Fossil Club of Lee County

May 2010

Message from the President

The warmest of greetings to everyone and I just checked the outside temperature---it is truly warm---about 90 degrees. It's that time of year when we would choose to hunt for fossils in the rivers rather than in the pits. The water level at the Peace River remains a little too high yet so we hunt the quarries in the meantime. But we must be mindful of becoming dehydrated. The advice is to go early, drink a lot of water, and leave before it gets too hot. We are optimistic that we will be able to hunt the river in a few weeks.

We want to welcome our new members to the Club. We are pleased that you joined. You are invited to participate in all club activities and enjoy the fellowship.

The election of new officers and board members was held in April and we are confident that they will well represent all club members. We also owe a debt of gratitude to the outgoing officers/directors as they served the Club well and helped to make this a great club.

Our next meeting promises to be a fun night. We have several members who have agreed to share their collections with us. It will also be a learning experience as they exhibit many specimens we may never have seen other than in books. We will have a wood carver, a bee keeper, some fossil jewelry designers selling their creations, an extensive animal skull collection, and many other exhibits. It can be considered as a combination of exhibits, show and tell, swap shop, and fossil crafts.

Also on May's agenda are annual scholarship grants and possible donations to not-for-profit organizations such as museums. We need items for our monthly raffle. If you have extras, please bring them in. I look forward to seeing everyone at the Iona House.

Best regards, Bill

Next Meeting
Our next meeting will be held on, Thursday, May 20, at 7:00 p.m. at the Calusa Nature Center located at Ortiz and Colonial Blvd, Ft. Myers.

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Gunther Lobish, 941-268-7506
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COMMITTEES
Bob Wood, Newsletter Editor
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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

MINUTES OF MEETING: THE FOSSIL CLUB OF LEE COUNTY

DATE: April 15, 2010
PLACE: Iona House, Calusa Nature Center
ATTENDEES: 47
PRESIDED BY: Bill Shaver, President

Election of Officers and Directors was held. Michael Siciliano was elected Vice President. Dean Hart, Gunther Lobisch, and Charles OConnor were elected as Directors. Kathy Powlowski was appointed as Club Secretary. In accordance with Club by-laws, all will take office effective May 1st 2010.

The President thanked Al Govin, Louis Steiffel, Ray Seguin, and Curt Klug for their service to the Club. He also thanked Kathy Arnold for managing club merchandise.

Speaker for the evening was Capt. Gil Cross talking about the "Fossil of Venice" and showing several fossils he found while diving from his charter boat.

Refreshments were provided by the Arnolds and the Powlowskis for April and they volunteered to do refreshemnnts for May as well. Gunther Lobish and Bill Shaver will do the refreshments for June.

The program for the May meeting wil be exhibits of collections by several club members, wood carvings by Werner Grabner, wire-wrapped necklaces by Cay Small, and fossil jewelry by Elida Bayard. Ray Seguin will exhibit his collection of animal skulls. All members are invited to participate.

Several members asked for a club trip to the University of Florida and perhaps other stops or visits while on the trip. Al Govin agreed to take the lead in setting up some possible dates and places to visit as well. It would be an over-night trip. Louis Steiffel said he will try to set up a Peace River trip.

REFRESHMENTS

Thanks to the Arnold family and Powlowski family for providing the refreshments for the April and May meetings. Gunther Lobish and Bill Shaver have volunteered to do refreshments for June. We still need people to sign up for July and August. Your Club needs you!

PROGRAM FOR MAY

We will not have a speaker for the May program. However, we have a great program! It will be a combination of exhibits brought in by our members, a show and tell session, items for sale made by our members, and demonstrations. Werner Grabner will give a little demo on wood carving and show some of his work, Ray Seguin will exhibit his extensive collection of animal skulls, Cay Small will offer show some of her wire-wrapped jewelry, Elida Bayard will show some of her designs, and of course, Gunther Lobish will have some great specimens, Tom Allen--our bee keeper---will have some of his honey available, and our usual group of show-and-tell specialist will be there. All members are invited to participate. Bring in some of your best or most interesting. The night promises to be entertaining, educational, informative, and interesting. We will also have door prizes and the monthly raffle

LOCAL ARTIST DONATES FOSSIL SHELL COLLECTION

Veronica Benning, an artist from Fort Myers, has given her collection of fossil sea shells to the Fossil Club of Lee County. The shells, about 100 in number, will be used by the Club for its fund raising events. The Club provides scholarship monies to Florida universities and other worthwhile organizations. We appreciate her donation.

