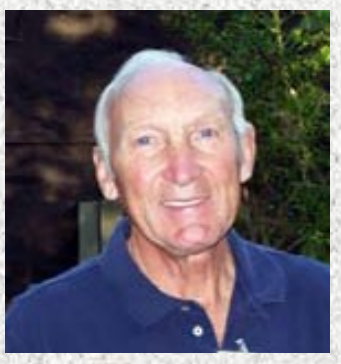
Fossil Club of Lee County

February 2011



Message from the President

Winter greeting to all and hope you are enjoying the winter weather of about 75 degrees everyday. Its great weather to be out looking for fossils in the rivers. along the beaches, and in the pits. We are blessed!

The Club will hold its annual auction in March on St. Patrick's Day to be exact, so have your traditional meal and come join in the fun. We have a excellent variety of specimens which have been donated by you, our generous members, and if you would like to make a donation, you still have time. Please bring your items to the February 17th meeting so we can process them for the auction in March. I particularly like the three excellent mammoth teeth and several other bones from that animal we were fortunate enough to obtain as donations.

This is the peak season for Fossil Shows so look in our newsletter under Coming Events for the dates and times, etc. We try to post all these types of events in our newsletter so if we have missed any, let us know.

Our Speaker for this month is Steve Wilson who many of us know from our sister club, the Southwest Florida Fossil Club. Steve has a been active in the world of fossils for a long time and is one of this regions local experts on a wide range of fossils. His presentation is on micro sea shell fossils and I am sure all of our invertebrate enthusiasts and even the hard core bone fossilers will enjoy his presentation.

We had over 80 members at our last meeting which was held in the Planetarium and we expect at least that many attendees for the February meeting so we meet again in the Planetarium at the Calusa Nature Center.

Our program for February will include Show and Tell so bring in your finds or something that you would like to share with your fellow members. If you have extra specimens and want to donate them to the monthly raffle table, you will be appreciated. We will have a limited amount of club merchandise available --we did get some more larger rikers-- including books and tee shirts.

Enjoy the great weather and find something special! Bill

Next Meeting
Our next meeting will be held on, February 17th at 7p.m. to 9:30p.m. at the Calusa Nature Center located at the intersection of Ortiz Av and Colonial Blvd in Fort Myers, FL

MINUTES OF JANUARY MEETING
THE FOSSIL CLUB OF LEE COUNTY

Date: January 20th, 2011
Place: Calusa Nature Center Planetarium
Attendance: 84
Presided by: Bill Shaver, FCOLC President

All members and guests were welcomed by the President.

Members were reminded that Annual membership dues are now due.

Treasurer, Ray Seguin, presented the Annual Financial Report.

February meeting will again be held in the Planetarium, March meeting and annual auction will be held at the Zion Lutheran Church, and in April, the meeting will be held in the Iona House.

The President thanked all for donating items for the annual auction. The February meeting will be the last opportunity to bring in items for the auction.

The speaker was Professor Bruce McFadden, Curatror for Vertebrate Paleontology at UF Museum of Natural History. His topic was Once-in-a-Lifetime Opportunity, Finding Fossils at the Panama Canal construction site.

Newsletter contributors Coby Pawlowski, Gunther Lobish, and Louis Steiffel were thanked for their monthly inputs to the Club newsletter.

It was announced that the SWFFC is holding their annual auction on February 12th and the Cape Coral Friend of Wildlife Festival is on February 26th.

Club field trips were announced. Quality Mine trips on Sundays, Mosaic Mine on February 5th and CF Industries on March 4th. Louis Steiffel will arrange for a trip to the Girl Scout Camp on the Peace River for the months of February and possibly again in March.

OFFICERS

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COMMITTEES

Cherie Neat, Newsletter
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
Coby Pawlowski, Youth Activities Director
Hollie Tiner, Club Photographer
Gunther Lobish, Invertebrate Education
Louis Steiffel, Vertebrate Education

CLUB ELECTIONS

In accordance with Club by-laws, elections are held on an annual basis with the election held in April and newly elected officers/directors taking office on May 1st. This year all officers and directors with one exception have decided to remain in their positions, however anyone seeking to run for any office may do so. One Director, Michael Orchin, has made a career change and will no longer be able to serve on the Board. If you would like to run for that position, please let the Club Vice President know of your interest.

