

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).

There was lots of fossil news on the web this past month but not nearly enough time to condense it all. I hope you all had a wonderful Christmas and New Years and were brought lots of new fossils.

PRESIDENT'S CORNER

Next meeting

Next meeting is

Friday, January 9th 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 planned that I know of discussions will be held related planning for field trips next year and fund raising plans for next year.

Thanks / Congratulations

Thanks to Rich & Lisa for hosting the Christmas party and opening their house to all of the members for a great tour of an awesome fossil collection. Thanks also to all the members who came, brought along food to share, and fossils to donate to the giveaway. From me, thanks to my daughter Shannon who gave me the fossil coral she won from Rich, it was under the tree as I have been a good boy this year.

A big thanks to all the members who showed up at the Viking show and helped manage the tables, bought from both us and the other dealers, and attended to questions from the public.

Thanks To Bruce for hosting a trip to his site in Southern MO. I did not hear how it went this time.

Upcoming Events/ Field Trips

Tucson show will be going on in January 28-Feb 15 Several people from the club will be going and it looks like some will be driving. See the website <http://www.visittucson.org/visitor/events/gemshow/winter/>

There are currently no plans for a January field trip, weather usually prevents one.

Remember that annual dues are due starting in January. If you have not paid, please get your money in.

Notes from the Meeting

Collections are still ongoing for the Joe Bolser Scholarship Fund. We have almost \$600 so far. So if you want to donate please bring your donations to the next meeting. The Viking Show was a big success, not just for us but for all the dealers. We cleared over three times what we have done in the past. Rick. and Carl looked at what was sold and evaluated to determine what sold best. The fossil boards sold well though the best sellers were the black and white Russian ammonites which no one else had and the fern fossils from Addie Bolser.

The vast majority of the money came from items under \$10 with many under \$5.

Starting in January we will be selling raffle tickets for a nice 4" Megalodon tooth from Florida. The drawing will probably be during the April meeting.

Items for the January meeting:

- Start the Meg tooth raffle
- Discussion of what we need to buy (and how much) at the Tucson show for fossils to sell at shows in 2009. I think the results of the Viking show it was definitely worth while.
- Mastodon Park Show – Will we have a table and sell there.
- Park-a-Palooza – we will be there this summer?

At the January talk Don Howell will be giving a presentation on Ash Fall State Park in Nebraska and the fossils found there.

Treasurers Report

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.

<http://news.bbc.co.uk/2/hi/science/nature/7748280.stm>

A turtle fossil found in south west China indicates that the turtles shell developed from hardened skin and not from the ribs. The fossil, which is 220 million year old had a breast plate that was an extension of the ribs but the top covering was only hardened skin. The mouth also had teeth rather than bony plate as modern turtles.

<http://discovermagazine.com/2009/jan/092>

A 380 million year old fish fossil from Western Australia was fossilized when pregnant. Previously fossils proving live birth only went back 200 million years.

<http://www.physorg.com/news147958885.html>

Recent CT scans of dinosaur skulls shown that dinosaur skulls had large air cavities than previously though. Among the skulls studied were from a T-Rex and two ankylosaurs, and other species. These were compared with skulls of crocodiles, birds, and humans. The studies showed

the dinosaurs to have large olfactory areas and large sinuses. They also were able to estimate the weight of a T-rex skull (with flesh) at over ½ a ton. It is thought that the large air cavities made the heads lighter allowed for more muscles on the skull. The skulls of the armored dinosaurs were different from those of predators with twisted passageways that did not go directly to the lungs or air pockets. The air passages also ran close to large blood vessels allowing heat transfer similar to what is found in warm blooded animals today. The airways also allowed different sounds to be made by the different dinosaurs, possible even having individual sounds for each animal.

<http://www.physorg.com/news146898316.html>

Recent studies in Europe indicate that the Cave Bear died out about 27,800 year ago or 13,000 earlier than previously though. The date of the die-off of Ursus Spelaeus matches that of a significant global cooling which would have reduced vegetation, a major source of food for the animal. There was no indication that humans had any influence on the extinction of the bear and does not match the time of the extinction of other large megafauna. The study indicates that the belief that the bear survived until 15,000 years ago is based on confusion with brown bear fossils. The vegetarian diet determination was made based on study of the skull anatomy and the teeth. The study does not resolve the question that the cave bears, weighing up to 2200 pounds died out but the brown bears averaging around 1000 pounds survived. Many of the remains studied were found in caves where it is believed that the animals died while in hibernation. The best source of information on the actual appearance of the cave bears is taken from Palaeolithic cave drawings in France.

<http://www.physorg.com/news144351814.html>

Remains of a 32,000 years old cave bear have been found in France. Scientists were able to obtain mitochondrial DNA from them which provided information on the species history. This indicated that the cave bears, brown bears, and polar bear had a common ancestor around 1.6 million years ago. While DNA has been studied from mammoths and Moas, this is the first time it was done for cave fossils.