WEB SITES & LOCATIONS OF INTEREST

Fossil Club of Lee County: http:// www.fcolc.com

Museum of Natural History @ Gainesville
http://www.flmnh.ufl.edu/

Florida Vertebrate Fossil Permit
http://flmnh.ufl.edu/natsci/ vertpaleo/vppermit.htm

Southwest Florida Fossil Club
http:// www.southwestfloridafossilclub.com

Orlando Fossil Club
http:// www.floridafossilhunters.com

PEACE RIVER Water Levels
http://www.canoeoutpost.com

Smithsonian Natural History Museum
http://www.mnh.si.edu

Florida Fossil Clubs
http://www.fossil-treasures-of-florida.com

PICKING UP ISOLATED NATIVE AMERICAN ARTIFACTS
http://dhr.dos.state.fl.us/archaeology/ underwater/finds

Lee County Parks: http:/Leeparks.org

Naples Botanical Gardens: http://naplesgarden.org

Suncoast Reef Rovers - Suncoast Area Dive Stores (Venice and Sarasota) -
http://www.suncoastreefrovers.com/ divestores.htm

Sovereign Miccosukee Seminole Nation
http://sovereignmiccosukeeseminolenation.com

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/

Six Mile Cypress Slough Preserve Six Mile Cypress Drive (Between Daniels and Colonial)
www.sloughpreserve.org

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

The Butterfly Estates
815 Fowler Street
239.690.2359

Peace River Wildlife Center
3400 West Marion Avenue (Ponce De Leon Park)
Punta Gorda, Florida
Www.peaceriverwildlifecenter.com

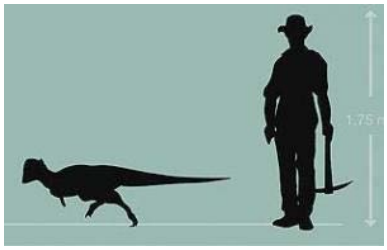
Cape Coral Friends of Wildlife Burrowing Owls
http://www.ccfriendsofwildlife.org

Hickey's Creek Mitigation Park
17980 Palm Beach Blvd., Alva
239.728.6240

PALEO-NEWS

New Bony-Skulled Dinosaur Species Discovered in Texas

ScienceDaily (Apr. 20, 2010) — Paleontologists have discovered a new species of dinosaur with a softball-sized lump of solid bone on top of its skull, according to a paper



The species was a plant-eating dinosaur about as big as a medium-sized dog that lived 70 to 80 million years ago, said Nicholas Longrich of Yale University, lead author of the paper. The team discovered two skull fragments in Big Bend National Park in southwest Texas in 2008. They compared them to dozens of fossils from related species found in Canada and Montana before confirming that the fossils represented a new genus of pachycephalosaur, a group of bipedal, thick-skulled dinosaurs.

The researchers named the new species *Texacephale langstoni.* ("Texacephale" means "Texas head" and "langstoni" is in honor of Wann Langston, a fellow paleontologist.) The new species is one of about a dozen known to have solid lumps of bone on top of their skulls, which Longrich speculates was probably used to ram one another head-on in a manner similar to modern-day musk oxen and cape buffalo.

The discovery of the new species lends further weight to the idea, which has gained popularity in recent years, that dinosaurs found in Canada and the northern United States were distinct from their southern neighbors.

"Instead of roaming across the North American continent, we see pockets of different dinosaurs that are pretty isolated from one another," Longrich said. "Every time we get good fossils from Texas, they end up looking very different from those to the north."

Because fossils from the Big Bend region are rare and tend to be poorly preserved, scientists do not have a complete picture of the different species that once inhabited the area, Longrich said.

But the team may have uncovered an important piece of the puzzle with their discovery. They found that this particular group of dinosaurs, which was previously thought to have originated in Asia, likely evolved in North America.

Longrich expects more related species to be discovered in the future as fossils from the Texas site and elsewhere continue to be examined.

'Road-Runner' Dinosaur Lived In The Fast Lane, Dug Termites And Ants

ScienceDaily (Mar. 29, 2010) — A new study published in the scientific journal *Zootaxa* by Chinese, Canadian and British researchers describes a new dinosaur that was one of the smallest known and also one of the best adapted for running. The fossil skeleton of the tiny animal, named *Xixianykus zhangi*, is highly incomplete but would probably have measured around half a meter in length. The specimen comes from Xixia County in Henan province, China.

