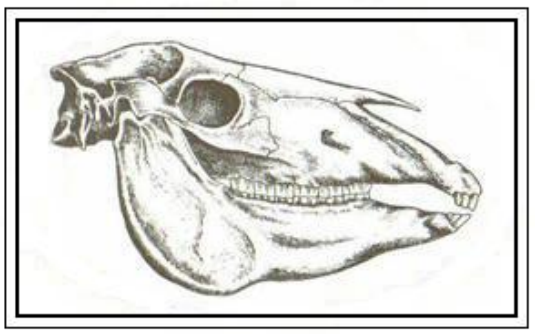

# Fossil Club of Lee County

August 2010

**Message from the President**

PRESIDENT'S MESSAGE

It's August already and we are enjoying the warm weather and rainy afternoons with lots of lightning. Makes one wonder how those poor prehistoric animals fared without air conditioning and umbrellas! One downside of particular interest to all of us who like to venture to the Peace River is that the water levels won't go down. Further, the outlook for hurricanes is still prevalent and that may affect our hunting. But, let's not have that dampen our spirits.

Some members of the Club toured the University of Florida Natural Museum of History and also were fortunate to be invited to Dr. Gordon Hubbell's home to tour his private collection of extinct shark teeth. If you appreciate megalodon shark teeth, you will be in awe of his fine collection from several countries and continents. He has amassed over 200,000 teeth and museums from all over the world request loans of his specimens. He found a great many of the teeth in his collection and also caught many of the sharks he has displayed on his walls. In summary, he undoubtedly has the finest collection of shark teeth in the world.

We appreciate Dr. Richard C. Hurlbert Jr. at the UFMNH for hosting our club and giving us a great tour of the vertebrate laboratory.

We have spoken before about establishing the Tom Allen Museum at the Calusa Nature Center. I am pleased to say that the CNC staff is enthused about exhibiting the Collection and are making good progress in getting the area ready. It should be completed this month.

Our speaker for August is our own Charles O'Connor who always does a fine job of getting people enthused about his topic. His presentation is about shark teeth. He has a fine collection and will undoubtedly be showing us some of his exquisite megalodon teeth. Incidentally, Charles is our speaker at our Fossil Show as well. We are pleased to have him in our Club.

We also have excellent speaker programs lined up for September and October. We have an opening for November if anyone has a good candidate.

Last December, the Club had its Fossil Show and we had a few fossil items left over, but not near enough to meet our needs for the upcoming Fossil Show. We can always use fossils, invertebrate or vertebrate for the Show or for the monthly raffle or for next years auction. No five (5) inch megs please, unless you have extras! Seriously, the Club will greatly appreciate your generosity and as you know, its for a good cause.

At our August meeting we will have door prizes, a first rate speaker, an opportunity to learn something new, good fellowship, refeshments, club merchandise, show and tell session, and the monthly raffle. I look forward to seeing everyone. Best regards, Bill

**Next Meeting**

Our next meeting will be held on, Thursday, August 19, at 7:00 p.m. at the Calusa Nature Center located at Ortiz and Colonial Blvd, Ft. Myers.

**OFFICERS**

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Kathy Pawlowski, Secretary, 239-267-6130

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Charles OConnor, 239-246-5526
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Curt Klug, Web Master
Bill Shaver, Speakers
Michael Orchin, Auctioneer
Kathy Arnold, Club Merchandise
Ray Seguin, Membership
Gunther Lobish, Pit Trips
Michael Siciliano, Raffle and Dive Trips

## MINUTES OF JULY MEETING
## THE FOSSIL CLUB OF LEE COUNTY

Date: July 15th, 2010
Place: Iona House at Calusa Nature Center
Attendance: 42
Presided by: Bill Shaver, President

Bill welcomed all attendees and thanked several people who continue to support the club with donations for the monthly raffle, door prizes, and for participating in show and tell and for volunteering to do the refreshments.

Ray Seguin, Treasurer gave the report on the Club's financial heath.

Bill thanked Coby Pawlowski for writing an article on the dire wolf for the newsletter.

Curt Klug briefly discussed planned work on the web site that would require use of photos of specimens and requested that the Club Board review potential concerns as to release of ownership/proprietary rights etc of submitted items to the club for use on the website. Bill thanked Curt his continued support of the website.

As a result of election of new board members, the club membership application needs to be updated. Ray Seguin said he would take on the job. Also, the Club needs to buy more Riker cases and Ray will do the reordering after an inventory been made. Bill thanked Kathy Arnold and family for handling the club merchandise.

There was a brief discussion about the Fossil Show for 2010 which is tentatively set for December 4th at the Calusa Nature Center.

