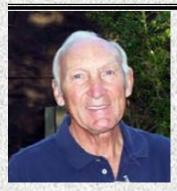


# FOSSIL CLUB OF LEE COUNTY

JANUARY 2013



Message from the Tresident

Greetings and Best Wishes for a Happy New Year,

So far we are having a mild winter. From a fossil hunting point of view that means we can be more comfortable out in the field. The river water temperatures are mild and so is the outside air. In other words, its an ideal time to look for fossils.

Several uncommon fossil finds have been reported already this year. These include a dire wolf canine, a speckeled bear molar, an alligator apex vertebra, and a giant armadillo toe bone. And of course, some megalodon teeth were found. When we find these spectacular specimens, It causes us to stop and think about the history of Florida and it piques our interest in the creatures that were here thousands of years before us.

One of our favorite reference books that lays out a lot of the history of fossils in Florida is Dr. Robin C. Brown's book entitled Florida's Fossils. We are pleased to have Dr. Brown as our guest speaker for the January meeting which will be held at the Calusa Nature Center Planetarium. He has spoken to us previously about some of the notable fossil finds in Florida and this time he will talk about Florida's Future Fossils! After his talk we will move to the lobby of the Nature Center for refreshments, book signing, socalizing and our monthly raffle.



We are making plans for our annual auction which will be held in March. As is customary, members are requested to bring auction items to the January and February meetings. We want to thanks all of you who support the auction with donations and also those who do the bidding. As we have done in the past, we will propose to support some aspects of paleontology with the funds we raise from the auction.

With regard to fossil hunting as a club function, we have set up two trips for January, will have our club exhibit at the Burrowing Owl Fest in February and at least one river trip for March. Also, The Tampa Bay Fossil Fest in March is a great opportunity to learn more about Florida fossils. Another field trip is planned for April.

I look forward to seeing everyone at the January 17th meeting at the Calusa Nature Center.

Regards, Bill

# **Next Meeting**

FCOLC next meeting is on **January 17<sup>th</sup>** at the Planetarium, Calusa Nature Center.

Meeting starts at 7 PM.

## **OFFICERS**

Bill Shaver, President, 239-834-0694 billshaverpeaceriver@hotmail.com

Michael Siciliano, Vice President, 239-980-1406

Pam Plummer, Treasurer, 239-246-5993

Kathy Pawlowski, Secretary, 239-267-6130

#### **DIRECTORS**

Dean Hart, 941-979-8217 Gunther Lobish, 941-268-7506 Charles O'Connor, 239-246-5526 Joshua Frank, 239-248-5094 Ray Seguin, 239-939-1921

## COMMITTEES

Cherie Neat, Newsletter
Curt Klug, Web Master
Bill Shaver, Speakers
Louis Stieffel, Auctioneer
Kathy Pawlowski, Club Merchandise
Pam Plummer, Club Badges
Pam Plummer, Membership
Joshua Frank, Refreshments
Dean Hart, Refreshments co-chairman
Gunther Lobish, Pit Trips
Michael Siciliano, Raffle and Dive Trips
Coby Pawlowski, Youth Activities Director
Hollie Tiner, Club Photographer
Gunther Lobish, Invertebrate Education
Louis Stieffel, Vertebrate Education

#### **CLUB REFRESHMENTS**

Many thanks to everyone who helped to make a great Holiday Dinner meeting in December 2012! Special thanks to Chuck Ferber for doing the ham, Charles and Marcia Simons for cooking an excellent turkey, and Pat and David Rosenquist for providing the beverages.

Our first volunteers for refreshments for 2013 are Pat and Ted Oakes and Sally Jane Moore. They have volunteered to do January which is sort of a tradition as they have done so for the past several years. February is still open so everyone is invited to pitch in and take a turn. As matter of fact all remaining months are open except for March, which will be handled expertly by our wonderful group called the Bonita Beachcombers. March is the month we hold our Annual Auction and the Beachcombers have a tradition of providing the refreshments for that event.

