southern Israel.

FOSSIL HUNTING!!

PICTURES SENT BACK FROM THE FIELD!

AIMEE HANKEL (OF AIMEEEE'S CORNER!) AND DON AND PAM PLUMMER. THEY MADE A TRIP OUT WEST EXPLORING FOR FOSSILS AND ADVENTURE!

(Not sure how much use that canoe got!!)



FOSSIL HUNTING!!

PICTURES SENT BACK FROM THE FIELD!



FOSSIL HUNTING!!

PICTURES SENT BACK FROM THE FIELD!



FOSSIL HUNTING!!

PICTURES SENT BACK FROM THE FIELD!



A Farewell for Now

After receiving a 4.40 school GPA and graduating Summa Cum Laude at the top of my class, the time has come for me to begin my own life and go to college. I am attending Florida Atlantic University and enrolled in their Direct Admission Nursing Program. I hate to inform that this means I will not be able to attend another club meeting for a while due to my new schedule, as well as living 3 hours away.

I wanted to write this letter to thank every member of the club. Being a part of this club has made me come out of my shell, and assured me I had a place where I belonged. Everyone has been continually kind to me since I joined at the age of 13, and everyone has encouraged me to strive to be the best person I can be. I also want to thank the board of directors for deciding to reward me a scholarship to help with my school costs; the money is going toward my dorm room located at the main Boca Raton campus.

My father Dave will continue representing the Fossil Dudes at upcoming meetings, and I'm sure he will keep you informed on how my studies are. I will try to make a meeting when time allows and whenever my breaks are.

Again, thank you all from the bottom of my heart.

Zack Deyo





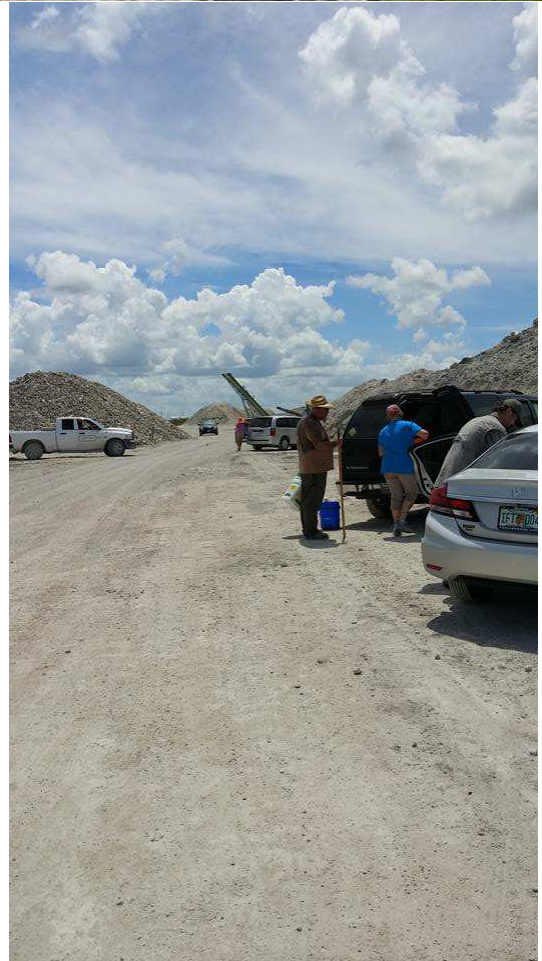
Central Florida Mineral & Gem Society, a non-profit educational organization, is hosting a Rock, Mineral, Gem, Jewelry & Fossil Show on October 6th, 7th & 8th, 2017 at the Florida National Guard Armory, 2809 S. Fern Creek Ave., Orlando, FL 32806. Show time: Fri. 1pm to 6pm, Sat. 10am to 6pm and Sun. 10am to 5pm. Vendors offering beads, minerals, gemstones, jewelry, fossils, artifacts, metaphysical stones, cabochons, etc. Silent Auction, Door Prizes, Demonstrations and Family Activities. Admission: Adults \$5, Students \$2, Scouts in uniforms free. Website: www.cfmgs.org. Contact: Show Chairman George Wood, 321-663-8805 or e-Mail geow98@gmail.com.

If you have any questions, please e-mail or call me at 407-816-1229. Thank you.

Betty Sumner, Secretary

"This is one of those hobbies that if you want to be successful you have to leave your comfort zone".

