



FOSSIL CLUB OF LEE COUNTY

JUNE 2011



Message from the President

Summertime greetings to all members and friends. Its a great time of the year for fossil hunting. The rivers are low throughout the state and being in the cool water is a good way to beat the heat. The hurricane season officially begins in June and soon the rains will come raising our river levels. Bottom line; let's go hunting while we can!

June is also the time of year when our Club has the pleasure of providing scholarship money for the education of students pursuing advanced degrees in paleontology. We are sending checks out this month to the University of Florida and the University of South Florida. Both of these institutions do an excellent job of furthering the science of paleontology and we pleased to support them.

Our Board met in late May and discussed having a Fossil Show in early December as we have done in previous years. This is a great opportunity for our Club to raise funds for worthy donations and to "give back" to our community. We have several events for young people and many parents have joined our club because their child became interested in fossils at our show. It was also noted that show attendance has increased every year.

Our speaker this month is Bob Hanchey. He will talk to us about the evolution of weapons developed by the North American Indians and demonstrate the making and use of several artifacts he has in his collection. Some of our members have interesting artifacts and replicas and all of us including Bob would enjoy seeing and hearing about them. Feel free to bring in your items and share them with the club.

We have several members who have joined us this year and we encourage all of you to attend the meetings. Now that school is over for a few months, maybe we will see more of our younger members. We have some interesting speakers signed up for the next three month and our "show and tell" program offers a good opportunity for learning about Florida fossils. Everyone is invited to bring in items for "show and tell" and share their finds with their fellow club members.

I look forward to seeing everyone at the June 16th meeting. Best regards. Bill

Next Meeting

Our next meeting will be June 16th,
7:00 pm at the Iona House at the
Calusa Nature Center.

SCHEDULE OF COMING EVENTS

June

June 14th Flag Day
June 21st First Day of Summer

REFRESHMENTS

The Fossil Club of Lee County held a Board Meeting in May and one of our new Directors, Joshua Frank was asked to head a Refreshments Committee. He will have a sign-up sheet available at each meeting and the hope is that all members will take a turn at providing refreshments at least once every two years. Everyone appreciates having a drink and some kind of snacks during the meeting, so let's support Joshua in his efforts to keep this program going.

OFFICERS

Bill Shaver, President, 239-834-0694
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Ray Seguin, Treasurer, 239-939-1921
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DIRECTORS

Dean Hart, 941-979-8217
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Joshua Frank, 239-248-5094

COMMITTEES

Cherie Neat, Newsletter
Curt Klug, Web Master
Bill Shaver, Speakers
Louis Steiffel, Auctioneer
Kathy Arnold, Club Merchandise
Pam Plummer, Club Badges
Ray Seguin, 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 Steiffel, Vertebrate Education

MINUTES OF MAY MEETING THE FOSSIL CLUB OF LEE COUNTY

Date: May 19, 2011

Place: Iona House at Calusa Nature Center

Attendance: 29

Presided by: Bill Shaver, FCOLC President

Bill opened the meeting and welcome everyone. There were five guests who joined the club.

The Fossil Show for 2011 was briefly discussed and all present favored doing the Show in December. The topic of annual donations for scholarships and organizations was discussed and will be addressed by the FCOLC Board.

Bill thanked the Arnold family for providing the refreshments for the evening and everyone gave them a big round of applause.

Speaker for the evening was Alex Kittle from the UF Invertebrate department

Field trips to the Quality Pit will probably resume in June according to Gunther Lobish who leads the trips.

WELCOME NEW MEMBERS

The Fossil Club of Lee County is pleased to welcome the following named people as Club Members:

Tod Dahlke
Taylor Dahlke
Blake Dahlke
Matt Ellis
Lewis Fish

JUNE SPEAKER

The speaker for our June meeting is Robert (Bob) Hanchey. Bob has always been interested in North American Indians and has studied the evolution of their weapons. His presentation includes an exhibit and demonstration of how these weapons evolved and were used. Club members are encouraged to bring in their collections and have an opportunity to talk about them with Bob. This is also an excellent opportunity for our members and junior members to learn about the ways the Indians made and used their "tools" for hunting and for self-protection.

NEVER hide in a culvert during a Tornado warning ESPECIALLY in Texas!!

A Texas Power & Light crew, putting in lines for an addition to the Hallettsville Airport , found the following in a culvert they were using... See the two (2) pictures below:



The gator is/was 18' 2" long.

The rattlesnake roundup totaled 87..

We thank Texas Power & Light for sharing these pictures.