Our refreshment committee co-chairs, Dean Hart and Joshua Frank, will have a sign-up sheet out at our next meeting. Everyone is invited to participate. The club will reimburse you for reasonable expenses and also the club provides the coolers for the beverages.

# SUGGESTIONS OR RECOMMENDATIONS

Its your club, so if you would like to offer suggestions or recommendations about any of the club activities or way things are conducted, let one of the club officers or directors know about your ideas. We will be receptive and bring your suggestions up at the next Board Meeting.

## **BEST WISHES**

Some of our members have not been coming to the meetings, not because they don't want to, but because of health issues. We have learned that Donna Johnson and Linda Warner, both of whom are long time members, have serious health problems.

Pam Plummer, our treasurer, is working up a gift "bucket" for Donna which consists of rocks, minerals and fossils in a matrix of sand. If you would like to bring in a small item for the bucket please bring it to the January meeting. Pam will receive the items and then sterilize them before they can be presented to Donna. Linda is home in the recovery mode and her friend and fellow club member Sue Collier is in frequent communication with her.

We send both of them our best wishes and look forward to seeing them at some future meeting.

#### **MEMBERSHIP DUES**

Club membership forms will be available at the January meeting. Please complete the form when paying your dues for 2013 so our Treasurer can update your information on the membership roster.

For those of you who joined the club in October, November, or December 2012, you are considered paid up for year 2013. Several people have already paid their 2013 dues. If you have not renewed your membership, please try to do so at the **January 17th** meeting.

We will begin our meeting in the Planetarium and after our speaker presentation we will move to the Calusa Nature Center Lobby (main building) to conduct business. Please pay your dues at that time.

Thanks for your continued support of your club.

# SPEAKER FOR JANUARY

Dr. Robin C. Brown, who was one of the founders of the Fossil Club of Lee County, will be the speaker for the **January 17th** meeting. The title of his presentation is "The Future Fossils of Florida."

Most of us know Dr. Brown for his excellent book entitled Florida's Fossils. It is the "reference book" for both novice and experienced fossil hunters. He also wrote another fine book entitled "Florida's First Peoples", which is very popular for those who are interested in the Indians that inhabited Florida for several thousand years. Our club has both books available for sale and Dr. Brown said he will be glad to sign them for you. If you already have the books and want them signed, bring them to the meeting.

Dr. Brown donated his reference books and other documents he used in the writing of Florida's Fossils to our club. These materials were used to establish the Club Library and members can sign out books when we meet at the Calusa Nature Center Iona House. He also donated his original photographs which we offer at our annual auctions.

Dr. Brown is a Lifetime member of our club and we thanks him for all of his contributions to the science and hobby of Florida fossils.

#### **CLUB FIELD TRIPS**

Several members signed up for the three scheduled trips set up for early 2013. The first trip is **Saturday**, **January 12th** to the Vulcan Mine in the Brooksville area.

We will have the sign-up sheets at the January meeting for the two river trips we have scheduled so far this year. Several people signed up at the last meeting. There is no limit on how many club members can participate, however you must be a current member. Both river trips are to the Peace River. A trip is set up for **Saturday**, **January 19th** and another is for **March 2nd**.

As it is winter here in Florida, we should expect the air and water temperatures to be cool so dress appropriately. Some people prefer to wear wet suits, but if you have a tolerance for cool/cold water you might be OK with regular clothes and a wind-breaker jacket. Both trips are walk-in, but if you want to bring your canoe or kayak so you can explore the area further, please feel free to do so, The trips start at 9 AM. Bring your lunch and drinks and change of clothes (there is a rest room available). You will need a shovel and screen. More details are available on the sign-up sheets and announcements will be made at the January meeting.

#### **ANNUAL CLUB AUCTION**

Our Annual Auction will be held at the Zion Lutheran Church on **March 21st.** In past auctions we have been fortunate to have several members donate some super items for the auction. Thanks to some of our members, we already have a start toward a goal of about 110 items. However, we still need a lot of items. For those of you who wish to donate items, please bring them to the January and February meetings so we can prepare them for the auction.

