

## Fossil Club of Lee County

October, 2009

#### **Message from the President**



Greetings to all of our fellow fossilers. It's that wonderful time of the year when we once again can go hunting for fossils in the Peace River. The water level is about normal and everyone has high expectations of finding some gravel beds that were previously buried beneath the sand. Our Trip Leaders are so enthused that they set up a Club trip to the Peace River on Sunday, November 15th. Information and sign-up sheets will be available at our October meeting.

We will also be discussing the Club Fossil Show at our meeting. We have some excellent dealers signed up for the show and some of members will have a few tables. We are asking members to donate some items (not your best finds) for the silent auction, Spin game, and raffles. Bring these items this meeting if you can. We also will have the fossil show flyers available so that our members can help with the publicity efforts. Of particular interest to our new members, the club has ordered a wide array of Riker boxes and will have these and books, Tee shirts, and fossil preservative for sale at the October meeting. Our program this month features a speaker with lots of experience on the Peace River. He has an extensive collection of fossils he has found locally and in several of the eastern states that he will be sharing with us. As usual, we will have our "show and tell" segment, door prizes, and a raffle. Also, we will have time to visit our new library. I look forward to see everyone.

Best regards, Bill



#### **Next Meeting**

Our next meeting will be held on, October 15, at 7:00 p.m. at the Calusa Nature Center located at Ortiz and Colonial Blvd.

#### **Officers**

Bill Shaver, President (239)834-0694 /

billshaverpeaceriver@hotmail.com

Al Govin, Vice President (239)245-7560 and cell 910-2339

Ray Seguin, Treasurer, 939-1921 or 936-5019

Sharon Drake, Secretary, (239) 823-9052

#### **Board Members**

Director—Louis Stieffel, 458-9818 Michael Orchin, 574-6318 Sandy Schwartz, 772-8015 Trip Director, Bill Shaver Dive Trip Director, Mike Siciliano, 980-1406

#### Committees

Newsletter: Cheryl Mitchell

Speakers: Bill Shaver

\$1.00 Raffle: Mike Siciliano

Auction: Louis Stieffel

Web Master: Curtis Klug

#### FCOLC LIBRARY

The FCOLC Library is now open! Starting at the October meeting, club members can view and check-out materials. So, as not to interfere with the normal meeting activities, the library will be available from 8:30 pm to 9 pm. Club members can borrow up to two (2) books or binders or other publications. All items must be returned at the next meeting so that other members will also have the opportunity to borrow these items.

A lot of time has been spent putting this library collection together. Much of the material is now out of print and cannot be replaced. Please handle all publications with care as many are fragile and irreplaceable. Also, please be careful that all the information in each binder is kept in the order as listed.

The Club is most appreciative of Dr. Robin C. Brown for donating his collection to us. Also, we thank Louis and Leslie Stieffel for all their efforts to review, catalog, assemble, and label all material to make it ready for the FCOLC Library.



#### MINUTES OF MEETING THE FOSSIL CLUB OF LEE COUNTY, SEPTEMBER, 2009

A meeting of the membership of the Fossil Club of Lee County was held at the time, date, and place set forth below:

DATE: SEPTEMBER 17, 2009

TIME: 7PM

PLACE: CALUSA NATURE CENTER

ATTENDANCE: 32

PRESIDED BY: Bill Shaver, President.

The meeting was called to order. Dr. Jose Leal, Director of the Bailey-Matthews Shell Museum was introduced as the guest speaker and spoke about the sea shells of Southwest Florida. Dr. Leal provided four guest passes for the museum which were included in the door prizes. Members were asked to help publicize the Club Fossil Show that will be held on December 5th, 2009. The show flyer has been completed and will be ready for members to distribute as needed to promote attendance. The Club Library (Dr. Brown's contributions) will be functional and ready for lending at the October meeting.

