

The Paleo Times

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EMSP SOAPBOX

By David Lukens & Don Howell

If you have any articles, comments, or need to communicate with me I can be reached through the following: dmslukens@yahoo.com (personal) or contact me at 636-751-8746 (cell).

REMINDER: I-40/64 will be closed between I-270 & I-170, if you use this route to get to the meeting, remember that you will need to take a different route.

President's Corner

Wow, the summer flew by! I hope everyone had as good a summer as I had. The club's picnic in July was great. Thanks go out to David Lukens for making sure there were field-trips in June and August. Thank you to Carl Campbell for making sure we have a great program at the September meeting. In fact, make sure you bring a CD with pics or a power point, or better yet bring your fossils you found this summer because that is the program. We will have one great big "Show and Tell"! I can't wait to see all of you and hear about your fossil hunting adventures.

Don Howell III

Next meeting

Next meeting is **Friday, September 12th** at 7:30 pm in the New Earth and Planetary Sciences building at Washington University (see more details below).

While there is not a speaker, please bring photos or a Powerpoint of fossil hunting adventures this summer and bring along some of your finds to show off at the meeting.

Thanks / Congratulations

Thanks to Rich for leading the field trip, bringing long his canoe, and his super-jumbo screen. Also thanks to Bruce Stinchcomb for bringing along 3 canoes so we could fit everyone in.

Club News

Thanks to everyone who showed up for the August field trip. We had about 13 people turn out and it was my first time at this location. We had a good time on the river especially with Rich's Mega-Screener. Sign of a truly dedicated fossil hunter who would bring a 4' x 2' screen along. We had a good time and everyone found something. The grand prize went to Abby who found a 20# piece of mastodon bone.

Upcoming Events/ Field Trips

September Field Trip – This will be on Saturday September 13th (day after the meeting). We will be meeting at the Marina at 10:00am with departure promptly at 10:30. We are usually out on the lake for at least 3-4 hours so you will need to bring lunch & drinks for yourself. Cost of the boat rentals will be split between the people taking the trip, typically the cost for the rental is between \$10-15 per person. This is a great family trip. Again, we would like to know ahead of time how many people will be going

so we know if we need to reserve 1 or 2 boats.

NOTE: We will confirm at the Sept meeting.

October Field Trip – Not sure of a location yet. Any suggestions? Maybe to Cedar Creek which is near Fulton, Millstadt, or Bruce's site in southern Missouri.

Rich will be running a couple of private (not the club) (limited space) fossil hunting trips by boat in the next couple months. One will be 9/28-9/29 (Su & Mn) on the Kaw river in Kansas. The other will be on the Missouri river on 10/11 & 10/12 (SA & SU). In both cases you will be on the river 4-6 hours/ day though much will be spent fossil hunting on gravel bars. Both will involve camping on gravel bars on the rivers overnight. More details will be provided at the September meeting. To go you will need to talk directly with Rich. If you do not have his contact information, call me and I can provide it. (david lukens – 636-751-8746)

Stratford Rock and Fossil show for Nov 7 was replaced with another venue. The Rock and Gem club has found another venue. It will be held at the Viking Conference center located on the northwest corner of Lindbergh and Watson Road in south St. Louis County. On November 21-23, 2008. This is the weekend before Thanksgiving. EMSP will have two front tables and one back table. This will cost us \$130. This is a major fundraiser for the club so we are looking for volunteers to help man the table. We hope to sell a lot of the items purchased at the Tucson AZ to raise money for the club.

We may want to get together before the November sale to organize the items we have for sale.

Notes from the Meeting

Paleo-shorts

-Original and summary articles provided by members of EMSP. Where possible, I have tried to add in website where you can read more.

From David Lukens

<http://www.livescience.com/animals/080822-ap-cat-fossils.html>

CARACAS, Venezuela (AP) — A trove of 1.8 million year old fossils was discovered recently by oil workers in Venezuela. The fossils, found in a tar pit, include remains from saber-toothed cats, which were previously not known to have existed in South America. The tar pit was found in 2006 in eastern Venezuela and covers an area the size of two-football fields. The lead paleontologist, Ascanio Rincon stated that it might be the most important find in South America in 60 years. But Venezuela's Cultural Heritage Institute currently bars him from the site. The fossil evidence indicates that scimitar-toothed cats crossed from the northern to southern continents when they were linked. These animals' remains have previously been found in Africa, Asia, Europe, and North America.

