

FOSSIL CLUB OF LEE COUNTY

JULY 2013

PRESIDENT'S MESSAGE

From the Prez,

Summer's here! Yes, it's HOT!! Time to stay out of the heat and just chill. Now is the perfect time to organize your fossils, and discover new ones that you forgot you had! It's also the time to put aside as many of the common "scrap" fossils and extra shark teeth as you can bear to part with, and bring them in to a meeting. Our 9th annual fossil show will be on December 7 and we are starting the collection of contributions for the kid's dig and the fossil prizes for games. Mark that date on your calendar as it will be a big 'ol shin dig and you're all invited!! Much more information on this show will be coming in the months ahead!

Pam has been very busy, lately, with a lot of club financial issues. She is involved with re-filing our incorporation by-laws and a getting us legal. She also is working with an accountant and a lawyer to bring our 501C-3 non-profit status up to date and filed properly. She also has been in touch with the IRS, a lot, to make sure our taxes liabilities are in order. At the same time Pam has been keeping track of the dues, the merchandise inventory, the contributions for the Bill Shaver Memorial scholarship set up through the FCOLC Scholarship fund, dealer applications and deposits for the fossil show, paying the rent on the fellowship hall, paying the newsletter publisher, and anything else financial that involves the club. Of course, Pam has a personal life also, and the juggling act required to do both is remarkable. I ask that everyone thank Pam when they see her at the meeting. And invite her to go fossil hunting! She sure deserves it!

The club library is progressing nicely. David Sheehey is the Librarian and expects to have it up and running by the August meeting. Anyone who currently has any books out on loan please consider returning them, so they can be incorporated into the new system. More information on this project, as it comes available.

The board decided that we would like to have a new club Logo! We are having a logo contest to see which one submitted is the one we like the best. The winning logo prize will be a half dozen nice fossils. I will bring these to the next meeting, in case anyone wants to see them, but I assure you I will dig deep into my collection and present some good ones, which you probably do not have! SO, get your idea hats on and start designing. All entries must be turned in by the September 2013 meeting. Remember, this

logo will be used in printed material representing the club. It must be tasteful and easily reproducible.

As long as we have volunteers to bring refreshments, we will have refreshments! It is an easy thing to do, and if everyone took a turn, would only be needed once every 4-5 years. The club presently has LOTS of non-food materials, such as napkins, silverware (plastic), paper plates, cups, etc. So, all a volunteer would need to bring is some snacks of their choosing and some water and different sodas. We even have coolers for you to use! So, anytime in the month before the meeting, pick up some snacks, and liquids. Then, ice down the liquids on the way to the meeting, and we will help you carry it in! The fellowship hall has a great kitchen setup, if needed. (It must be left in the condition we found it in!). SO, I ask everyone to consider taking a turn, thanks.

I have submitted some dates for consideration to Mosaic Mines, for a phosphate mine hunt or two. Their season starts in October. I'll pass on any locked-in dates as soon as I hear back from them. The rivers have gone up, but we are looking into other club trips. There has been a LOT of club activity, at least for ME! these past two months, but things are coming together and I expect to have some news to report about trips in the near future.

I HIGHLY encourage everyone to apply for a Florida Fossil permit, or keep up with your renewal. I had let my own lapse, and have recently renewed it. Yes, I am embarrassed! Don't you be also! Please mark your expiration date on a calendar so that doesn't happen to you! And a report is needed to be sent in with a renewal stating your finds for the permit year. **DO NOT FORGET!!** All the information needed is in a link at the bottom page of our website: www.fcolc.com

Sue Collier volunteered to help out as club artist on our new t-shirt designs. Kathy and Coby are spearheading that project. There is more to come.

Due to unseen developments there is an opening on the Board of Directors. If any member has a wish to be part of this group, please let me know.

To wrap it up for this month, I want to say thank you to all of you guys that have helped me with this transition. Pam Plummer has done (and is still doing) a monumental financial task which I am so glad to not have to attempt to

President's Message (cont.)

do myself!. Mike Siciliano, as vice president, is a rock. He is there to help, and does, frequently. Kathy Pawlowski has added t-shirt design to her club secretary duties. Board members have given their time to meet on extra meetings and taken on projects. Jack Boyce has been a huge help with the newsletter and helping getting membership on line. Coby Pawlowski, while not a board member, has joined the fossil show committee and is a big help. Curtis Klug continues to be an outstanding web master. Joshua Frank is getting vendors lined up for the fossil show, and is handling the digital communications. Ray Seguin is there, as always, offering his help and expertise and experience. Charles O'Connor has helped advise the scholarship setup and also has agreed to be a featured speaker at the fossil show again this year. There have been other club members, too numerous to name, that has helped this club. I appreciate all of your efforts and sacrifices and sincerely thank each of you!