**Thank you Cheryl and Jim Freeman,
for allowing the FCOLC in today
for some great fossil shell hunting!!!**



Show and Tell!!!

RECENT FINDS BY Beth Cooper Meyer, AT STAR QUARRIES!



Show and Tell!!!

RECENT FINDS BY Beth Cooper Meyer, AT STAR QUARRIES!



Show and Tell!!!

Some recent finds by Joel Noah on the club trip to Star Quarries!
Most of these are fairly rare! Joel had a good day!



Show and Tell!!!

A FEW NICE FINDS BY LOU AND Val AT STAR QUARRIES!!



Show and Tell!!!

Recent finds by Louis Stieffel, at Star Quarries!! The great Clypeaster echinoid was found by Leslie Stieffel



Show and Tell!!!

Recent finds by Louis Stieffel, at Star Quarries!! The great Clypeaster echinoid was found by Leslie Stieffel



Shark Tooth Serrations

Here is an example showing the difference between Great White and megalodon serrations, the GW on top. Notice how jagged and big the serrations are compared to the fine consistently sized serrations of the meg.



100-Million-Year-Old Amber Holds Tiny, Feathery Chick

By Mindy Weisberger, Senior Writer | June 9, 2017 11:20am ET



A close-up view of the hatchling's feet shows its digit pads and claws.
Credit: Lida Xing

Much of the body of a wee Cretaceous-era chick was preserved in incredible detail in a piece of Burmese amber, and bears "unusual plumage," according to the researchers who described the unique find in a new study.

Excavated from a mine in what is now northern Myanmar, the precious lump of fossilized tree sap is estimated to be about 98 million years old, and holds the most complete specimen to date representing a group of extinct toothed birds called enantiornithines (eh-nan-tee-or-NITH'-eh-nee-z), which died out at the end of the [Cretaceous period](#) (about 145 million to 65.5 million years ago).

Body proportions and plumage development in the tiny specimen indicated that it was very young, while details in the feathers' structures and distribution highlighted some of the key differences between these ancient avians and modern-day birds, the scientists wrote in the study. [\[See Stunning Photos of the Cretaceous Chick in Amber\]](#)

Though scientists had previously found specimens of this bird group in amber, the new find included features never seen before, such as the ear opening, the eyelid and skin on the feet.

Its body measured about 2.4 inches (6 centimeters) in length, from the tip of its beak to the end of [the truncated tail](#). The scientists used micro-CT scans and digital 3D reconstruction to further analyze the specimen — processes that took nearly a year to complete, study co-author Jingmai O'Connor, a professor with the Institute of Vertebrate Paleontology and Paleoanthropology at the Chinese Academy of Sciences, told Live Science in an email.



In a small lump of amber, a tiny, taloned foot is the most visible part of a hatchling that was entombed nearly 100 million years ago.
Credit: Lida Xing

The amber chunk — which measured around 3.4 inches (8.6 cm) long, 1.2 inches (3 cm) wide and 2.2 inches (5.7 cm) thick — had been divided down the middle into two pieces. Unfortunately, this cut sliced through the specimen's skull, damaging some of the bones and relegating the chick's beak to one amber fragment and the braincase and neck to the other, the researchers reported.

Even so, the body was near-complete, with the amber containing the tiny bird's head and neck, part of its wings, feet and tail; and plenty of [soft tissue](#) and attached feathers. The bird was undergoing its first molt when it became caught in the sticky tree sap; there was only a light covering of plumage on its body. But it already had a full set of flight feathers on its wings, suggesting that birds in this group were highly independent from an early age, the study authors wrote.



CT data revealed the avian fledgling trapped in the amber, here pictured next to a reconstruction showing how the animal may have looked in life.

Credit: Reconstruction by Cheung Chung Tat

In recent years, amber fossils have revealed fascinating glimpses of life from many millions of years ago — from [ant-termite warfare](#) and a daddy long-legs' [long-lasting erection](#) to a spider [attacking prey](#) in its web and a bug that jumped [out of its skin](#).

And when it comes to birds, fossils' exceptional preservation of plumage helps paleontologists understand the diversity of feathers and the role they played for early avians, O'Connor said in the email.