WEB SITES & LOCATIONS OF INTEREST

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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.canoecanoeoutpost.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

Tampa Bay Fossil Club
Www.tampabayfossilclub.com

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

FLORIDA FOSSILS 101

Florida is a fossil-hunter's paradise. Fossils present in the exposed rock of Florida range from 45 million year old "sand dollars" to bones and teeth from the "Ice Age" sabertooth tiger which lived in our state just 10,000 years ago. Much of Florida's bedrock, which is largely limestone, is comprised of the shells of animals that lived in the shallow seas that once covered our state. Many fossils represent only the hard parts of the original animal, such as the shells of molluscs or the bones of land animals such as the mammoths. Some fossils such as wood, bones, and teeth are petrified, or turned to stone. Petrification occurs when minerals replace the organic material that originally comprised the organism. Other fossils such as sea shells are preserved with little change. More information is available from the Florida Geological Survey in Special publication 6 entitled Fossil Mammals of Florida.



Small Mammal foot bone

Many times in May, I visited the Peace River. Sometimes I went by myself to Arcadia or Wauchula, where it was easy access walking into the river from Boat ramps. More often, I went on trip with an assortment of club members Bill Shaver, Mike Siciliano, Gunther Lobish, Dave Flynnbaugh, Bobby Joe Sherrill far from the boat ramps, deep into the river basin. These trips can push the limits of my endurance because normally you have to paddle, port, or walk upstream 2-4 miles going one way or the other. It is good exercise, but fossils are not free. Like most of you, I am interested in any fossil I can find with an emphasis on LARGE shark teeth like Megs, Makos, and Snaggletooths from 1 or 2 million years ago. The Peace River has these teeth, but I prefer the diversity of finding Pleistocene (basically the last 2.5 million years) fossils including the mammals from the last Ice Ages. My favorite Pleistocene fossils are Glyptodont, Giant Armadillo, Turtle, Mammoth, Mastodon, Tapir, Horse, three toed Horse, Capybara, Bison, Camel and now Eagle.

On one of these trips, I went with Bill Shaver heading upstream with Kayaks in a very shallow river. Many times we need to get out of the Kayaks and drag them through 3-4 inches of water over the bedrock. We were heading to a “new spot” where Mike had recently found a Dire Wolf carnassial tooth thinking that maybe, just maybe we could find one also.

When 2 fossil friends go on a trip, one is always far luckier in the choice of spot to start and the finding of neat fossils. On this trip, the luckier fossil seeker was Bill. We both were finding large Snaggletooth teeth and I had a number of Galeocerdo aduncus, a 20 mya Tiger shark teeth. Bill additionally was finding Megs and numerous mammal fossils and all I found was a single broken Armadillo Osteoderm and a strange 30 mm mammal bone, which Bill thought was a toe bone (Photo #1). (See attached file: *Eagle5_cm.jpg*)

This mammal toe bone was the first of its kind that I have ever found. Given it was mid-May and a long time until the June fossil club meeting where I might ask Louis to identify the bone, I decided to ask for an identification on The Fossil Forum (<http://www.thefossilforum.com>). TFF is a great resource, much like FCOLC. The first identification was Smilodon toe bone. WOW!!! I was excited: a Saber-Toothed fossil. Suddenly, I was reassessing the success of this trip and thinking about the Riker box for this toe bone. Alas, it was not to be. Within 15 minutes, others were identifying my toe bone as an Eagle toe bone and their evidence was quite compelling. (Photo #2.) (See attached file: *Eagle Claw and Phalanx.jpg*)

For a split second, I mourned the loss of my Smilodon fossil. Then I realized that I do not have any Eagle fossils and now I have a special eagle bone that connects directly to the claw. I know that there is an Eagle Claw still in the Peace River. I'll just have to start looking for it.

Jack Boyce



Early mammals pointed the way to sense of smell

WASHINGTON (AP) — The unusually large brains of mammals apparently didn't evolve so that we could ponder philosophy — but so we could sniff our way to success.

A new analysis of some of the earliest mammals and mammal-like creatures shows their complex brains evolved in stages, starting with the regions that handle the sense of smell.

The tiny creatures that evolved into today's mammals "exploited a world of information dominated to an unprecedented degree by odors and scents," report researchers led by Timothy B. Rowe, a paleontologist at the University of Texas.

"If I had to tell a freshman class what it means to become a mammal, it means to become a superb smeller," Rowe said in a telephone interview.

Enlargement of the brain's smell-sensing region was followed by upgrades in the brain areas that deal with touch sensitivity from body hair, and then parts providing improved movement, Rowe and colleagues report in Friday's edition of the journal *Science*.

