# The Paleo Times

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# The Official Publication of the Eastern Missouri Society For Paleontology

#### **EMSP SOAPBOX**

By David Lukens

This is my first shot at writing the newsletter. So if there are any problems with it blame me. If you have any articles, comments, and need to communicate with me I can be reached through the following: <a href="mailto:dmslukens@yahoo.com">dmslukens@yahoo.com</a> (personal) or contact me at 636-751-8746 (cell).

I hope that all had a wonderful Christmas or holidays and found lots of fossils, books, or tools in their stockings. Or in a case like mine, Santa left Paleobond under the tree for me.

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.

#### **Next meeting**

Friday, January 11<sup>th</sup> at 7:30 pm in the New Earth and Planetary Sciences building at Washington University (see more details below). The guest speakers will be Carl Campbell and Rick Poropat. Their talk will discuss the geology and paleontology at their marine research site in Stoddard County, Missouri. The speech will be significantly different than the one that they gave a couple of years ago.

#### Possible Business for the next meeting:

- -The venus clam raffle (donated by Dave Lukens) when will the drawing take place?
- -Members of the club will be going to the Tucson, AZ international gem, jewelry, and fossil show. In

the past the club has sent money to purchase items for sale at local shows as club fundraisers. A discussion needs to be held to determine the amount of money to be sent along

- Discussion about field trips and speaker committees. Think of places you want to go.
- Ideas for February 2008 field trip
- Discussion on January 2008, Fossil assembly meeting

#### **Thanks**

To the host and hostess for opening their house and hosting the Christmas Party this year. Everyone that attended had a great time. We did not have a many attendees as in previous years due to the nasty snowy weather. We all enjoyed John's wonderful collection. It is incredibly well organized and extensive. Our thanks again.

## Upcoming Events/ Field Trips

Due to the weather, we normally do not have a Field Trip in January. We are planning a get together to work on assembling fossil display boards for sale at the future fossil shows and to organize the fossils and other items we have for sale. The get together will be at my house.

Date is January 19, 2008; starting at 3 PM For more details call a club officer or call me at 636-751-8746.

#### **Paleo-shorts**

-Original and summary articles provided by members of EMSP

ON THE ROAD Lemmon, South Dakota

#### By: David Lukens

Lemmon S.D. is located on the north edge of S.D., just to the west of the Standing Rock Indian Reservation. It is about 90 miles south of I-94 or about 3 ½ hrs north of Wall, S.D. so it is a little out of the way, but not so far if you going to Montana.

The city has two sites with fossil related material. The first is the Petrified Wood Park in town that was built between 1930-1932 during the depression. It is reported to be the biggest P.W. city park in the world. The park is various structures built from P.W. including a wishing well, a waterfall, a castle, and many cone shaped structures. Some of the cones are made of the wood and others from concretions, dino bones were used in the castle construction. There is also a city museum in the park. It has a variety of antiques and fossils collected located including various dinosaur bones.

The other site is the Grand River Museum; this local museum has a number of displays on local history, Native American & cowboy history, and some displays on Creation Science. It also has parts of several dinosaurs on display that were found locally. This includes the left half of a Triceratops skull, parts of the back end of an Edmontosaurus, along with other scattered dinosaur bones.

If you are passing through the area, it is an interesting stop for a couple of hours. I was told there were places to collect wood in the area (big pieces) but I never found anything bigger than the end of my thumb. But I heard claims of "giant piles" free for the taking (yeah, sure).

# 15 October 2007 - BBC Website 'Giant dino' found in Argentina

Scientists think they have found a new species of giant plant-eating dinosaur, *Futalognkosaurus dukei*, which roamed the Earth some 80m years ago. It would have measured at least 32m (105ft) in length, making it one of the biggest dinosaurs ever found. The skeleton showed signs that its owner had been eaten by predators. The skeleton found in Patagonia appears to represent a previously unknown species because of the unique structure of its neck. Its name derives from the Mapuche Indian

words for "giant chief of the lizards" and for Duke Energy Argentina, a company that helped fund its excavation. "This is one of the biggest [dinosaurs] in the world and one of the most complete of these giants that exist," said Jorge Calvo, director of the paleontology centre at the National University of Comahue, Argentina.

The dinosaur's remains are thought to have washed into a river, creating a barrier that collected the remains of other now-fossilized animals, fish and even leaves found at the site. Since the first bones were found on the banks of Lake Barreales in the Argentine province of Neuquen in 2000, paleontologists have dug up the dinosaur's neck, back region, hips and the first vertebra of its tail. "It's among the biggest dinosaur finds and the most complete for a giant dinosaur," Alexander Kellner, a researcher with the National Museum in Rio de Janeiro, told Reuters news agency. "The accumulation of fish and leaf fossils, as well as other dinosaurs around the find, is just something fantastic. Leaves and dinosaurs together is a great rarity. It's like a whole lost world for us." Researchers say the fossilized ecosystem points to a warm and humid climate in Patagonia, which had forests during the Late Cretaceous period. The area is steppe-like now and almost bare of vegetation.