Louis Stieffel, President, FCOLC

Next Meeting

FCOLC next meeting is on Thursday, July
18th, 2013 at
Zion Lutheran Church,
7401 Winkler Avenue, Fort Myers
Meeting starts at 7 PM.

OFFICERS

Louis Stieffel, President, 239-851-7499,
cape187@earthlink.net
Michael Siciliano, Vice President, 239-980-1406
Pamela Plummer, Treasurer, 239-246-5993
Kathy Pawlowski, Secretary, 239-267-6130

DIRECTORS

Jack Boyce, 239-281-2416
Joshua Frank, 239-248-5094
Charles O'Connor, 239-246-5526
Ray Seguin, 239-939-1921, Emeritus

COMMITTEES

Jack Boyce, Newsletter Publisher, Photographer & Peace
River Trips
Joshua Frank, Coby Pawlowski, Mike Siciliano, Louis Stieffel
Fossil Show Committee
Curt Klug, Web Master
Cherie Neat, Newsletter Developer
Coby Pawlowski, Youth Activities Director
Pam Plummer, Badges, Membership
Gunther Lobish, Pit Trips, Invertebrate Education
Ray Seguin, Merchandise
David Sheehey, Librarian
Michael Siciliano, Raffle and Dive Trips
Louis Stieffel, Auctioneer, Vertebrate Education, Speakers

In Memoriam

This month has been a sad one for all of us. We lost two well-loved members. One was the President of the club, Bill Shaver, who succumbed fairly quickly to pancreatic cancer. The other person was Donna Johnson, a long time member. Breast cancer was her foe, and she fought it for almost 5 years. There was a memorial for each of them, days apart, and it was a very sad time for all. They both will be missed very much. Donna was very involved at the Rotary Park, in Cape Coral. Honey Archer has been instrumental in helping Art (Donna's husband) and friends to construct a memorial garden there in her memory. Many of her native plants and also some benches, birdbaths and stepping stones from Donnas' home garden are being relocated to this new garden. Her fossil and mineral collection is being sold and the funds used to help with this garden. There have been several volunteer days for folks wanting to help. Dedication of this garden will take place in the fall/early winter. Bill was always involved with youngsters, teaching them about fossils. A Bill Shaver Memorial Scholarship is being set up in Bill's memory, and will be awarded to a deserving young person. The final details are still being worked out, but donations are still being accepted, through the club, attention to the treasurer, Pam Plummer.

Speaker

Dr. Austin Hendy is an invertebrate paleontologist at the Florida Museum of Natural History, with interests in fossil (& recent) mollusks, paleo-ecology and fossil preservation, and past biogeography. Austin also has a great appreciation of museums and the role they play in research and education.

Unlocking the Fossil Cabinet:

The Value of Collections in the 21st Century

Austin will discuss the FOSSIL Project, an initiative to create a dynamic community among fossil clubs, and iDigBio, an NSF-funded portal into natural history museums of the United States. Through these efforts it is hoped that natural history museums can better share their fossil collections (and unlock their education potential) with the public, educators, students, and fossil clubs like Lee County! Dr. Hendy would appreciate the club's feedback on these activities as well as discussing future plans to involve local fossil clubs around the US in developing resources for their local schools and the amateur collecting community. Austin will also showcase and discuss fossils of interest to southwest Florida fossil hunters.



Minutes of June meeting

THE FOSSIL CLUB OF LEE COUNTY

Date: June 20th, Zion Lutheran Church
Fellowship Hall

Presided by: Louis Stieffel, President

Club president Louis Stieffel called the meeting to order and thanked all who were able to attend this Members Exhibits plus Show & Tell/Buy/Sell/Swap Meeting. 45 members were in attendance tonight.

