

Fossil Club of Lee County

August 2009

Message from the President



Greetings to all and a warm welcome to our new members.

We are in for a treat this month as our speaker will be talking about one of our favorite fossils: SHARK TEETH. Our speaker is Lisa Whitebach from the University of South Florida paleontology department. So, if you are into shark teeth you won't want to miss her presentation. Let's bring in a lot of shark teeth so she can see what we find in our area.

One of favorite places to hunt for shark teeth and other fossils is in the Peace River, but as most of you know the water level is just to high now. We are still hunting the Quality Material pit and our Trip Director (Gunther Lobish) says they are still finding some fossils. Also some of our members including myself, were lucky enough to participate in a fossil trip sponsored by the Conchologist of America. We went to an aggregate mine and some of our hunting colleagues were Roger Portell from the UF Museum of Natural History and Dr.Edward Petuch, Professor at the Florida Atlantic University.

(continued on page 2, column 1)

Next Meeting

Our next meeting will be held on, August 20, 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

Needless to say, we had expert ID of the specimens we found that day.

Our Fossil Show is set for December 5th this year and as of this date we have commitments from five dealers and three NFP groups. We have given "fossil talks" to several summer campers at the Imaginarium and the Six Mile Cypress and passed out draft flyers for the Show. As we get closer to the show date we will ask all of you help spread the word.

Last month we spoke about building a library with the books given to us by Dr. Robin Brown. Louis Stieffel volunteered to work up a list of all the materials and will give us an overview at the August meeting.

Also, I have several books that Barbara Fite donated to us and some of those may go in to our library or used as raffle item/door prizes.

Our host, the Calusa Nature Center has need for part-time volunteers. See me if you are interested.

I look forward to seeing everyone at our meeting. As usual we will have door prizes, the raffle, and everyone is invited to participate in Show and Tell.

Thanks for supporting your Club.

Bill



MINUTES OF MEETING THE FOSSIL CLUB OF LEE COUNTY, JULY 16, 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: July 16, 2009 TIME: 7:00 P.M. PLACE: Calusa Nature Center

ATTENDANCE: 30

PRESIDED BY: Bill Shaver, President Bill called the meeting to order, and thanked Kathy Powlowski for providing refreshments. He acknowledged that we had five guests in the house this evening.

He stated that the Imaginarium is looking for July 29th and the 30th, to give a couple of fossil talk to summer camp kids.

Cheryl Mitchell was acknowledged for doing such a fine job on the newsletter. She is still asking for pictures and articles of interest.

The fossil show has been confirmed for December 5th at the Calusa Nature Center, we are soliciting vendors and dealers.

Our speaker tonight was Ian Bartozeck. The August speaker will be Lisa Whiteneck of the University of South Florida on different species of sharks, and shark teeth. (See bio on pg. 4)

Our September speaker will be Jose Leal of the Bailey-Matthews Shell Museum.

Bill gave us a heads up on the Peace river, being at 3 to 3½ feet, barely accessible.

The heat is precluding trips to the Quality mine.

Show and tell: Coby, Gunther, Louis, Rick and Bill. Raffle was held, and meeting was adjourned at 9:20.

By: Sharon Drake, Secretary

• WEB SITES OF INTEREST

www.fcolc.com FOSSIL CLUB OF LEE COUNTY

<http://www.flmnh.ufl.edu/> MUSEUM OF NATURAL HISTORY @ GAINSVILLE

<http://flmnh.ufl.edu/natsci/vertpaleo/vppermit.htm> FLORIDA VERTEBRATE FOSSIL PERMIT

<http://www.southwestfloridafossilclub.com> SOUTHWEST FLORIDA FOSSIL CLUB

<http://www.floridafossilhunters.com> ORLANDO FOSSIL CLUB

<http://www.tampabayfossilclub.com> TAMPA BAY FOSSIL CLUB

PEACE RIVER WATER LEVELS:
<http://www.canoeoutpost.com>

<http://www.mnh.si.edu>. SMITHSONIAN NATURAL HISTORY MUSEUM

Contact Cheryl at kayak-peaceriver@yahoo.com if you have any suggested additions to our web site in the interest column

• 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

Fossil Club of Lee County Fossil Show

Upcoming Date: December, 5, 2009

Calusa Nature Center

\$3.00 Adults.....Children Free

This month's speaker; Lisa Whitenack (Bio)

CURRENT POSITION: Postdoctoral Fellow, Department of Geology, University of South Florida

EDUCATION:

-2008: Ph.D. in Integrative Biology, Department of Biology, University of South Florida

-2001: M.S. in Geological Sciences, Michigan State University

- 1999: B.S. in Geology, University of Illinois at Urbana-Champaign

BIOGRAPHICAL INFORMATION:

I grew up in Chicago, where I never quite outgrew an obsession with dinosaurs, sharks, and fishes. During my freshman year of college, I took a course called "History of Life" and promptly changed my major from chemistry to geology. My senior thesis was on the paleoecology of a 320 million year old deposit full of invertebrates and odd-looking shark teeth, which begged the question "what the heck were these sharks eating?". This question stayed with me through my masters and formed the basis of Ph.D. dissertation and my research career.