Donated items are generally rocks and minerals, Indian artifacts, pertinent books, pertinent photos, fossil jewelry, fossil shells, display cases, river screens, fossil hunting equipment/tools, and of course vertebrate fossils of all kinds. If you are not sure if an item is acceptable, please ask.

The money we raise from the auction is primarily used to support scholarship funds at the University of Florida and University of South Florida for deserving students pursuing advanced degrees in paleontology. The club membership votes on the distribution of the funds.

Please bring your donated items to Club Vice President Mike Siciliano. Thanks to everyone of you who generously support your club.



# 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

Mark Renz's Fossil Expeditions www.fossilx@earthlink.net

Smithsonian Natural History Museum www.mnh.si.edu

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

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.com

Imaginarium 2000 Cranford Ave, Fort Myers www.i-sci.org

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

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

Tampa Bay Fossil Club Www.tampabayfossilclub.com

Picking Up Isolated Native American Artifacts http://dhr.dos.state.fl.us/archaeology/ underwater/finds

# SCHEDULE OF EVENTS AND SPEAKERS

January 17th FCOLC Meeting at Calusa Nature Center Planetarium

January 17th Speaker: Dr. Robin C. Brown

January 19th Club Field Trip

February 9th Southwest Fossil Club Annual Auction

February 21st FCOLC Monthly Meeting at Zion Lutheran Church

February 21st Speaker: Dr. Charles OConnor

February 23rd Annual Burrowing Owl Festival in Cape Coral

March 2nd Club Field Trip

March 21st FCOLC Annual Auction at Zion Lutheran Church

March 23rd/24th Tampa Bay Fossil Fest 2013 (www.tampabayfossilclub.com)

April 18th FCOLC Monthly Meeting at Iona House Calusa Nature Center

April 18th Speaker: Steve Koski

# Giant fossil predator provides insights into the rise of modern marine ecosystem structures

Published: Monday, January 7, 2013 - 16:04 in Paleontology & Archaeology

An international team of scientists has described a fossil marine predator measuring 8.6 meters in length (about 28 feet) recovered from the Nevada desert in 2010 as representing the first top predator in marine food chains feeding on prey similar to its own size. A paper with their description will appear the week of Jan. 7, 2013 in the early electronic issue of *Proceedings of the National Academy of Sciences*.

Scientists who studied the fossil include lead author Dr. Nadia Fröbisch and Prof. Jörg Fröbisch (both at Museum für Naturkunde Leibniz-Institut für Evolutions- und Biodiversitätsforschung), Prof. P. Martin Sander (Steinmann Institute of Geology, Mineralogy, and Paleontology, Division of Paleontology, University of Bonn), Prof. Lars Schmitz (W. M. Keck Science Department, Claremont McKenna, Pitzer, and Scripps Colleges, Claremont, California) and Dr. Olivier Rieppel (The Field Museum, Chicago, Illinois).

The 244-million-year-old fossil, named *Thalattoarchon saurophagis* (lizard-eating sovereign of the sea) is an early representative of the ichthyosaurs, a group of marine reptiles that lived at the same time as dinosaurs and roamed the oceans for 160 million years. It had a massive skull and jaws armed with large teeth with cutting edges used to seize and slice through other marine reptiles in the Triassic seas. Because it was a meta-predator, capable of feeding on animals with bodies similar in size to its own, *Thalattoarchon* was comparable to modern orca whales.

Remarkably, only eight million years prior to the appearance of *Thalattoarchon*, a severe extinction at the end of the Permian period killed as many as 80 to 96 percent of species in the Earth's oceans. The rise of a predator such as *Thalattoarchon* documents the fast recovery and evolution of a modern ecosystem structure after the extinction.