Announcements:

- Boat trip and the scattering ashes in memory of Donna Johnson are scheduled for this Sunday the 23rd going out of Getaway Marina.
- Memorial service for Bill Shaver will be held at Zion Lutheran Church at 9:30 am on Tuesday the 25th.
- We have moved to a bigger place so we can grow bigger with a lot more room. Fellowship Hall is our new meeting place every month.
- Sandy Schwartz, Sue Collier and Joe Larkin volunteered to handle July refreshments.
- Pam Plummer informed us of National Fossil Day at Payne's Creek on Highway 17 on Oct 12. Pam will lead FCOLC participation at this event.
- Children's Museum of Naples needs someone to talk to kids about fossils. Zack Deyo volunteered to represent FCOLC and give a presentation.
- We now have our storage areas in Fellowship Hall. The board has funded rolling shelves to put our books on soon. The shelves are being built, and David Sheehey will finish them with primer and paint. We expect to have the library up and operating by the August meeting.
- Curtis Klug will be our speaker at next month's meeting.
- Club Treasurer reports that we have 4500.00 in our checking account.
- We have decided to have a contest for creation of a club logo. We are not sure what the prize for the winning Logo entry is going to be yet.
- We are going to redo our t-shirts. Coby and Kathy Pawlowski have come up with the design that is going to be used and Sue Collier volunteered to draw the design up for club.
- We have lots of ideas and plans on trips coming up down the road and when we get some trips set in stone we will let everyone know.
- The newsletter has a lot of different articles in it and we welcome everyone to show what you found while out digging, diving, etc...And put it in the news letter. We may start featuring a fossil find of the month.

FCOLC Fossil show is coming up in December. We expect that more dealers will come than in previous years. It will be inside, at the Araba Shriners Hall, with lights, air conditioning, restrooms, etc... Joshua Frank is setting up dealers for the show. We need fossil and shark teeth donations for the kids' digs and other giveaways. The fossil show will be held December 7th from 9 am to 5 pm.

Show and tell: Mike Siciliano, Gunther Lobisch, Jack Boyce, Coby Pawlowski.

Many other members brought fossils to trade or sell. A highlight was Donna Johnson's fossil collection being sold by Pam Plummer and Art Johnson.

SCHEDULE OF EVENTS AND SPEAKERS

July 18th FCOLC Monthly Meeting @ Zion Lutheran Church, 7401 Winkler Road, Fort Myers, FI 33919

July 18th Speaker – **Curt Klug**, Paleontologist, Certified Geologist, and FCOLC Webmaster will discuss Fossil Identification and solicit feedback on a FCOLC Fossil Identification and member gallery capability within the current FCOLC Web-site.

August 15th FCOLC Monthly Meeting @ Zion Lutheran Church, 7401 Winkler Road, Fort Myers, FI 33919

August 15th Speaker – **Dr. Austin Hendy**, an invertebrate paleontologist at the Florida Museum of Natural History, will discuss the FOSSIL Project, which is an initiative to create a dynamic community among fossil clubs, and iDigBio, an NSF-funded portal into natural history museums of the United States. Austin will also showcase and discuss fossils of interest to southwest Florida fossil hunters.

September 19th FCOLC Monthly Meeting @ Zion Lutheran Church, 7401 Winkler Road, Fort Myers, FI 33919

September 19th Speaker; TBD

October 12th National Fossil Day Celebration will be held at Paynes Creek Historic State Park, Lake Branch Road, Bowling Green, Florida. Pam Plummer is leading the active participation of FCOLC as a registered partner of the National Park Service in supporting this event.

Websites & Locations of Interest

Fossil Club of Lee County: www.fcolc.com

FCOLC, c/o Pam Plummer, 133 NE 20th St., Cape Coral, FL, 33909

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/

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

Peace River Water Levels

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

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/>

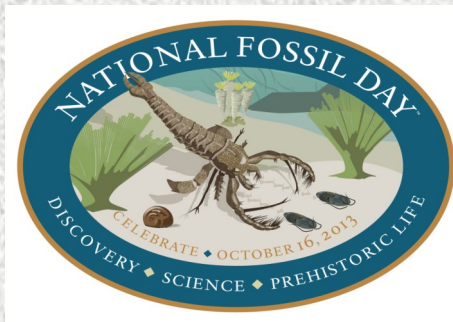
Picking Up Isolated Native American Artifacts www.flheritage.com/news/faq.cfm

If you find an Indian artifact, such as an arrowhead, on Florida state land or river bottom, be aware that possession of an Indian artifact found on state lands after 2004 is a Class 3 Felony.



National Fossil Day

National Fossil Day was established to promote the scientific and educational values of fossils. This nationwide celebration was first held on October 13, 2010, during Earth Science Week. The National Park Service (NPS) and over 220 partners, including museums, institutions, organizations and other groups, joined together to celebrate fossils. Hundreds of activities are hosted across the United States allowing the public to better understand the world's fossil Heritage. The 2013 National Fossil Day is October 16th but activities are scheduled throughout the week.