Field trip sign-up sheets were available. Gunther Lobish will see if we can set up a trip to Vulcan. Mike Siciliano said there are no scheduled diving trips. The Peace River water levels are too high for trips at this time. Volunteers for refreshments for October are Mary Southall and Lori and Bill Mandos will do the beverages. Jack Boyce and Bobby Jo Sherrill volunteered for November. Members were asked to provide appropriate articles for our newsletter.

Show and Tell participants were Gunther, Louis, Coby, Cay, Jack Boyce, and Bill. Members are always invited to participate in Show and Tell. Also, items for the Fossil Show games or for the monthly raffle are appreciated. The monthly raffle was held and the meeting adjourned at 9:20pm.

Respectfully submitted: Sharon Drake, Secretary

#### WEB SITES OF INTEREST

www.fcolc.com FOSSIL CLUB OF LEE COUNTY

http://www.flmnh.ufl.edu/ MUSEUM OF NATURAL HISTORY @ GAINS-VILLE

http://flmnh.ufl.edu/natsci/vertpaleo/ vppermit.htm FLORIDA VERTE-BRATE FOSSIL PERMIT

http://

www.southwestfloridafossilclub.com SOUTHWEST FLORIDA FOSSIL CLUB

http://

www.floridafossilhunters.com ORLA NDO FOSSIL CLUB

http://

www.tampabayfossilclub.com TAMPA BAY FOSSIL CLUB

#### PEACE RIVER WATER LEVELS:

http://www.canoeoutpost.com

http://www.mnh.si.edu. SMITH-SONIAN NATURAL HISTORY MU-SEUM

Contact Cheryl at <a href="mailto:kayak-peaceriver@yahoo.com">kayak-peaceriver@yahoo.com</a> if you have any suggested additions to our web site in the interest column. Please <a href="mailto:help">help</a> support the newsletter by submitting appropriate articles for publication.

#### LOCAL ATTRACTIONS

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

Imaginarium 200 Cranford Av, 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 (on Pine Island) www.flmnh.ufl.edu/RRC/

Six Mile Cypress Slough Preserve Six Mile Cypress Drive (Between Daniels and Colonial) www.leeparks.org/fossil

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

Lost in Time, St. Pete Pier, St. Petersburg, FL Tel 727.823.7493





Randall Research Center, Pine Island

# Paper Challenges Ideas About 'Early Bird' Dinosaur





By JOHN NOBLE WILFORD

Published: October 8, 2009 The "early bird" Archaeopteryx may not be a bird, after all.

The Natural History Museum, London Scientists who examined pieces of fossil bone concluded that Archaeopteryx was a dinosaur. The first fossil of the raven-size species was an immediate sensation when it was excavated in 1860, in southern Germany. It had feathers and a wishbone, like birds, but teeth and a long, bony tail, like reptiles. Coming the year after publication of "The Origin of Species," the discovery swayed many scientists into accepting Darwin's theory of evolution by natural selection. Thomas Henry Huxley, Darwin's staunch ally, recognized the fossil in a limestone slab as a transitional species between dinosaurs and birds. Over time, the 10 known specimens of Archaeopteryx became widely regarded as examples of the earliest bird, which lived about 150 million years ago.

Now scientists examining tiny pieces of a specimen's long bone under powerful microscopes for the first time said they found unexpected patterns indicating that the species grew at a rate faster than living reptiles but only one-third as fast as that of modern birds. The evidence, they reported Thursday, challenges the hypothesis that Archaeopteryx had already developed characteristics of a physiologically modern bird. In a research paper being published in the online journal PLoS One, the science team led by Gregory M. Erickson, a paleontologist at Florida State University, concluded that Archaeopteryx was simply a feathered dinosaur that might have been capable of some aerial behavior, though perhaps not powered flight. In short, despite feathers, it was not the archetypal bird.

Dr. Erickson said in an interview that studied under a polarizing microscope, the dense microstructure of the bone showed few traces of blood vessels. He said this was evidence of a slow metabolism by which the individual probably took more than two years to reach adult size. Birds have especially fast metabolisms, making them able to leave the nest in days or a few weeks.