<http://www.physorg.com/news134233301.html>

New evidence from Ohio and Indiana support the theory that a comet or asteroid impacted over Canada around 12,900 years ago. About the time many large mammals went extinct. Scientific analysis of diamonds, gold, and silver found in the area have pinpointed their origin in Northern Canada. The only reasonable explanation is a comet or asteroid impact. 2000 years ago, the gold, silver, and diamonds were sufficiently abundant that the Hopewell Indians used them as tradegoods. The impact of the asteroid about 12,900 year ago would be at the same time as the disappearance of animals such as the mammoth and also the Clovis culture. The ice age would have been ending at this point but the impact would have resulted in another 1,300 years of glaciation.

<http://www.physorg.com/news145817882.html>

Researchers have found marine organisms trapped in amber that date to 100 million years ago in France. This finding goes against previous thought that since amber comes from trees, only forest organisms would be found. Among the items found were plankton, radiolarian, skeletons of sponges and echinoderms, and algae. This pushed back the knowledge of certain organisms tens of millions of years. How the organisms got trapped is still unknown though it is suspected that the trees grew close to the coast or were flooded by the sea at some point.

<http://www.digitaljournal.com/article/263057>

A recent fossil discovery in a fossil rich area of eastern Brazil are raising interesting questions. The discovery of a new genus of pterosaur larger than your car. This pterosaur is toothless which have previously only been found on China. What the connection between the Chinese and Brazil species is still unknown.

<http://www.paleontologynews.com/link.asp?ID=357712&Title=Ancient%20insect%20imprint%20found%20in%20Massachusetts>

A 310 million year old dragonfly like imprint is the oldest insect ever found. The fossil was discovered near a shopping center in Massachusetts (so you thought it was just kids that hung out at the mall). The imprint, possibly of a mayfly shows the thorax and abdomen, along with six legs. Most fossil insect remains contain only body parts as predators have eaten the rest.

http://blog.cleveland.com/metro/2008/11/dinosaur_fossil_poachers_appar.html

Dinosaur poachers have hit an important site in Mongolia's Gobi Desert. Two years ago, a paleontologist from the Cleveland Museum of Natural History found remains of a Tarbosaurus bataar, (related to the T-rex). But when he returned to the same GPS coordinates, they were gone. Where the 65 million year old bones have gone are unknown. The Tarbosaurus, which was a theropod, was different from a T-rex in several ways. They were not as big at 16 ft and had even smaller arms. Their 4' long heads were narrower. It had been planned to set a display with the Tarbosaurus but instead it will feature a T-rex confronting a Triceratops (both casts). The stolen skeleton had previously been attacked by poachers in its National Park in 2005 when the skull, hands, and feet were stolen but the vertebrae, pelvis, and leg bones remained. But this year all the bones were gone.

<http://news.bbc.co.uk/2/hi/asia-pacific/7806062.stm>

Paleontologists have made a major dinosaur discovery in Shandong province in China from the last Cretaceous period. Almost 8000 bones have been found so far. Over 3000 bones were removed from one site shorter than the length of a football field. Among the dinosaurs found were tyrannosaurus, ankylosaurus, duck-billed and many others.

Around Town

Sue is coming to the St. Louis Science Center, at least a cast. From Jan. 17 to April 12, 2009 Sue will be on display. See the web site www.slsc.org for more details.

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 always 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. Please bring to the next meeting so we can meet later and work on putting more fossil boards together for the upcoming show.

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)

Vice-President: Bruce Stinchcomb

Treasurer: Pete Smith

Secretaries: David Lukens

(dmslukens@yahoo.com) and Abby Lee

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.

DUES ARE DUE

Our treasurer, Pete Smith will accept dues payment for a full year. **Dues are \$20.00 per household per year-payable in January if receiving the newsletter by e-mail. The dues are \$25 for those receiving the newsletter by regular mail.** See Pete at the next meeting or mail a check (payable to Eastern Missouri Society for Paleontology) to:

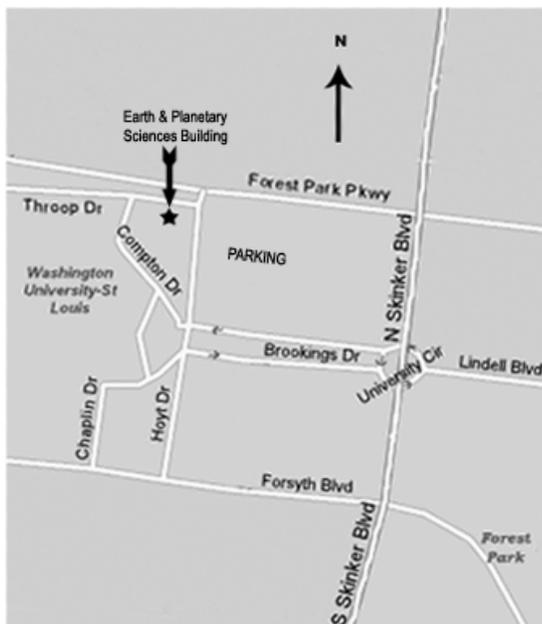
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Distribution of the Newsletter by email

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



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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