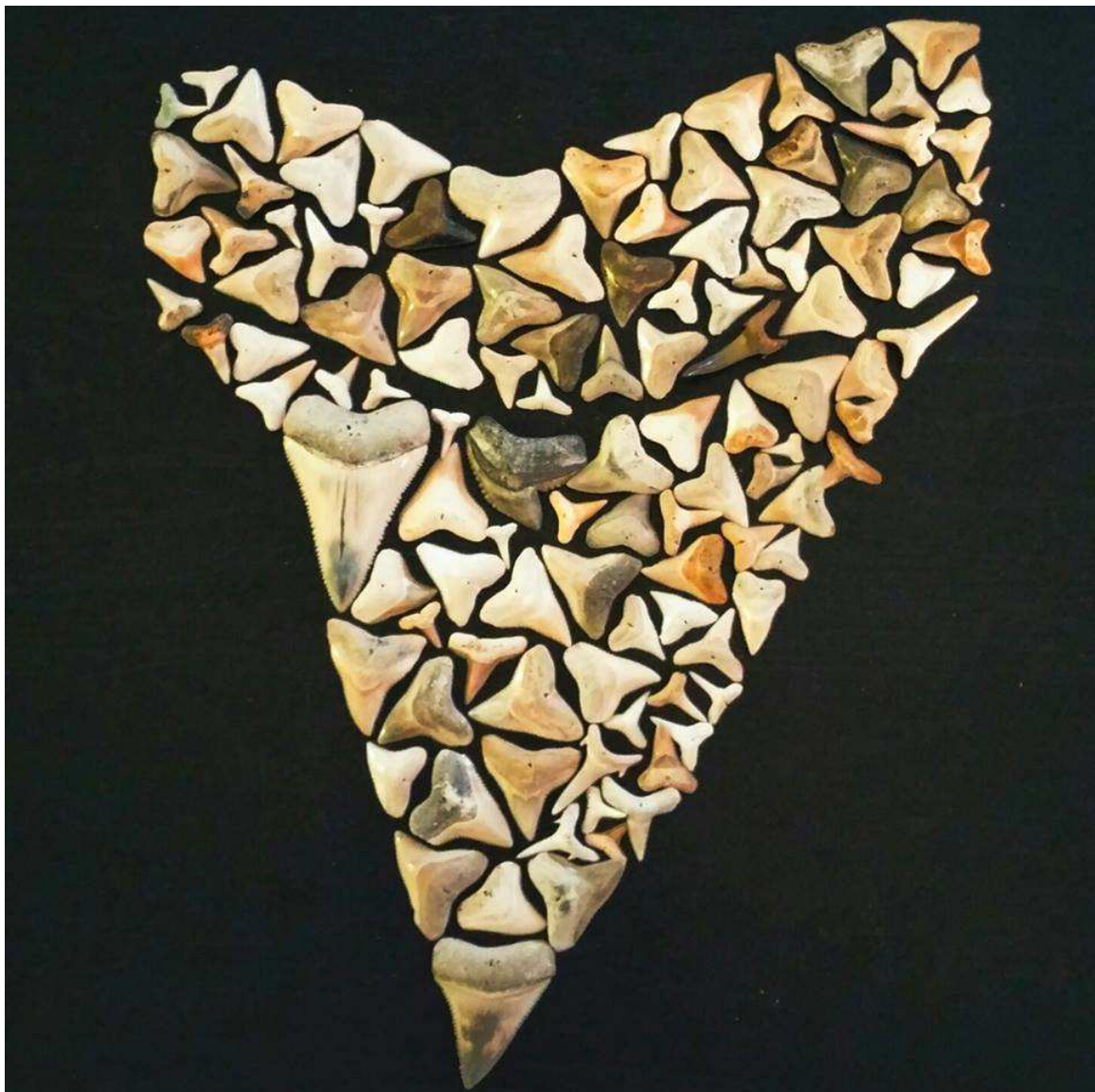
"Feathers can never be well understood in normal fossils," O'Connor said. "But in amber, we get crystal-clear views of what primitive feathers were like, and they reveal all sorts of bizarre morphologies," she said.

The findings were published online June 6 in the journal [Gondwana Research](#).

Original article on [Live Science](#).



**I found
this
humerus**



JUNE FCOLC MEETING!! SHOW AND TELL AND TRADE AND SELL!!!