Mark A. Norell, a co-author who specializes in dinosaur research at the American Museum of Natural History in New York, said the findings showed that "the transition to physiological and metabolic birds happened well after Archaeopteryx." As a result, he added, the evolutionary emergence of birds "is still a huge mystery." Both Dr. Norell and Dr. Erickson emphasized that their findings did not undermine the theory widely held among paleontologists that birds evolved from what are known as theropod dinosaurs. Birds, in that sense, are avian dinosaurs, although some ornithologists insist that is a stretch.

Paleontologists and ornithologists who had no part in the research said the findings were an important step in dinosaur-bird studies, but not surprising. "Archaeopteryx has always been seen as a marvelous example of a transitional species," said Helen James, an ornithologist at the <u>National Museum of Natural History</u> in Washington. "You would expect to find its physiology to be transitional from what we see in modern birds and modern reptiles." Lawrence M. Witmer, a paleontologist at Ohio University who conducts other Archaeopteryx research, said that he was not surprised to learn that the species was "not fully avian," but that it had many features seen in later birds, indicating that it had not been displaced as "a very basal member" of the avian family

(continued on page 5)

(continued from page 4.....Early Bird Dinosaur)

family tree.

In the new research, the scientists worked with Zhonghe Zhou of the Institute of Vertebrate Paleontology and Paleoanthropology in Beijing, conducting similar bone examinations on several specimens found recently in China of feathered dinosaur species. They concluded that <u>confuciusornis</u> was the first known species in which the transition to a bird's growth rate occurred.

Confuciusornis lived about 130 million years ago. Although its growth rate was somewhat slower than that of most same-size living birds, this species had no teeth, no long tail and seemed to grow more rapidly than Archaeopteryx and other known specimens in between. More advanced bird fossils, with bones well supplied with blood vessels, appeared somewhat less than 100 million years ago.

In fact, it was the numerous discoveries in China that prompted the first close examination of Archaeopteryx bones. Two years ago, Oliver W. M. Rauhut of the Bavarian State Collection for Paleontology and Geology in Munich gave the scientists permission to conduct the research on the museum's fossil, which like all the known specimens was of a juvenile.

Museum technicians extracted samples — hardly larger than specks of lint — from already damaged parts of a thighbone.



#### SPEAKER FOR OCTOBER

Fred Mazza is the founder of Paleo Discoveries, a fossil hunting tour company. Paleo Discoveries offers guided tours and educational programs as well as fossil products. His talk will center on his experiences in fossil collecting along the east coast from New Jersey to Florida, and discussion about the geologic formations yielding these fossils. Fred has over 30 years of fossil hunting experience and has made significant contributions to the New Jersey State Museum.

For the past five years, he has been involved full time coordinating fossil hunting tours on the Peace River and conducting paleontology educational programs for people of all ages. His company participated in the Fossil Club of Lee County Fossil Show of 2008. Fred and his family reside in Vero Bhttp://