Bill introduced the guest speaker, Andreas Kerner, who spoke about recent developments in Florida paleontology, which includes identifying new species of bear and peccary. Andreas identified several specimens for club members and exhibited some great specimens that he brought for his presentation. Everone was very impressed with Andreas' presentation.

Kathy Pawlowski, Club Secretary, volunteered to maintain the club membership listings. Ray has an updated list (as of July 1st) and will pass in on to Kathy.

The Tom Allen Museum at the Calusa Nature Center is being worked on and the target date for finishing the room is early August.

Bill thanked Melanie Hutchinson and Joshua Frank for the July refreshments, which were great.

Show and Tell participants were Joshua Frank and Melanie, Coby Pawlowski, Donna Johnson, Linda Warner, Ron Seavey, and Gunther Lobish. The monthly raffle was held and the meeting ended at 9:30pm.

Submitted by Kathy Pawlowski, Secretary

## FOSSIL CLUB TRIP

After several months of discussing the logistics and details of a Club trip to the Florida University Natural History Museum coupled with a tour of Dr. Gordon Hubbell's personal collection of sharks skull and teeth, Charles OConnor, one of our esteemed Directors, made it happen!

left to right: Joshua Frank, Melanie Hutchinson, Pam Plummer, Gunther Lobish, Richard C Hulbert Jr-Vertebrate Collection Manager for UFMNH, Dean Hart, Ron Seavey, Mike Siciliano, Bill Shaver, Donna Johnson, Charles O'Connor

We visited the Vertebrate Laboratory, where Dr. Richard C. Hulbert Jr., gave us a grand tour of the hundreds of specimen that have been accumulated over the years. The specimens of mastodons, mammoths, giant armadillo, saber toothed cat, dire wolf, glyptodont, giant ground sloth, and dozens of other species were catalogued and waiting for us. Dr. Hulbert is the Collection Manager of the Vertebrate Lab and a man with exceptional knowledge of the fossils of Florida. Some of you may remember his visit to our Club as a speaker earlier this year. Many of you probably have his book entitled "The Fossil Vertebrates of Florida". He helped several of us to identify some fossils we had brought along as well giving us much detail on the many of the specimens in the lab and in storage.

Of course, we got to see a few hundred specimens, but there were hundreds of others that we were not able to see due to time constraints.

Touring the lab was a wonderful experience and we were able to take photos to our hearts content. It is a trip well worth taking for anyone who is really into vertebrate fossils.

After lunch at a good pizza place we convoyed over to Dr. Hubbell's home and toured his private museum. He and his wife, Kate were so gracious and made us feel welcome. Dr. Hubbell allowed us to take as many pictures as we wanted to and there was an endless array of shark teeth on exhibit for us to photograph.

Dr. Hubbell has the finest and best collection of shark teeth and shark skulls in the world. He loans specimens to museums all over the world. He is known worldwide as an authority on shark teeth and many people seek his expertise and an opportunity to study his collection. He has an extensive collection of megalodon teeth from over 20 different countries. These are equisite specimens both in quality and size. He also has teeth and skulls from just about any shark you can think of and many of the shark skulls/heads he has displayed on the walls were caught by him over the years. In total, he has over 200,000 shark teeth in his collection. With respect to design and layout of his exhibits, they are superb and rival or surpass any collections in the world. In summary, we were in awe of his collection.

Some of our club members decided to stay over in the Gainsville area and hunt for fossils in the local creeks. To everyone's suprise, some nice specimens were found and the weary fossilers finally made their way back home. Their finds will probably appear at the next show and tell session.

## REFRESHMENTS

Your Club needs volunteers to do the refreshments for September, October, and November. Your support is greatly appreciated.

Let's all thank one of our newest members---Valerie Mccausland and family for volunteering to bring the snacks for August and thanks to our VP Mike Siciliano for taking care of the beverages.

September----------
October----------
November----------

Sign up for one of the upcoming months and be a good club supporter. See Bill or Mike

## South Florida Museum

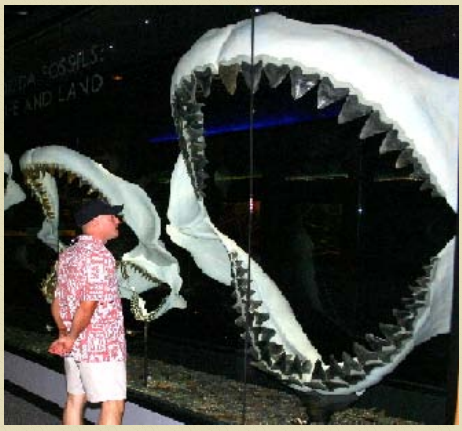
The museum is located on 10th Street in Bradenton. Fl. Take the exit off I-75 for RT 64 and go west, cross RT 41, then turn right on to 10th, it is the last group of buildings on your right.