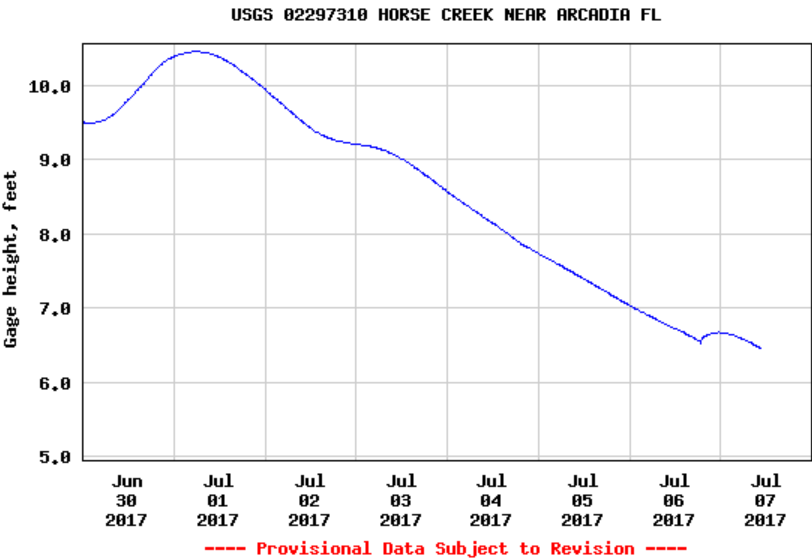
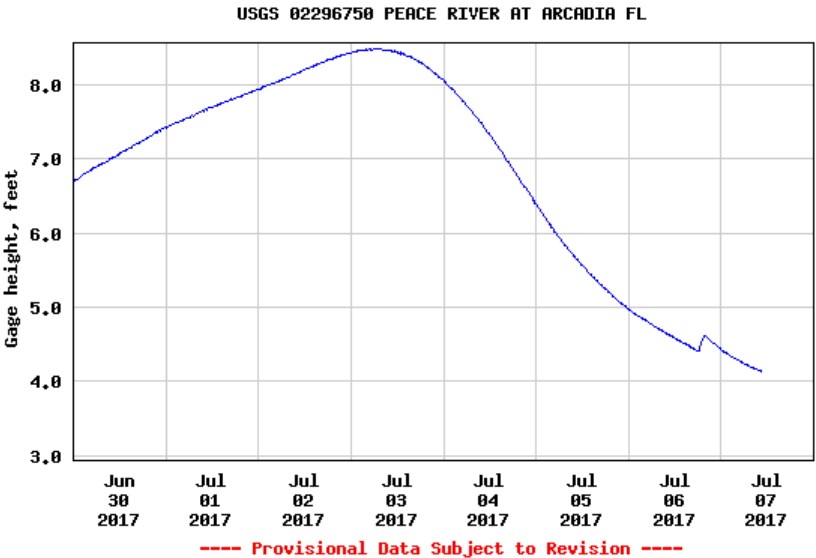
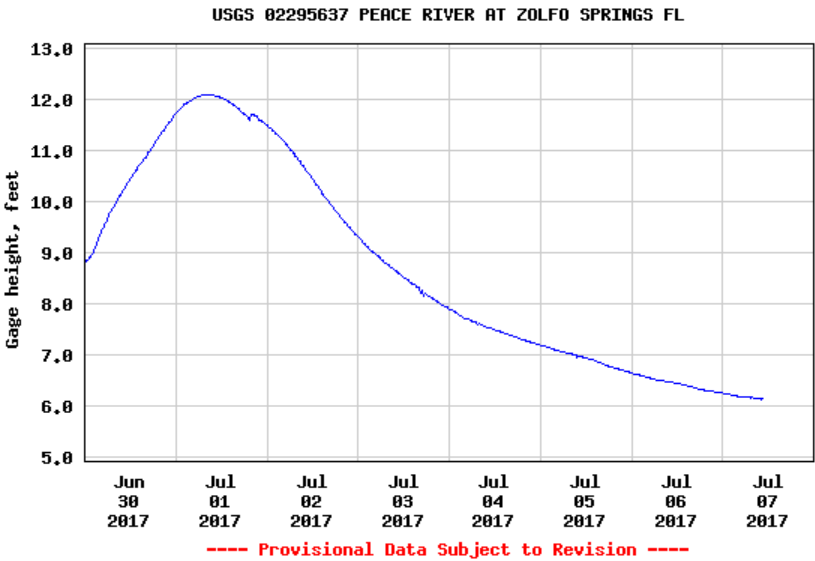
JUNE FCOLC MEETING!! SHOW AND TELL AND TRADE AND SELL!!!