"Everyday we learn more about the biodiversity of our planet including living and fossil species and their ecosystems" Dr. Fröbisch said. "The new find characterizes the establishment of a new and more advanced level of ecosystem structure. Findings like *Thalattoarchon* help us to understand the dynamics of our evolving planet and ultimately the impact humans have on today's environment."

"This discovery is a good example of how we study the past in order to illuminate the future," said Dr. Rieppel of The Field Museum.

The ichthyosaur was recovered from what is today a remote mountain range in central Nevada. Most of the animal was preserved, including the skull (except the front of the snout), parts of the fins, and the complete vertebral column up to the tip of the tail. Supported by a grant from the National Geographic Society's Committee for Research and Exploration, the team of paleontologists took three weeks to unearth the ichthyosaur and prepare it for its transport by helicopter and truck out of the field.

Source: Field Museum

# Separating bones and boulders by: Jack Boyce

With the help of friends, I have learned many successful fossil hunting techniques over the last 4-5 years most of which have proved their value in 2012. Friends from the Fossil Forum (<a href="http://www.thefossilforum.com/">http://www.thefossilforum.com/</a>), friends from the Lee County Fossil Club (<a href="http://www.fcolc.com/">http://www.fcolc.com/</a>), and those friends and acquaintances who I have met on the Peace River. The highlighted technique for this article is: <a href="https://linearchy.org/">If you want to find large fossils</a>, <a href="mailto:find large fossils">find large gravel and dig DEEP</a>. That sounds pretty simple but, in fact, it is not simple to execute for a whole host of reasons:

- Large gravel is heavy and difficult to dig;
- ➤ The percentage of large gravel versus sand, mud, and small gravel is small;
- Even when you do find some large gravel, it generally does not contain a lot of fossils because the best, brightest, most experienced fossil hunters have beaten you to the treasure;
- There are far fewer large fossils than small fossils by orders of magnitude and fossil hunters will get discouraged when they find nothing in sieve after sieve;
- Most fossil seekers do not have a good understanding of the concept of DEEP you have to dig deeper than anyone who has looked there previously. So DEEP may mean snorkel, hookah or scuba. DEEP may mean looking in late June when the river is at its lowest depth. Deep may mean closing your mouth to avoid swallowing water as you dig. You **really** should close your mouth because river water may or may not contain some really nasty things.

I am generally pleased when I start digging up rocks and boulders over 5-6 inches. The quantities are small but results are impressive: 4 large mammoth tooth fragments of 3-6 plates each; a complete mastodon tooth root and all; multiple whale vertebrae; a 10 inch sloth claw, and finally the subject of this article: a Mastodon Metapodial bone. In each case, I had dug through small gravel with no fossils and then larger gravel with few fossils down to bedrock and large boulders. These large fossils had settled between the boulders, and I carefully removed the boulders and found the fossils. Once I encounter large rocks, I usually switch from a pointed shovel to a flat shovel to avoid damage to the fossil and to keep the fossil on the shovel while lifting to the sieve.

**Metapodials** are long bones of the hand (metacarpals) and feet (metatarsals) which connect

the digits to the center of the hand or foot. In humans, five are present in each hand and foot. In the mastodon foot, there seems to be 3 large metapodial in the center of the foot flanked by a smaller metapodial on each side. I had tossed aside 10-15 rocks when this metapodial came up in the center of my flat shovel sitting on a pile of gravel. It was pretty clear based on size and shape that this was either Mammoth or Mastodon and more likely Mastodon because that was common in this section of the Peace River. An experienced fossil hunter digging with me identified the bone as Mastodon toe bone, and a post of the Fossil Forum clarified the identification to metapodial. By looking at photos of Mastodon foot bones on the internet. I am trying to classify which specific toe on a left or right foot. The bone is 5 inches long, 3 and ½ inches high and 3 and 1/4 inches wide.