EMAIL NEWSLETTER

Most members now receive their newsletter on-line and it does save the club the postage and printing costs. For those of you who receive the newsletter in the mail and would like to now receive it on-line, please let us know. Thanks

MEMBERSHIP DUES

Please pay your dues to ensure continuation of your membership in the Fossil Club of Lee County. You may pay your dues at the next meeting or mail them. The application form is at our web site www.fcolc.com. The Club appreciates your support and participation.

FEBRUARY SPEAKER

The speaker for February is Steve Wilson. He has been hunting for vertebrate and invertebrate fossils in the Southwest Florida area for over 30 years. According to Steve, he has had the privilege of contributing to the science of paleontology by discovering numerous new species of fossils to be added to the fossil record. Steve is a professional firefighter with the Division of Forestry with over 28 years of service. His presentation will be about fossil invertebrates of the SW Florida area. He will present a series of slides and several fossil specimens.

Schedule Of Coming Events

February - Southwest Florida Fossil Club is having its Annual Fossil Auction on February 12th, at Edison College in Punta Gorda. Viewing starts at 5 pm and the auction starts at 5:30 pm. See their website for detailed directions.

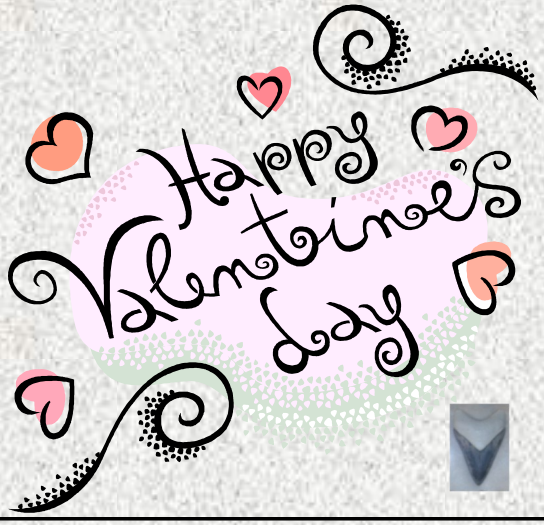
Burrowing Owls Event at Cape Coral Rotary Park, February 26th, 2011

March - Tampa Bay Fossil Fest at Florida State Fairgrounds, March 13th and 14th, 2011(see Tampa Bay Fossil Club web site for details)

Fossil Club of Lee County Annual Fossil Auction at Zion Lutheran Church on 7401 Winkler Road, Fort Myers, FL beginning at 7 pm on March 17th, 2011

Cape Coral Fossil and History Fest at Rotary Park on March 26th, 2011 (10am-4pm)

April - 19th Annual Venice Shark's Tooth Festival, April 8th, 9th, and 10th, 2011



REFRESHMENTS

We had a wonderful selection of snacks and beverages at the January meeting which were provided by the Oakes, Kempers, and Sally Jane Moore. Thanks for your generosity. The February refreshments will be done by the Schoenherrs and Gunther Lobish. There were a lot of extra beverages left over and the Kempers donated two cases of water so that pretty well takes care of the February refreshments. The Bonita Beach Combers have signed up to do the March refreshments and we always appreciate their efforts. We need a volunteer/s for April refreshments. Thanks to everyone who helps to support their club.

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

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

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

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

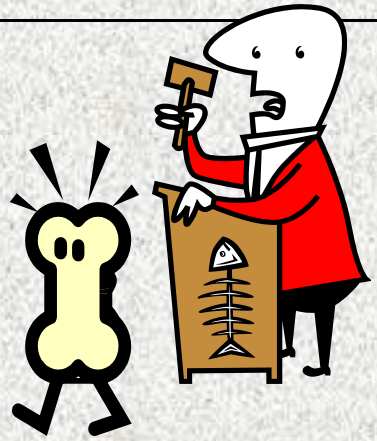
Fossil Field Trips

The Club is scheduling trips to the Quality each Sunday, so if you want to go, sign up at the February meeting and get the details from Gunther Lobish, Pit Trip Leader. They continue to find specimens usually proportional to the amount effort expended. The recent trip to the Mosaic mine was a great experience and the host was so very accommodating. It was a beautiful day with just a little breeze so hunting conditions were comfortable. The group of hunters found at least 15 keeper "megs" and several other specimens including three-toed horse astragulus, shark vertebra, ray dermal plate, whale and porpoise vertebra, and a few mako shark teeth. Everyone enjoyed the trip and thanks to host, we also know a lot more about phosphate and how critical it is for the production of grain and other food crops world wide. The hunting for fossils on the Peace River, despite the recurring high water levels, is getting into high gear so we are planning a Club trip on the Peace. Louis Steiffel is setting up a trip either in February or March or perhaps both months. This date/s will be announced at the February 17th meeting and sign up sheets will be available. The Club has a trip set up at CF Industries for March 5th and this will be mentioned again at the next meeting. Last year, we had a trip to Ruck's Crystal Pit. This is a pay to dig trip to find calcite crystals. If there is enough interest, we will organize a trip. Happy hunting!