The Fossil Club of Lee County will join with NPS and other Florida fossil groups to sponsor a fossil focused celebration on **Saturday, October 12th** at Paynes Creek Historic State Park located on Lake Branch road

one-half mile southeast of Bowling Green, Florida. Paynes Creek and the adjoining Peace River provide opportunities for canoeing, kayaking, and fishing. FCOLC members know



the Peace River as one of the premier fossil hunting locations in the country. A museum at the visitor center depicts the lives of Florida's Seminole Indians and pioneers during the 19th century. This event provides opportunities to interpret a fossil's ecological context by observing fossils in the same place where those animals and plants lived tens or hundreds of thousands of years ago.

While numerous details are not set, there will be NFD educational materials, displays, and presentations along with tables set up by Florida fossil groups and vendors who will display, identify, discuss and educate visitors on Florida fossils and Paleontology. FCOLC will have a booth and our members can contribute display fossils, expertise on identifications, interaction with potential fossil hunters and future club members, and donations of small shark teeth, dugong ribs, turtle shell and any other Florida fossils that can be distributed to event visitors.

Pam Plummer is leading FCOLC participation and needs volunteers and contributions. Pam is also looking for Speakers and Vendors on October 12th. If you have any suggestions on how to improve the experience, contact Pam. More detailed information will be available in FCOLC monthly meetings and newsletter as the event approaches.

Pam Plummer, FCOLC Treasurer

FCOLC Fossil of the Month – July, 2013

Fossil: Carcharocles Megalodon, 4.95 inches, minimally 2 mya

Date found: May 25th 2013 slightly before noon

Where Found: The **Boneyard** is located just off of Venice Florida beaches. It is appropriately named because, within the Boneyard, are the remains of both Pleistocene mammals and also Miocene marine fauna including whales and the giant sharks which fed on whales. A likely theory is that at one time a huge river, more massive than the Mississippi, flowed through ancient Florida and emptied into a wide shallow sea which in turn was a feeding ground for large marine creatures of the day. There are smaller shark teeth on the beach which attract visitors but the big ones are offshore. This tooth was found $\frac{3}{4}$ of a mile offshore in 30 feet of water.



How found: While scuba diving in the Boneyard, I saw the edge of the blade of the tooth. The tooth was covered up pretty well, but the sand had washed away on one side of the blade edge of the tooth. Seeing the blade edge of the tooth, gave it away. Normally I rely heavily on my tactile sense when diving. I get cuts from shells, and spiny urchin spines stuck in my hand, but it is worth it for quickly identifying what you are touching. Megalodon tooth enamel has its own feel. I have stuck my hand into sand and pulled out a 4.5 inch tooth that was completely covered up, and knew it was a tooth before I saw it. The basic hunting technique is to stick my hand into the sand on the bottom, feeling around until I touch a large Meg and then pull it out. It is a lot harder than it sounds!

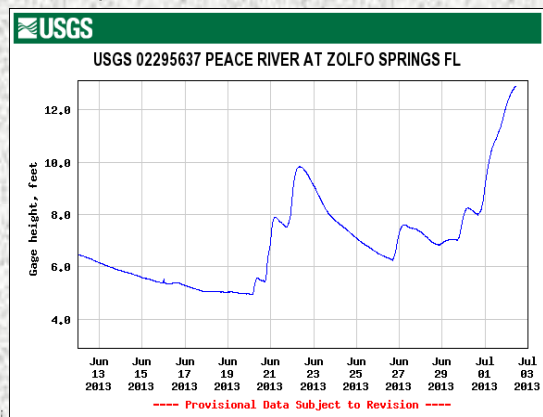
How it measures up to my other Megs: I have one tooth that is exactly 5" and it is in better condition. Size wise, this one is the 3rd largest complete Megalodon tooth I have found. My largest personal find is 5.5", but that tooth is very worn down. This new addition is a pretty nice large tooth, but I have confidence. I will find a larger, nicer Meg some day.

If you are scuba certified and would like to come along, contact me or Mike Siciliano, the FCOLC chair of the Dive Trips committee.