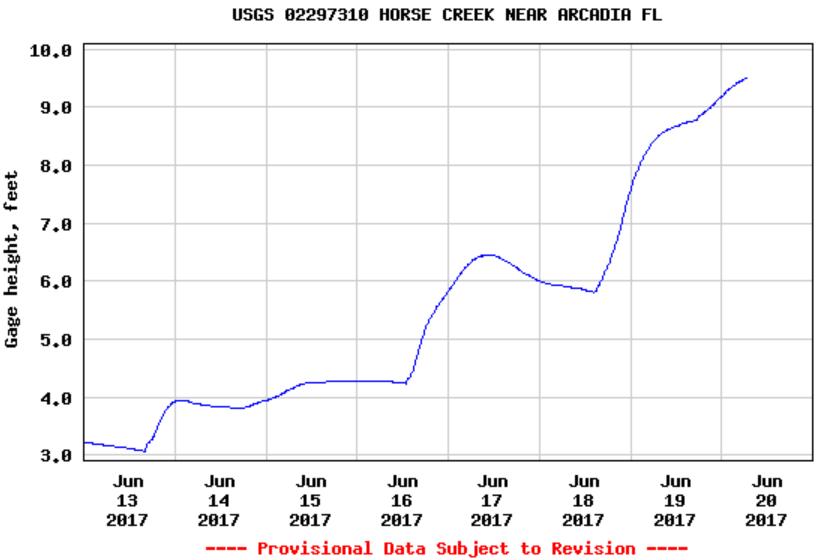
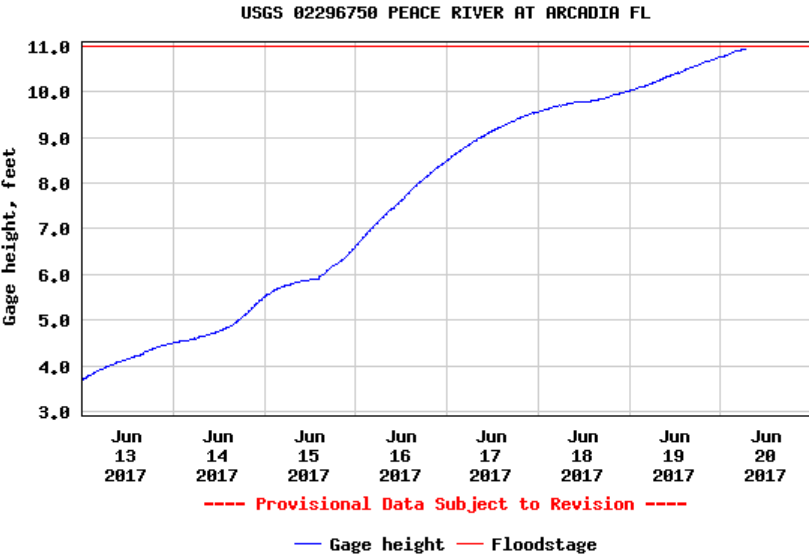
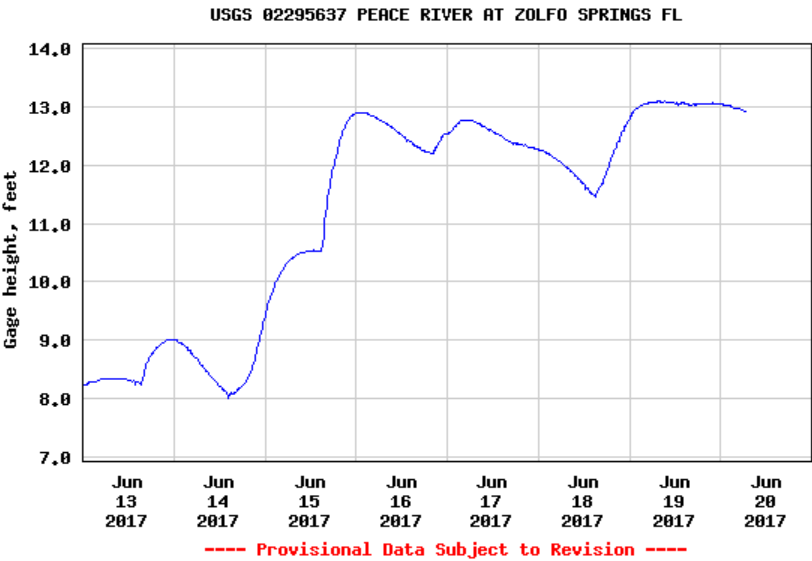
RUCK'S PIT FOSSIL CLAMS!!