#### 17 October 2007 BBC Website

Ancient reptile tracks unearthed. The earliest evidence for the existence of reptiles has been found in Canada. The 315 million-year-old trackway gives an insight into a time when vertebrates were evolving through amphibians to reptiles. The footprints suggest reptiles evolved between one and three million years earlier than previously thought. They were found by UK scientist Dr Howard Falcon-Lang in fossil-rich sea cliffs at New Brunswick. The origin of reptiles, in particular the appearance of eggs protected by a shell, allowed four-legged animals to avoid having to go back into water to lay eggs, heralding life on dry land. It is thought that the tracks may have been left by reptiles gathering around a watering hole on river plains that were dry for at least part of the year.

The tracks have scales and 5 fingers, which proves they were made my reptiles. The most likely animal is *Hylonomus lyell*, a lizard like animal. The results of the study are published in the Journal of the Geological Society of London.

December 2008 National Geographic

The Dec edition of NG has an article on "Big Bad Bizarre Dinosaurs". Some of the ones discussed include the Amargasaurus (Argentina) which had a double row of spines on the neck and back; the Parasaurolophus (North America) which had a long trombone crest; and Tuojiangosaurus (China) which had large spikes on its back and shoulders. It is an interested read.

BBC 12-11-07

Evidence has been found that fragments of meteorites hit Ice Age mammals. A number of 35,000-year-old mammoth tusks from Alaska as well as a bison skull from Siberia all show signs of impact damage. Some of the bones show new bone growth around the damage indicating some the animals survived the impact. But it is possible the debris severely injured the animals. The impacts are only on one side indicating a like the strike from one-side. Close inspection show the fragments exploded inside the bones after impact. Analysis of the fragments shows them to have high iron-nickel content and most likely to have come from space. The scientists believe that the impacts may be related to evidence of a meteorite impact in North America date at about 13,000 years ago. Evidence of this has been various in iridium and other particles at various sites in N.A. It is possible that the fossils were exposed on the surface and impacted or there was an impact farther back in history. If so, did these impacts play a roll in the extinction of these species?

#### BBC 12-12-07

Fossils found in Niger Africa have been determined to be a new species. The 95 million year old *Carcharodontosaurus iguidensis* would have been similar in size to the T.Rex. The skull is 1.75 meters long with teeth as big as bananas. The Sahara desert at the time was totally different from total. It was similar to the Everglades and had large areas covered with vast shallow seas. This 13 m dinosaur also had lots of competition including the Spinosaurus (18 m long) and a 9m high Abelisaurid

theropod. These fossils were found in Niger in 1997 on an expedition led by Paul Sereno from the University of Chicago. A similar species has been found in Morocco. Fossils of another similar dino were found by the German paleontologist Ernst Stromer in Egypt but Allied bombing in WWII destroyed the fossils.

#### **Around Town**

## At the St. Louis Science Center: "Sea Monsters – A Prehistoric Adventure"

An Imax film with computer-generated life from the inland sea of the later Cretaceous (which covered the center part of North America) is currently playing. It traces the life of a dolichornchops and its encounters with other life in the inland sea including crocodiles, plesiosaurs, sharks, and others. It ties together both the animation and work of modern paleontologists. See the Science Center Website for times.

Academy of Science – St. Louis –
"Snapshot in Time – Secrets of the
World's Oldest Rainforest (Lecture), by:
Scott D. Elrick and John Nelson,
Geologists, Illinois State Geological
Survey

A lecture on the discovery of a 300-millionyear-old Carboniferous fossilized forest in a coalmine near Danville, Illinois. The forest covers more than 20 square km. Scheduled for Wednesday, February 27, 2008; 7:30 -9 p.m. at the Living World at the St. Louis Zoo. For more information call 314-768-5408

### **Reports**

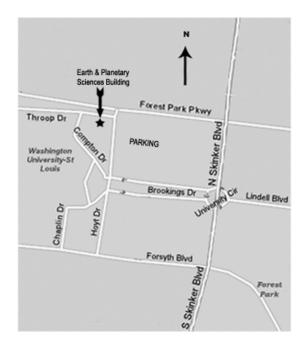
Looking for volunteers: At the January meeting we are hoping to get some volunteers. We are looking for form two (2)

groups. One group to work on obtaining speakers for upcoming meetings and the other group to plan and organize field trips during the year. Several trips were already mentioned including Coon Creek in Tennessee. We would like to find out how many people would be interested in going on this trip.

**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 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 <a href="mailto:dmslukens@yahoo.com">dmslukens@yahoo.com</a>, <a href="mailto:motirek@gmail.com">motirek@gmail.com</a> or <a href="mailto:abfactor@gmail.com">abfactor@gmail.com</a>



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.

Distribution of the Newsletter by email

# 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 Buildingon 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.

Eastern Missouri Society For Paleontology (EMSP) P.O. Box 220273 St. Louis, MO. 63122

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