Joshua Frank, FCOLC Director

End of Season Peace River

The Peace River is one of the fantastic resources available to FCOLC members and other fossil hunters in southwest Florida. It is only available for shovel & sieve hunting for 8 months of the year because of the summer wet season that begins in June and ends in early November. I scramble to get as many fossil trips in before the deep waters and fast currents become a risk to life and limb. I keep close track of the water depth readings at Zolfo Springs http://waterdata.usgs.gov/usa/nwis/uv?site_no=02295637 comparing USGS gauge readings to actual water depth at my favorite spots. I know that if the Zolfo gauge is under 6 feet, I can find many acceptable digging locations, but at 7 feet, I will struggle at a **very** few spots. Any reading above 7 feet makes hunting impossible for me. Looking at the chart below, I was out hunting the Peace 2 or 3 times a week through June 20th. The river photo was taken on June 14th when the gauge was at 5.60 feet. This location is generally 4-6 inches deep but on June 14th, it was 3 feet deep. I tried and failed to return to this location on June 21st. Note the July 3rd gauge reading of **12.9 feet!!!**



Risk and reward; many trips late in June produce a few small, broken fossils. Lady Luck is fickle but sometimes delivers unexpected gems. On the June 14th trip, a 2.8 inch Meg with reddish brown bourlette and olive blade showed up in my sieve. On June 24th, the Zolfo depth gauge was dropping back toward 7 feet. I was digging in 4.5 feet of water, barely reaching the top 6 inches of riverbed gravel. There, hidden in the sieve, was my first *complete* Mammoth tooth with 5 plates. I can hardly wait for November 1st.



-Submitted by Jack Boyce, FCOLC Director

Equus DNA Buried 7,000 Centuries Is Retrieved

Researchers have reconstructed an ancient genome that is 10 times as old as any retrieved so far, and they now say that DNA should be recoverable from animals that lived one million years ago. This would greatly extend biologists' ability to understand the evolutionary past.

The genome was that of a horse that lived about 700,000 years ago in what is now the Yukon Territory in Canada, and its reconstruction has already led to new insights. The researchers who sequenced it then analyzed DNA from a less ancient horse, one that lived 43,000 years ago, as well as five contemporary horse breeds and a donkey named Willy that resides in the Copenhagen Zoo. They concluded that the genus that gave rise to modern horses, zebras and donkeys — *Equus* — arose about four million years ago, twice as far back as had been thought.

Bruce MacFadden, an expert on fossil horses at the University of Florida, said the Danish team's findings were reasonable in light of the fossil data. "It's always wonderful when the fossil and molecular evidence coincide," he said. But the influence of climate on horse demography is more complicated than the genomic data suggests, he said.

<http://www.nytimes.com/2013/06/27/science/genome-of-horse-buried-700000-years-is-recovered.html?src=recg>



Cave Paintings Showed True Colors of Stone Age Horses

About 25,000 years ago, humans began painting a curious creature on the walls of European caves. Among the rhinos, wild cattle, and other animals, they sketched a white horse with black spots. Although such horses are popular breeds today, scientists didn't think they existed before humans domesticated the species about 5,000 years ago. Now, a new study of prehistoric horse DNA concludes that spotted horses did indeed roam ancient Europe, suggesting that early artists may have been reproducing what they saw rather than creating imaginary creatures.

<http://www.wired.com/wiredscience/2011/11/cave-painting-colors/>

Precision and Brawn a Deadly Combination

A bizarre, pouched super-predator that terrorized South America millions of years ago had huge saber-like teeth but its bite was weaker than that of a domestic cat, new research shows.

Australian and American marsupials are among the closest living relatives of the extinct *Thylacosmilus atrox*, which had tooth roots extending rearwards almost into its small braincase. "Thylacosmilus looked and behaved like nothing alive today," says paleontologist Dr. Stephen Wroe, leader of the research team.



"To achieve a kill the animal must have secured and immobilized large prey using its extremely powerful forearms, before inserting the sabre-teeth into the windpipe or major arteries of the neck – a mix of brute force and delicate precision."

The iconic North American saber-toothed 'tiger', *Smilodon fatalis*, is often regarded as the archetypal mammalian super-predator. However, *Smilodon* - a true cat - was just the end point in one of at least five independent 'experiments' in saber-tooth evolution through the Age of Mammals, which spanned some 65 million years.

"Frankly, the jaw muscles of *Thylacosmilus* were embarrassing. With its jaws wide open this 80-100 kg 'super-predator' had a bite less powerful than a domestic cat. On the other hand - its skull easily outperformed that of the placental *Smilodon* in response to strong forces from hypothetical neck muscles."

"Bottom line is that the huge sabers of *Thylacosmilus* were driven home by the neck muscles alone and - because the saber-teeth were actually quite fragile - this must have been achieved with surprising precision."

"For *Thylacosmilus* - and other saber-tooths - it was all about a quick kill."

<http://phys.org/print291883490.html>

Submitted by Charles O'Connor, FCOLC Director