RESEARCH INTERESTS:

My general research interest is the biomechanics of vertebrates and invertebrates, with a focus on predator-prey systems in the fossil record. In other words, I like to figure out how animals work from a mechanical viewpoint. As behavior and ecology is often lost when studying extinct animals, I often start with living organisms, which allows me to use behavioral data with morphological data to refine and support hypotheses. I can then apply engineering techniques to extinct organisms for which we only have morphological data.

PRESENTATION TOPIC: The Biomechanics & Evolution of Shark Teeth

Chondrichthyans (sharks, skates, rays, and chimeras) have been around for 400 million years, but extinct sharks are still poorly understood. Due to the cartilaginous nature of the skeleton, the fossil record of these organisms is primarily composed of teeth and the occasional whole body fossil, limiting the amount of information that paleontologists have to work with. We will take a look at the fossil history of shark teeth, then focus on experiments with modern and fossil shark teeth and what they can tell us about how sharks teeth lived.

Huge Fossilized Dung Reveals a Hidden Ancient Ecosystem

livescience.com – Fri Jul 17, 4:20 pm ET

The world might be knee-deep in cow patties and other animal waste today were it not for dung beetles. [Dung beetles](#) roll the waste of large animals into tiny balls that they bury underground to snack on later. Burying the [dung](#) fertilizes the soil and reduces disease, but the benefits don't stop there.

A new study of 30 million-year-old [fossilized mega-dung balls](#), as big as three inches (seven centimeters) in diameter and produced from the dung of extinct giant South American mammals, reveals that the dung was also a food source for a number of insects that would steal a bite while the dung beetles weren't looking.

- "Traces [in the fossilized dung] record the behavior of animals actively stealing the food resources set aside by the dung beetles," said Victoria Sanchez, a graduate student at the Museum of Natural Sciences in Buenos Aires and a co-author on the study. "The shapes and sizes of these fossilized burrows and borings in the dung balls indicate that other beetles, flies and earthworms were the culprits. Although none of these animals are preserved in these rocks, the fossil dung balls preserve in amazing detail a whole dung-based ecosystem."

About 30 million years ago, South America was home to giant extinct herbivores that produced mega-sized dung. Paleontologists have dug up evidence of bone-covered armadillos the size of small cars, ground sloths nearly 20 feet tall (6 meters tall) and elephant-sized hooved mammals. Although the [dung beetles](#) themselves did not [fossilize](#), the results of their work are preserved as fossil dung balls, some more than 40 million years old and as large as tennis balls, the researchers said.

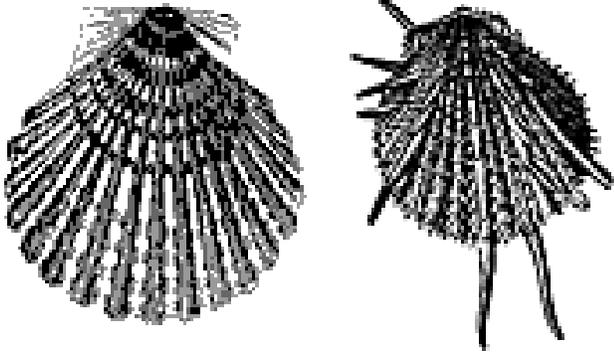
The study is detailed in the July issue of the journal *Palaeontology*.

How many of these shark teeth can you identify?



Dave's Great Diving Find



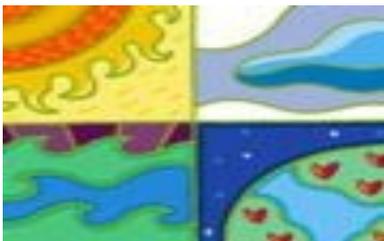


POEM SUBMITTED BY MAURICE GUY

Rings of the Lord

Precious are the rings of the Lord
That in the depths they have stored
In fossilized and rocky floors
That once were lofty sandy shores
The Lord has taken great measures
To conceal his many treasures
At the bottom of vanished seas
In jewel boxes without keys
All arranged in infinite rows
Only to reveal them to those
With wisdom to appreciate
What Mother Nature can create

Maurice Guy



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. Figure on about 50 attending each summer meeting. So be a strong club member Take a turn at doing the refreshments!

We appreciate you all!!!!

AUGUST - BILL SHAVER

SEPTEMBER - NEED VOLUNTEER

OCTOBER - NEED VOLUNTEER

***WELCOME TO OUR NEW
MEMBERS***

Carol King

Mary and Karl Belcher