RIVER LEVELS!



RIVER LEVELS!



FLMNH Database search tutorial

Here's the tutorial for the search function my talk was based on. This should help navigate the database and look at fossils.

Sean Moran, M.S.

Ph.D. Student

University of Florida, Department of Biology

Florida Museum of Natural History

smmoran@ufl.edu

(609) 617-5919

To view images of vertebrate fossils from the Florida Museum of Natural History collections:

1. Go to floridamuseum.ufl.edu/vertpaleo-search
2. To see images check the “Only Results With Images” box at the top of the search
3. Enter your search terms of interest:
 - Taxonomic terms (e.g., Class, Order, Family, Genus, Species)
 - These are all latinized names, so you will need to know (generally) what you are looking for. Good resources include “The Fossil Vertebrates of Florida” -Richard Hulbert, the taxonomic lists on the FLMNH Vertebrate Fossil Sites pages (floridamuseum.ufl.edu/florida-vertebrate-fossils/sites/), FLMNH species accounts (floridamuseum.ufl.edu/florida-vertebrate-fossils/species/), or simply by using Google.
 - Locality terms (e.g., County, Site, Formation, Land Mammal Age, Epoch)
 - Again, some of these terms may be unfamiliar to a general collection, such as the Hemphillian North American Land Mammal Age, but resources on the FLMNH website (e.g., floridamuseum.ufl.edu/florida-vertebrate-fossils/land-mammal-ages/) should be able to provide some help.
 - Collection terms (e.g., Collector, Donor Name, Date Collected)
 - These should be fairly self-explanatory.
 - Anatomical terms (Nature of Specimen)
 - This will perhaps be the most commonly used search field, but also the trickiest to navigate without familiarity of the terms used. I would recommend changing the drop-down menu from “Equals” to “Contains” so that search returns all results with the search term entered. Most anatomical terms will bring back the terms you will likely be looking for. For example, typing in “ulna” in the Nature of Specimen field and changing the drop-down to contains will return all ulnae from our collection that have been imaged, “femur” will return all femora, “vertebra” all vertebrae, “skull” all skulls, “mandible” all lower jaws, etc.

However, due to our identification system, searching on “tooth” will only return a subset of all the photos of our teeth. This because our teeth are labeled as C, I, P, or M (for canine, incisor, premolar, or molar, respectively) for mammals and then given a number that pertains to which exact tooth it is (1 through 4). So, a P4, left upper would be a left upper fourth premolar while a m3, right lower would be a right lower third molar. If you simply switch the drop-down to “Contains” and type “p1” then “p2” then “p3” then “p4” into the Nature of Specimen field you should all images that contain a premolar in them or “m1”, “m2”, “m3” for specimens that contain a molar. It’s a little tricky, but feel free to email me atsmmoran@ufl.edu if you can’t get it figured out. Hopefully, in the future the database search function will be a little more user-friendly.
4. Click the blue “Submit Query” button
 - This will return all the images at the bottom of the page for the search you typed in above.

Other useful hints include switching between the table and list option in results box, clicking the “Display” box for a field that may not show up by default, sorting by a particular field using the “Sort Direction” drop-down menu, and exporting the results as a .csv file.

2017 FOSSIL FAIR

Florida Fossil Hunters

Twenty-sixth Annual Fossils, Rocks, Gems & Minerals

Saturday, October 28, 2017

9:00am - 5:00pm

Sunday, October 29, 2017

10:00am - 4:00pm



Central Florida Fairgrounds

4603 West Colonial Drive, Orlando, Florida 32808

\$4.00 Adults | \$1.00 Children

**Learn to dig in Florida and
see what can be discovered!**

Directions:

I-4 to Orlando, Exit 84,
West Hwy 50/Colonial Drive
exit Westbound.

The fairgrounds will be
on the right side, just past
Mercy Drive.



For more information on the 2017 Fossil Fair contact us by email at
info@floridafossilhunters.com, call 407-699-9274, or check the website at

www.floridafossilhunters.com

Raffles

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