The desirability of any fossil is subjective. That is especially true for me because I have never sold any of the fossils I found. I have found 100s of Megs, some perfect. This Mastodon Metapodial is much rarer and harder to find than a Megalodon, or a Mammoth tooth, or a Giant Sloth Claw or even a Mastodon tooth. In the world of supply, demand, and eBay all those other fossils are valued 10x the Mastodon Metapodial. In my Peace River world with glistening water meandering through Live Oaks and Cypress covered with Spanish Moss, this Mastodon foot bone is one of my best finds ever. See you on the river.



# Conquistadors and the Calusa: Reflections on Resistance

In conjunction with the statewide VIVA FLORIDA 500 initiative, Lee Trust for Historic Preservation is holding a free symposium titled "Conquistadors and the Calusa: Reflections on Resistance" from 1:30 to 4:30pm on Saturday, February 9, 2013 at the Koreshan State Historic Site Art Hall.

The Conquistadors and the Calusa symposium brings together lead scholars on American Indian archaeology, history and representation. Dr. Jerald Milanich, Professor Emeritus at University of Florida/Florida Museum of Natural History and Dr. John Worth, Associate Professor of Anthropology, University of West Florida will chronicle European encounters with the powerful Calusa Indians in southwest Florida, beginning with the voyages of Juan Ponce de León who named La Florida in 1513 through the Calusa's retreat in the early 1700s. Worth and Dr. Andrew Frank, Allen Morris Associate Professor of History at Florida State University will recount the resistance and accommodation of successive groups including the Seminole and Miccosukee Tribes from the Spanish colonial era to today's Florida. Frank and American Indian literature scholar Dr. Gretchen Bataille, Senior Vice President for Leadership and Lifelong Learning with the American Council on Education will address the representation of indigenous histories in the commemoration process and provoke discussion of how we create realities.

Space is limited. Interested parties are strongly encouraged to register attendance in advance at <a href="MakingHistoryMemorable@gmail.com">MakingHistoryMemorable@gmail.com</a> or consider viewing online at www.leetrust.org on Tuesday, February 12<sup>th</sup> at 1:30pm.

Lee Trust is a volunteer based charitable organization founded in 1993 to promote historic preservation through education, advocacy and property acquisition. The Florida Humanities Council has awarded more than \$8 million since 1971 to support statewide humanities programs that promote and preserve Florida's diverse cultural heritage.

Funding for this program is generously provided by the Florida Humanities Council through a twoyear partnership grant to Lee Trust entitled, Making History Memorable. Program partners for the Conquistadors and the Calusa event include Koreshan State Historic Site, Friends of Koreshan State Historic Site, Blue Marble Films, Fort Myers Scene, and Embassy Suites Fort Myers – Estero.

Charlie Strader

Bonita Springs Historical Soc. PO Box 3015, Bonita Springs, FL 34133 1-239-992-6997 www.BonitaSpringsHistoricalSociety.org

# **Cuban Fishing Tour with Dr. John Worth**

Dr. John Worth, currently an Associate Professor in Anthropology at the University of West Florida and formerly the Assistant Director of the Randell Research Center at Pineland, will discuss the origins and history of the earliest Cuban fishing industry in Southwest Florida on a cruise offered by SCCF and Captiva Cruises. Dr. Worth will begin with the initial contacts of Cuban fishermen with the resident Calusa Indians during the 1680s, their continued fishing in the region during the Calusa's retreat to the Florida Keys and Cuba by 1760, and the subsequent interactions and eventual intermarriage with immigrant Creek Indians during the British, Second Spanish, and American Territorial period, followed by the eventual demise of this phase of the Cuban fishing industry during the Second Seminole War, and the removal of the fishermen's "Spanish Indian" families to Oklahoma. Dr. Worth has studied the Spanish Florida period extensively, researching historical documents in both Spain and Cuba. Friday, February 8, departing from McCarthy's Marina on Captiva. Check-in is 12:30 p.m. for 1 p.m. departure; return at 3:30. Dress comfortably for the weather. The fee is \$45 per person plus \$5 per car for parking. Reservations required: please call Captiva Cruises at 472-5300. Space is limited.