It's a fine museum with lots of prehistoric animals, including a full mastodon cast, saber toothed cat, mammoth, and many other fine specimens. There is a section on Indian artifacts and Indian culture, and exhibits of fossil invertebrates. It is a good stop for fossil enthusiasts. There is also an aquarium, a planetarium, and an archeological section in the museum.

Their web site is www.southfloridamuseum.org

## PROGRAM FOR AUGUST

**Megalodon Sharks**



Dr. Charles O'Connor is a native Floridian, an amateur paleontologist, and was an assistant in the Vertebrate Paleontology Laboratory at the Florida Museum of Natural History in Gainesville, one of the nation's premier Pleistocene fossil collections. H e received the SW FL Audubon Educator of the Year award, was a Golden Apple Teaching Award finalist, 2009 Environmental Teacher of the Year, and has presented hundreds of fossil talks to schools, fossil clubs, and community groups for over 13 years.

Charles' "***Megalodon Shark***" presentation will explore the natural history of sharks, human and shark interactions, and fossilized teeth, with a special focus on (Carcharocles) Megalodon sharks. Diet, tooth structure, dimensions, evolution, and demise will be explored in this lively and colorful presentation.

## SNEAK PEEK AT UPCOMING PROGRAMS

**September 16**
**Ian Bartoszek**
**Reptiles of Florida: Gators and Big Snakes**

**October 21**
**Dr. Greg Herbert, USF**
**Overview of Field Research Projects**

## INTERNET SITES & LOCATIONS OF INTEREST

**WEB SITES & LOCATIONS OF INTEREST**

Fossil Club of Lee County: www.fcolc.com

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

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

Southwest Florida Fossil Club
www.southwestfloridafossilclub.com

Orlando Fossil Club
www.floridafossilhunters.com

PEACE RIVER Water Levels
www.canoeoutpost.com

Smithsonian Natural History Museum
www.mnh.si.edu

South Florida Museum
www.southfloridamuseum
Located in Bradenton, FL Houses the museum, an aquarium and planetarium.

Florida Fossil Clubs
www.fossil-treasures-of-florida.com

PICKING UP ISOLATED NATIVE AMERICAN ARTIFACTS
http://dhr.dos.state.fl.us/archaeology/ underwater/finds

Suncoast Reef Rovers - Suncoast Area Dive Stores (Venice and Sarasota) - www.suncoastreefrovers.com/ divestores.htm

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

Imaginarium 200 Cranford AvE, Fort Myers
www.cityftmyers.com/imaginarium

Southwest Florida Museum of History 2300 Peck St., Fort Myers www.swflmuseumofhistory.com

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

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

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

Lost in Time, 4719 69th Street, N. St Petersburg, FL 33709, Tel. 727-541-2567 Owner Brian Evensen

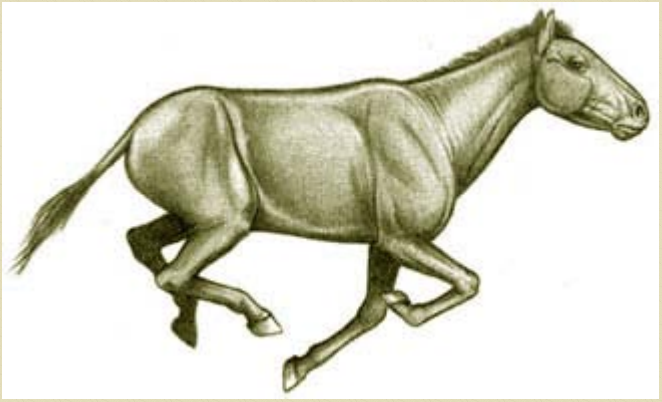
Peace River Wildlife Center
3400 West Marion Avenue (Ponce De Leon Park)
Punta Gorda, Florida
Www.peaceriverwildlifecenter.com

Cape Coral Friends of Wildlife Burrowing Owls
www.ccfriendsofwildlife.org

## Young Fossil Collectors
## Coby's Column

By Coby Pawlowski

***Florida's Horses***



I remember finding my first Horse Tooth, I was walking with my Dad along the edge of the Peace River. My Dad stepped right over it and kept on going, but I always keep a eye on the ground and that is how I found it. Horse fossils are very common in Florida. Some are very common while others are very rare. The smallest horse was 11" tall at the shoulder while the biggest horse was 60" tall at the shoulder.