Fossil Auction

ANNUAL AUCTION

The Annual Auction will be held on **March 17th, 2011** at the **Zion Lutheran Church Fellowship Hall** at 7401 Winkler Road, Fort Myers, FL. We all look forward to this event for two important reasons: one is to raise funds for our annual scholarship funds and the other is to make available a wide variety of fossils and other items that our members and guests can obtain at a reasonable price. Its a fun event, but also a lot of work for those who make it happen, so let's appreciate everyone involved and that includes the members that make donations and to those who bid and buy. We know that it sometime hard to part with some of your fossil specimens and other items, but it is for real worthy causes. Our February meeting is the last opportunity to donate times for the auction. The Club greatly appreciates your support.



MEGS...Found by Joe Arnold and Coby Pawlowski.

Ancient plant-matter find in Pine Island changes Florida history

BY KEVIN LOLLAR - klollar@news-press.com
January 18, 2011

1:10 A.M. — Recently discovered plant material from deep beneath Pine Island might change the way scientists think about Florida's ancient geography.

Tests at the University of Florida show that a rock sample from an injection well contained pollen and spores from the oldest land plants ever found in Florida. The sample and, thus, the pollen and spores date to the Eocene epoch — about 35 million years ago — a time when scientists think the Florida Peninsula was at the bottom of a shallow sea.

"The fact that we're finding it in this age rock suggests there were terrestrial sources for plants in the vicinity," said Curtis Klug, a hydrologist with Entrix Inc. of Fort Myers. "Perhaps there were islands where plant material was accumulating. This could help tighten up our interpretations of the past geography and environment of the state."

In 2004, Entrix was drilling an injection well, pipe into which water, other liquids, or gases are pumped or allowed to flow, for Greater Pine Island Water Inc. Klug, who has extensive training in micropaleontology and palynology (the study of living and fossil pollen and spores), sent a rock sample to fossil-plant expert David Jarzen at the University of Florida's Museum of Natural History.

The sample was from 2,516 feet beneath the surface, in what is known as the Oldsmar Formation.

Jarzen identified pollen and spores from 17 terrestrial plants. Jarzen and Klug wrote a paper on their findings for the December 2010 issue of Palynology magazine.

Some of the pollen was airborne and could have traveled great distances before settling.

"However, and of great significance, some of the identified pollen was produced by plants that are pollinated by insects, and are not transported far at all," Jarzen wrote for the March issue of Friends of Randell Research Center Newsletter. "Contrary to earlier beliefs that Florida was completely submerged during the Eocene, there must have been land at or near the present site of Pine Island in order for the plants to have grown and the pollen to have entered the fossil record."

Some of the 35-million-year-old pollen was from plants related to modern Florida plants, including members of the mallow, primrose willow and gentian families.

Bill Marquardt, curator in archaeology at the Florida Museum of Natural History, has studied the Calusa Indians at the Pineland archaeological site on Pine Island for more than 20 years and was intrigued by this discovery.

"As archaeologists, we are studying 2,000 years of human and environmental history at the Pineland site," Marquardt said. "With this new find, our colleagues are giving us information about what was here 20,000 times that time period."

Earlier work in Levy and Citrus counties by Jarzen and David Dilcher also suggest that parts of Florida weren't submerged during the Eocene.

But the plant material from that study was from the Avon Park Formation, which represents a more recent part of the epoch.

"The pollen recovered from Pine Island clearly shows that the oldest land plants thus far discovered in Florida are from Pine Island," Jarzen wrote. "Together the findings from Florida suggest perhaps a chain of islands from the mainland stretching into the Gulf of Mexico, such as we see with the Florida Keys today."

While the studies indicate that islands existed on or along what is now the Florida Peninsula 35 million years ago, researchers aren't certain about their configuration.

"Most of Florida would have been underwater with maybe a scattering of islands here and there," Klug said. "Perhaps it was like the Ten Thousand Islands. Whether there's a direct parallel, I can't say. But it would be worth looking into."