<http://www.livescience.com/animals/080828-giant-clam.html>

Recent evidence indicates that a giant clam, *Tridacna costata*, found in the Red Sea may have fed human ancestors as they spread out of Africa. They once accounted for 80% of the giant clams but now are less than 1%. These clams, which only live in shallow water, saw a sharp decline in population starting 125,000 years ago, about the time humans left Africa.

<http://www.livescience.com/history/080814-ap-sahara-cemetary.html>

A new archeology site in Africa has shown two different cultures occupying the same site at different times. The site was found by paleontologist Paul Serano while searching for dinosaurs in Niger, Africa. Over 200 human graves were found in addition to bones from crocodiles, fish, and other animals, all implying a much wetter and greener Sahara at the time. The remains come from two different times, one between 4,500-7,000 years ago and the other 8,000-10,000 years ago. Both are believed to have developed next to a lake that existed at the time. The first civilization known as Kiffian hunted animals and perch from the lake and were a tall, sometimes over 6 feet. The more recent group, the Tenerians were shorter and did hunting, fishing, and cattle herding. Analysis of the bone indicates that the Kiffian's had access to lots of protein and were active while the Tenerian's had less protein and probably a less active lifestyle.

http://www.usatoday.com/tech/science/columnist/vergano/2008-08-11-neanderthals-dna-humans_n.htm

Additional research indicates that Neanderthals are likely not direct ancestors of modern humans. The Neanderthals existed from 600,000 to 28,000 years ago with Gibraltar being there lat refuge. But physically there are a number of differences between them and remains or more modern looking humans identified in various parts of the world. Part of the evidence comes from recent DNA studies from a 38,000 years old Neanderthal leg bone. The study of the mitochondrial DNA indicates that modern humans and Neanderthals would have last had a common ancestor 650,000 years ago. Variations in the DNA also indicate that the Neanderthal population was probably never very large and may have only been in the thousands at any one time.

<http://www.sciencecentric.com/news/article.php?q=08072301>

Recent discovery of fossil ostracods from 14 million year old lake sediments in Antarctica point to the fact that the continent was once significantly warmer. The fossils even preserve the soft body features. But the information points to a high elevation tundra lake at the time of the fossils. It is also likely they were introduced into the lake by change by birds passing through the area.

<http://www.sciencecentric.com/news/article.php?q=08072244>

New information from drilling off the coast of South American and mountains of Italy indicate increased volcanic eruptions 93 million years ago. These eruptions are indicated by the presence of osmium, which indicates volcanism in seawater. Dating indicates that the eruptions occurred less than 23,000 prior to mass extinctions that occurred. It is possible that the eruptions resulted in changes in the seawater and atmosphere may have resulted in the extinctions.

<http://www.sciencecentric.com/news/article.php?q=08071023>

Studies of fossil feathers from several locations including Brazil and Denmark show traces of organic material. Study of this organic material under a SEM (scanning electron microscope) indicates the traces are remains of pigments

indicating that the feathers were colored. In addition, the imprint of the eye structure was also found on one fossil showing it is similar to modern birds. Based on this information it may be possible to determine the coloration of the feathered dinosaurs.

Articles submitted by Clarence Zacher

<http://www.smithsonianmag.com/science-nature/wild-things-200803.html>

Studies of the massive increase in biodiversity during the Ordovician, 470 million years ago, indicate that this may have resulted from the impact of numerous asteroids according to scientists from Sweden.

http://www.sciencenews.org/view/generic/id/9536/title/European_Roots_Human_ancestors_go_back_in_time_in_Spanish_cave

Recent finding of 1.1-1.2 million year old fossil bones found in Northern Spain were determined to come from human ancestors. The scientific name given is homo antecessor and is believed to predate both modern humans and Neanderthals. But other scientists below these are simply older examples of *Homo heidelbergensis*. But either way, they are the oldest evidence of humans in Europe, pushing them back beyond 1 million years. These findings support previous evidence of stone tools (but not fossils) dated to the same age in other locations in Europe. It is believed that these humans may have spread out of Africa into Central Asia and then moved westward into Europe. Supporting evidence is a 1.77 million year old human remains from Georgia (Asia)

http://www.sciencenews.org/view/generic/id/9559/title/Salty_Old_Cellulose_Tiny_fibers_found_in_ancient_halite_deposits