www.paleodiscoveries.com/HOME.html



Bison upper



Llama molar



Bison lower



Megs—Florida Museum in Gainesville, Florida

### Dino footprints enter record books

AFP/CNRS – Wed Oct 7, 10:31 am ET PARIS (AFP) - French researchers on Tuesday said they had uncovered the biggest dinosaur footprints in the world, left by giant sauropods that may have weighed 40 tonnes or more. An extraordinary track of footprints was found in April this year in the Jura plateau at Plagne, near the southeastern city of Lyon, by a pair of amateur fossil-hunters, the National Centre for Scientific Research (CNRS) said in a press release. Professional palaeontologists have since authenticated the find. "According to the researchers' preliminary inspections, the footprints appear to be the biggest seen so far," the CNRS said. "In addition, the tracks formed by the footprints extend over dozens, even hundreds, of metres (vards). Further digs will be carried out in the coming years and they may reveal that the site at Plagne is one of the biggest of its kind in the world. "The footprints entail circular depressions in chalky sediment that has been dated to the Upper Jurassic period. around 150 million years ago, when the area was covered by a warm, shallow sea. "The prints are very big, reaching 1.20 to 1.50 metres (3.9 to 4.9 feet) across, which corresponds to animals exceeding 30 or 40 tonnes in weight and measuring more than 25 metres (81 feet) in length," the CNRS said. Big as these four-footed beasts were, they were not the largest dinosaurs that lived. Candidates for the much-disputed title include Amphicoelias fragillimus, speculated to be between 40-60 metres (131-196 feet) long and up to 122 tonnes in weight, and Argentinosaurus, between 30-35 metres (98-110 feet) and as much as 80-100 tonnes. The biggest dinosaurs were all sauropods -- long-necked, four-footed herbivores. Evidence mainly comes from fossilized bones, sometimes single or fragmented, and the sketchiness of such proof often sparks heated debate.



Dino Footprints



FCOLC Trip (s)

**Peace River** 

Sunday, November, 15th, 2009

Information and sign-up sheets will be made available at our October meeting.

#### Science Quiz: Dinosaur Facts

Dinosaurs Strolled the Earth for over 160 million years. Are they really gone? Take the quiz. Cut and paste into browser.

http://science.discovery.com/quizzes/ dinosaur/dinosaur.html



#### **REFRESHMENTS**

The refreshments need not be lavish, but preferred to be kept simple except on special occasions. Drinks, crackers, cookies, and chips are all that are necessary. The club provides the drink cooler and will reimburse you for what you have spent. Our numbers will be growing as our seasonal people return. So be a strong club member .... Take a turn at doing the refreshments!

We appreciate you all!!!!

OCTOBER - Mary Southall and Lori and Bill Mandos

NOVEMBER - Jack Boyce and Bobby Jo Sherrill





## FOSSIL SHOW 2009

PRESENTED BY

THE FOSSIL CLUB OF LEE COUNTY

FOSSIL SHARK TEETH, VERTEBRATE FOSSILS, ROCKS & MINERALS, INDIAN ARTIFACTS, TRADE BEADS, BOTTLES, GEMSTONES, FOSSIL SHELLS, AND UNIQUE JEWELRY.

**MEET LOCAL FOSSIL COLLECTORS** 

FIND OUT WHERE AND HOW TO HUNT FOR FOSSILS, SEE THE EXHIBITS

FEATURING SEVERAL WELL KNOWN FLORIDA VENDORS

KIDS FOSSIL DIG - KEEP WHAT YOU FIND RAFFLES, GAMES DOOR PRIZES, SILENT AUCTIONS

#### FOSSIL TALKS BY DR. CHARLES O'CONNOR

10:00 AM - FLORIDA'S FOSSILS

FOSSILIZATION, SABER-TOOTH CATS, MAMMOTHS, GIANT GROUND SLOTHS, HUGE SHARKS, HOW TO HUNT FOSSILS, & MUCH MORE! MANY FOSSILS ON DISPLAY.

2:00 PM - SHARKS

BIOLOGY, FOSSIL TEETH, & MEGALODONS - THE LARGEST SHARK OF ALL TIME!

MANY TEETH ON DISPLAY.

SATURDAY, DECEMBER 5TH 9 AM TO 5 PM

AT THE

CALUSA NATURE CENTER & PLANETARIUM

CORNER OF COLONIAL BLVD & ORTIZ AVE.

**ENTRANCE ON ORTIZ AVE** 

FT. MYERS, I-75 EXIT 136 - GO WEST TO 1ST LIGHT, TURN RIGHT, ENTRANCE 500 FT ON LEFT WWW.FCOLC.COM

ADULTS \$3 CHILDREN FREE UNDER 12



7" Megalodon Shark Tooth Univ. of Florida