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GROUND SLOTHS
by Louis Steiffel

Ground sloths are a diverse group of extinct sloths, in the mammalian superorder Xenarthra. Their most recent survivors lived in the Antilles, where it has been proposed they may have survived until 1550 CE; however, the youngest AMS radiocarbon date reported is 4190 BP, calibrated to c. 4700 BP for *Megalocnus* of Cuba. They had been extinct on the mainland of North and South America for 10,000 years or more. The term "ground sloth" is used as a reference for all extinct sloths because of the large size of the earliest forms discovered, as opposed to the extant "tree sloths." However, this is a historical convention and does not imply that all extinct sloths were strictly terrestrial in nature.

The bulk of ground sloth evolution took place during the mid to late Tertiary of South America while the continent was isolated. At their earliest appearance in the fossil record, the ground sloths are already distinct at the family level. The presence of intervening islands between the American continents in the Miocene allowed a dispersal of forms into North America. A number of mid- to small-sized forms are believed to have previously dispersed to the Antilles islands either by making short swims or using land bridges that are now submerged. Ground sloths were a hardy group as evidenced by their diverse numbers and dispersals into remote areas given the finding of their remains in Patagonia (Cuava del Milodón) and parts of Alaska.

Sloths, and xenarthrans as a whole, represent one of the more successful South American groups during the Great American Biotic Interchange. During the interchange, many more taxa moved from North America into South America than in the other direction. At least five genera of ground sloths have been identified in North American fossils; these are examples of successful immigration to the north.
(used by permission: mazoncreekfossilscom)

The extinct ground sloths are some of the most confusing fossils to identify sometimes, as their bones are different in shape than most mammals. And to further confuse the issue there are 3 different families of sloths, Megalonychidae, mylonontidae and Megatheriiini, with some variations of bone structure between them.. Even though these extinct giant ground sloths had spread over most of the Americas, including a specimen discovered in Alaska!, we are concerned, usually, with the families that inhabited ancient Florida. Some of the differences between the three families are teeth, claws, and ankle and heel bones, among others. I show a comparison of three different ankle (astragulas) bones. In the picture of all three, the one in front, left, is from a magalonyx Jeffersoni; in front, right, from a paramylodon harlini; and the rear, larger one from an Eremotherium eomigrans. These represent all three families of Florida collected ground sloths, and you can see that the differences in just these same ankle bones can make sloth osteology identification difficult.

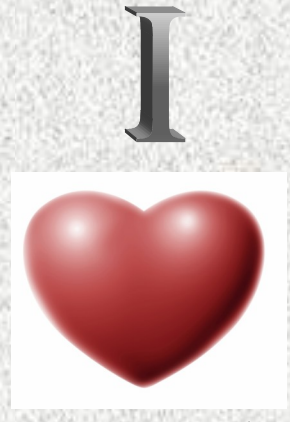
I used to think that if it's different or "knarly" it was sloth. However, after learning more about these fascinating extinct creatures I have come to realize that there is so much more to it than that. I recommend to anyone wanting to positively id sloth remains to try and find a properly labeled comparable collection, as that is the most accurate means for id. Good Luck!!

Coby's Column

Barracuda fossils are quite common, but are usually looked over or mistaken for other fossils. My first barracuda tooth was found in Venice, but I had mistaken it for a worn-down shark tooth. 'Cuda teeth can range from micro size, to around an inch they usually have a glossy or enamel like coating on them. They can be found in marine deposits, and with other fish fossils, because they feed on fish. The barracuda is still around today, and can be found throughout Florida, especially in the Keys.

Happy Hunting,
Coby Pawlowski

Barracuda Teeth



ECHINOIDS
by Gunther Lobish

Lets talk Echinoids. Echinoids are a family of shallow to deep sea animals that include, Star Fish, Sea Biscuits, Sand Dollars and regular and irregular Sea Urchins. Most of the Echinoids we collect are Pliocene in age and are between 1.8 and 5.3 million years old. The Tamiami Formation, which I believe is totally Pliocene, is the formation we most collect at Quality. It is said there are 15 species of Echinoids in the Pliocene and 14 of them can be found at Quality. However, two of the species I have seen are not described in the Florida Paleontological Society booklet titled Florida Fossil Invertebrates, part 3. Those species are Brissus glenni and Plagiobrissus sarea (hope I spelled that right)(Nita wheres your book?). Also, I've found the base of one other species thats not said to occur in the Pliocene, only in younger formations and that species is Clypeaster rosaceus. Quality has changed greatly in the last two months and not a lot of material is available to collect in but there's always the chance something rare can be found. Lets get out there and find that rare specimen while we can and have the place available to collect in. Thanks Gunther

A "Brissus Glenni" specimen from Quality