Among mammals, today's humans have traded away some of that ability to smell for improved vision and hearing, Rowe observed, but we still have close companions called dogs who heavily exploit the sense of smell.

As the mammal brain evolved, the area involved in sensory response "underwent particularly spectacular development," said R. Glenn Northcutt of the Scripps Institution of Oceanography, who was not part of Rowe's team. The studies "provide the first solid evidence of the stages of mammalian brain evolution," Northcutt said.

The report is "very significant because it outlines, for the first time, the evolutionary history of major brain regions in the closest relatives of mammals, and early mammals," said Hans-Dieter Sues, curator of vertebrate paleontology at the Smithsonian's National Museum of Natural History.



Scientists think these tiny creatures were active at dusk or during the night, said Sues, who was not part of the research team. "Thus, smell and tactile senses, but also improved hearing, would have been really important to these animals." Mammals are warm-blooded animals with backbones, and with females that have milk-secreting organs to feed their young. They include humans, apes, many four-legged animals, whales, dolphins and bats.

Rowe studied the brains of several examples of *Morganucodon* and *Hadrocodium* using CT scans to produce images of the inside of the skulls of the animals. The creatures lived about 190 million years ago when mammals were just beginning to evolve. *Morganucodon*, which weighed in at less than an ounce, and the even smaller *Hadrocodium*, existed in a transition period between pre-mammals and the earliest mammals.

Eventually mammals developed complex brains several times larger, relative to body size, than their ancestors, and the researchers were interested in how that process began and proceeded.

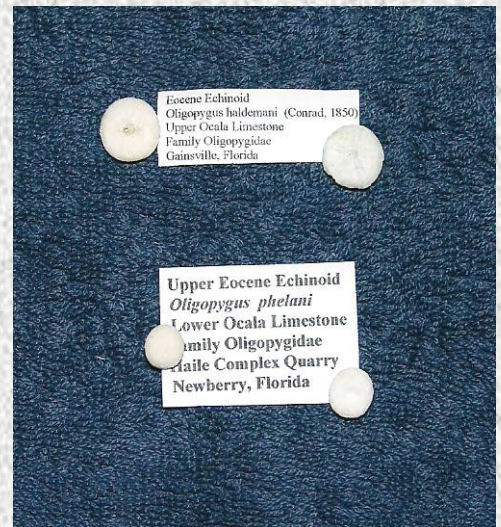
**Big brains designed
for scent, experts say**

Photo above: CT scan shows of the *Hadrocodium* skull, highlighted to show where the brain was. A new analysis of some of the earliest mammal-like creatures shows their complex brain evolved in three major stages starting with the regions that handle the sense of smell.

Hunting the Chipola River

I have always wanted to try finding some of the sites described in Robin Brown's book, "Florida's Fossils". When Bill heard I was going up to Tallahassee on Memorial Day weekend he wanted in, we left on Saturday and planned to come back on Tuesday. On Sunday morning we headed to the Chipola River and put our Kayaks in at a ramp above Ten Mile Creek. It took awhile to reach the creek, it seemed a lot further than described. We pulled our Kayaks up the creek which was narrow, fast moving and shallow but could find none of the outcrops of Chipola shells we hoped to and finally decided to head back down to the river. We continued to follow the river down stream looking for a cliff along the bank. Just as we were about to turn back we started finding shells in a brown clay along the bank. After collecting a bit it was decided to check the other side of the river. After crossing over I was looking at the bank and noticed some Dugong ribs at the base of the slope. After getting out of the kayak I saw a nice vertebra further up the slope and six Dugong ribs sticking out of the clay next to it. Bill tried digging in the sticky clay and found another rib but nothing else. It was getting late and the paddle back up stream was very difficult, I should have brought my little boat and will next year. The second day we drove further up stream to a shallower part of the river near Marianna, Fl. and hoped to find shark teeth. While Bill was exploring I started digging in some very white, very soft clay and working it through my screen. I was shocked to find a perfect Echinoid later found to be a *Rhyncholampas conradi*, Bill also found one after he got back and started digging. There was very little gravel in this area but we did manage to find some Mako's, *Auriculatus* and others, also, I found two more Echinoids, *Oligopygus phelani* and *Oligopygus haldemani*. If the rivers not to high I will try this spot again on my way back from camp in late July. All in all we had a good time and I'm sure will try other spots as the opportunity arises.

Happy Hunting; Gunther



Dugong Ribs and Vertebra from the Chipola River and lower right is a dugong vertebra from the Vulcan Mine.