Scientists have found the oldest pieces of cellulose (253 millions years old) in salt deposits from the southwestern US. The good preservation indicates that the molecule can survive hundreds of millions of years under the right conditions. Cellulose. Founding trees, plants, and grasses, is one of the most common biological materials on Earth. Scientists have also grown bacteria from the same deposits found east of Carlsbad N.M. at a depth of almost 2000 feet below the ground. The material was found within inclusions in the salt crystals and

samples were only taken from salt crystals that were not cracked to prevent contamination.

Websites

Have you spotted a website about fossils for paleontology that peaked your interest. Thought that others might like it. If so, send me a note along with the website address and a brief summary of what is there.

<http://www.livescience.com>

Check out live science. It has many different sections with many different articles of interest.

Around Town

St. Louis Zoo – Dinoroarus

An animatronic exhibit of 17 life-sized dinosaurs has opened at the Zoo through September 1. Admission is \$3, \$5 if you want to see the 5 minute movie Dino Island 2.

St. Louis Science Center is currently running several movies in the Imax with the fossil theme. Check out the website.

Reports

If you have suggestions for field trip locations, please e-mail them to me and I will begin putting together a list.

NEEDED

We are still looking for more donations of small fossils (quarter size or smaller) for the fossil boards. We are especially in need of small trilobites (the Utah ones are best) were also looking for horn corals, other corals, gastropods, bryozoans, and other donations. So keep an eye out as summer gets here.

CONTACTS

Do you need to find out something about the next meeting or have questions on the next field trip? If so, please talk to or contact one of the EMSP officers.

President – Don Howell

(donhowelliii@sbcglobal.net, cel 314-954-6922)

Vice-President: Bruce Stinchcomb

Treasurer: Pete Smith

Secretaries: David Lukens

(dmslukens@yahoo.com, cel 636-751-8746) and

Abby Lee

DUES ARE DUE

Our treasurer, Pete Smith will accept dues payment for a full year. **Dues are \$15.00 per household per year-payable in January.** If you join in the middle of the year the amount will be prorated. See Pete at the next meeting or mail a check (payable to Eastern Missouri Society for Paleontology) to:

EMSP

P.O. Box 220273

St. Louis, MO. 63122

Distribution of the Newsletter by email

Can't find your newsletter, just when you need it for a trip? Then sign up for the e-mail version. This also saves the club money so we can bring in speakers (once we pick some...) E-mail requests to dmslukens@yahoo.com, motirek@gmail.com or abfactor@gmail.com



Meetings are held the 2nd Friday of every month (except July, August, and December) in room 203 of the new Earth & Planetary Sciences Building on the campus of Washington University. The Earth & Planetary Sciences building is on the southwest corner of Hoyt Drive and Forest Park Pkwy. There is a large parking lot just across the street.

What is EMSP?

The Eastern Missouri Society for Paleontology (EMSP) is a not-for-profit organization Dedicated to promoting the enjoyment of fossil collecting. It is open to all individuals interested in learning about the history of life on earth. The club membership includes professional paleontologists as well as amateur hobbyists. The EMSP provides an open forum for the exchange of information and access to expertise on collecting, identifying, preparing and displaying fossils.

EMSP meetings are held on the second Friday of every month (except July, August and December) at 7:30pm in the Earth and Planetary Sciences Building on the campus of Washington University. Each meeting includes an informal exchange of information and speakers on a variety of fossil-related topics.

Weather permitting, field trips to fossil collection localities around the St. Louis area are held each month. Led by experienced collectors, these trips are a fun way to augment discussions at the monthly meetings. The club participates in joint field trips with other paleo clubs, visiting fossil sites throughout the United States. EMSP is also a proud to be involved in partnerships with the St. Louis Science Center and the Greater St. Louis Association of Earth Science Clubs, Inc.

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FIRST CLASS MAIL