The species of Horse are Neohipparion, Merychippus, Nannipus, Hipparion, Cormohipparion, Pseudhipparion, Pliohippus, Dinohippus, Astrohippus, Equus (the most common), Parahippus and Archeohippus. Now try to say those names 5 times fast!

Coby Pawlowski
Youth Activities Director

PALEO NEWS

## Mammal-Like Crocodile Fossil Found in East Africa, Scientists Report

ScienceDaily (Aug. 4, 2010) — Fossils of an ancient crocodile with mammal-like teeth have been discovered in the Rukwa Rift Basin of Tanzania, scientists report in the journal *Nature*. The unusual creature is changing the picture of animal life at 100 million years ago in what is now sub-Saharan Africa.

"If you only looked at the teeth, you wouldn't think this was a crocodile. You would wonder what kind of strange mammal or mammal-like reptile it is," said study lead author Patrick O'Connor, associate professor of anatomy in the Ohio University College of Osteopathic Medicine.

The scientists describe the new species of notosuchian crocodyliform as a small animal -- "its head would fit in the palm of your hand," O'Connor said -- that wasn't as heavily armored as other crocodiles, except along the tail. Other aspects of its anatomy suggest it was a land-dwelling creature that likely feasted on insects and other small animals to survive.

O'Connor and his international research team, funded by the U.S. National Science Foundation and the National Geographic Society, found a complete specimen of the crocodile in 2008, and now have recovered portions of seven different individuals in southwestern Tanzania. The tooth row with molar-like teeth initially puzzled many experts. Other ancient and living crocodiles typically boast relatively simple, conical teeth that serve to seize and tear prey; they swallow flesh in large chunks.

The molar teeth of the new species, named *Pakasuchus* (Paka is the Ki-Swahili name for cat and souchos is Greek for crocodile), possessed shearing edges for processing food, similar in form to the teeth of some mammalian carnivores.

"Once we were able to get a close look at the teeth, we knew we had something new and very exciting," O'Connor said.

The research team's discovery that the animals had heavily plated tails but relatively unarmored bodies with gracile limbs suggests that the creatures were quite mobile. They probably actively foraged on land, unlike water-dwelling crocodiles.

The new species isn't a close relative of modern crocodilians, but is a member of a very successful side branch of the crocodyliform lineage that lived during the Mesozoic Era, O'Connor said.

While the specimens of the newly discovered animal and its close relatives are unusual, the study suggests that the creatures were abundant during the middle Cretaceous, from around 110 million until 80 million years ago.

"The more exploration we do, the more we push the boundaries on what we thought we knew about animal life on the planet," O'Connor noted.

Based on other fossils discovered as part of the Rukwa Rift Basin Project, *Pakasuchus* lived alongside large, plant-eating sauropod and predatory theropod dinosaurs, other types of crocodiles, turtles and various kinds of fishes.

"We suspect that notosuchians were very successful in the southern hemisphere because they were exploiting a certain ecological niche, one in which they were able to successfully compete with other small-bodied, terrestrial animals," O'Connor said. "This is an environment that was quite different from what we typically think of for crocodiles."

Little is known about the vegetation during this time period, but detailed sedimentological analysis of the Rukwa Rift Basin shows that "the landscape was dominated by a large, long-lived river system with multiple, crisscrossing channels and low-relief vegetated floodplains in between that apparently supported a relatively rich vertebrate fauna," said Eric Roberts, an assistant professor of

geology at James Cook University who collaborated on the research while at Southern Utah University.

During much of the Cretaceous Period, Afro-Arabia, India, Madagascar, Antarctica, Australia and South America were joined together as the southern supercontinent Gondwana. Relatively few Cretaceous-age mammals have been recovered from this part of the world, and most of those discovered don't appear to be related to modern mammals. Notosuchian crocodyliforms may have taken up residence in a "mammalian niche" in Gondwana during the Cretaceous Period.

"One of the reasons we're working in different parts of the southern hemisphere, including Africa and Antarctica, is that not as much exploration has been done in these locales. We are still piecing together the puzzle of what animal life was like in these places," O'Connor said. "Perhaps we just haven't found the mammals yet."

Collaborators on the study include Nancy Stevens and Ryan Ridgely of Ohio University; Joseph Sertich of Stony Brook University; Eric Roberts of James Cook University; Michael Gottfried of Michigan State University; Tobin Hieronymus of the Northeastern Ohio Universities College of Medicine; Zubair Jinnah of the University of the Witwatersrand, South Africa; Sifa Ngasala of Michigan State University and the University of Dar es Salaam in Tanzania; and Jesuit Temba of the Tanzanian Antiquities Unit.

**Story Source:**

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