This Late Cretaceous 'road-runner' had a number of adaptations for fast, efficient locomotion. Most strikingly, the upper leg (the femur or thigh bone) is particularly short in comparison to the lower leg and the foot -- a pattern seen in many running animals today. Other features of the hind limb, pelvis and backbone would have promoted stability and reduced superfluous, energy-wasting

movements as *Xixianykus* dashed across prehistoric landscapes.

Dr. Corwin Sullivan, a Canadian researcher and one of the authors of the study said: "The limb proportions of *Xixianykus* are among the most extreme ever recorded for a theropod dinosaur. This doesn't provide a basis for estimating its top speed, but it does show that *Xixianykus* was a highly efficient runner. Several other characteristics of the skeleton reinforce this impression."

Interestingly, some of these characteristics might also have played a role in another of the animal's likely activities -- digging for termites and ants. *Xixianykus* is a member of a group of theropod dinosaurs (which includes famous animals like *Tyrannosaurs*, *Allosaurus* and *Velociraptor*) called the alvarezsaurs, many of which probably shared its fast-paced approach to life. Although the forequarters of *Xixianykus* are not preserved, its closest relatives among the alvarezsaurs had short but strong arms, tipped by a single massive claw to break into logs or insect nests, and *Xixianykus* likely fed in the same way. Some of the adaptations that helped to stabilize the body when running could also have braced it when digging. Surprising as it may seem, the two activities complement each other in some respects and add up to a viable if unusual lifestyle.

Study coauthor Dr David Hone, a British researcher, said: "It may sound odd, but digging and running actually work quite well together. Some modern termite eating species travel long distances between colonies of their prey, so as an efficient runner *Xixianykus* would have been able to follow this pattern. Any small dinosaurs would be vulnerable to predators too and the ability to make a speedy exit if danger threatened would be valuable to an animal like this."

Bone-Eating Worms 30 Million Years Old

ScienceDaily (Apr. 20, 2010) — An international team of scientists led by the paleontologist Steffen Kiel at the University of Kiel, Germany, found the first fossil boreholes of the worm *Osedax* that consumes whale bones on the deep-sea floor. They conclude that "boneworms" are at least 30 Million years old.

This result was published in the current issue of the scientific journal *Proceedings of the National Academy of Sciences.*

Six years ago *Osedax* was first described based on specimens living on a whale carcass in 2891 m depth off California. Since then paleontologists have been searching for fossil evidence to pin down its geologic age. Now researchers at the Institute of Geosciences at the Christian-Albrechts-University at Kiel, Germany, found 30 Million year old whale bones with holes and excavations matching those of living *Osedax* in size and shape. The evidence of the boreholes and cavities made by the living worms was provided by Greg Rouse (Scripps Institution of Oceanography), one of the original discoverers of *Osedax*.

To produce accurate images of the fossil boreholes, the bones were CT-scanned by the scientists. The fossil bones belong to ancestors of our modern baleen whales and their age was determined using so-called co-occurring index fossils. "The age of our fossils coincides with the time when whales began to inhabit the open ocean" explains Steffen Kiel, who has been working on the evolution and fossil history of deep-sea ecosystems for many years. Only from the open ocean dead whales could sink to the deep-sea floor where they served as food for the boneworms. "Food is extremely rare on the vast deep-sea floor and the concurrent appearance of these whales and *Osedax* shows that even hard whale bones were quickly utilized as food source," Steffen Kiel explains the relevance of their discovery.

The ancient bones were found by the American fossil collector Jim Goedert. He has been collecting fossil along the American Pacific coast for more than 30 years and is well known in the scientific community. Steffen Kiel says: "I got to know Jim when I was a PhD student, when he visited Hamburg University. We kept in touch ever since." By now, Steffen Kiel has done several field trips with Jim Goedert to the US Pacific coast, a geologically active area where fossil-rich sediments are continuously uplifted by plate tectonic processes.

Vertebrate paleontologists are probably less happy about the old age of *Osedax*: because it has been feeding on bones for most of the evolutionary history of whales, it is likely to have destroyed many potential whale fossils.

PALEO-STORE

The Age of Reptiles: **The Art and Science of Rudolph Zallinger's Great Dinosaur Mural at Yale**

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