

The Paleo Times

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The Official Publication of the Eastern Missouri Society For Paleontology

Upcoming Events

No meeting in December!

Holiday party! Dec 15th . Arrive after 5pm, dinner at 6. At the home of an EMSP member.

Watch for your newsletter for details or call an officer of the club.

They have an impressive and nicely organized fossil collection- as well as other hobbies on display.

The club will provide the main meat dish and utensils. The rest is potluck. Please bring appetizers, side dishes, drinks (all kinds), desserts, etc- **please call the hostess to collaborate dishes.** Lots of fun, bring the family and an empty stomach!

Next Meeting: Jan 11th 2008 @ 7:30pm
(see map and details below). Speaker TBD.

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 dolichorhynchops 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-million-year-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

Thank you to the past officers of 2007!

President: Brian Jackson

Vice President: Bruce Stinchomb, Carl Campbell arranged some speakers as well

Treasurer: Pete Smith

Secretary: Abby Lee, editor Tom Lee

Election Results- Club Officers for 2008

President: Don Howell

Vice President: Bruce Stinchcomb, and others lending a hand to obtain speakers

Treasurer: Pete Smith

Secretaries: Abby Lee, David Lukens, Peggy Cole

Board members: Brian Jackson, Tom Lee and Carl Campbell

Thanks for volunteering!

The November Stratford Inn Fossil show:

We sold off most of our inventory. We will shop for more at the Tucson show. We welcomed two new members that found us at the show. The total revenue was \$178. We plan to buy items in the \$10-\$30 to make a larger profit.

Thanks to those that volunteered at the show.

Field Trip 11-18-07

Quarry Trip

Report from David Lukens

On November 11, 2007 a field trip was made to a limestone quarry located near central MO. Our thanks go to John and Dorothy for their hard work in arranging access for the club. The club met at the I-70 rest stop and had a good turn out. Between 20-25 members were there including 4 new members. Two of them had only joined at the Fenton Show the weekend before. Welcome to all 4 of the new members.

The day was clouded and cool but still turned out to be a good day for collecting. We were able to drive down to the lower pit where the group spread out for collecting. There are multiple layers from which to collect in the quarry. The main formations to collect from were the Kimmswick and Decora. Both of those formations are middle and late (respectively) Ordovician (~490-440 million years ago). Some items were also found that may be from the Devonian.

Club members found a large variety of fossils including crinoids (a few with the calyx still attached), gastropods, corals, brachiopods, bryozoans, trilobites, and several good cephalopods. In addition, there were scatterings of pyrite and other crystals found.

To get in the spirit:

Song lyrics to the tune of "The 12 Days of Christmas from the University of Victoria, Canada, students- provided by John

(also handy for memorizing some geologic eras, though some phrases may need some editing- now we have archea)

In the Archaen Eon there first came to be.....prokaryotic cells.

In the Proterozoic Eon there first came to be....eukaryotes and prokaryotic cells.

In the Ediacaran Period there first came to be... marine arthropods, eukaryotes, and prokaryotic cells.

In the Cambrian Period there first came to be...Brachiopods marine arthropods, eukaryotes, and prokaryotic cells.

In the Ordovician Period there first came to be...land plants and fish! Brachiopods, arthropods, eukaryotes, and prokaryotic cells.

In the Devonian Period there first came to be...spiders, mites and sharks; land plants and fish! Brachiopods, arthropods, eukaryotes, and prokaryotic cells.

In the Carboniferous Period there first came to be...reptiles, trees, and insects; spiders, mites and sharks; land plants and fish! Brachiopods, arthropods, eukaryotes, and prokaryotic cells.

In the Triassic Period there first came to be...bipedal dinosaurs; reptiles, trees, and insects; spiders, mites and sharks; land plants and fish! Brachiopods, arthropods, eukaryotes, and prokaryotic cells.

In the Jurassic Period there first came to be...conifers and mammals; bipedal dinosaurs; reptiles, trees, and insects; spiders, mites and sharks; land plants and fish! Brachiopods, arthropods, eukaryotes, and prokaryotic cells.

In the Eocene Epoch there first came to be...horses and whales; conifers and mammals; bipedal dinosaurs; reptiles, trees, and insects; spiders, mites and sharks; land plants and fish! Brachiopods, arthropods, eukaryotes, and prokaryotic cells.

In the Miocene Epoch there first came to be...hawks and higher primates; horses and whales; conifers and mammals; bipedal dinosaurs; reptiles, trees, and insects; spiders, mites and sharks; land plants and fish! Brachiopods, arthropods, eukaryotes, and prokaryotic cells.

In the Pleistocene Epoch there first came to be...bisons and humans; hawks and higher primates; horses and whales; conifers

and mammals; bipedal dinosaurs; reptiles, trees, and insects; spiders, mites and sharks; land plants and fish! Brachiopods, arthropods, eukaryotes, and prokaryotic cells.

Paleo-shorts

CNN – 11-21-07 (supplied by David Lukens)

British paleontologists have found the fossilized claw of an ancient sea scorpion, which may make it the largest bug ever. The fossil indicates an animal about 8 feet long according to Simon Braddy, a University of Bristol paleontologist. It is identified as a Jaekelopterus Rhenaniae, which lived only in Germany for about 10 million years, about 400 million years ago.

The claw was found by paleontologist Markus Poschmann near Prum, Germany. The deposits were likely from an ancient estuary or swamp. The eurypterids (ancient sea scorpions) are believed to be the extinct aquatic ancestors of today's scorpions and possibly all arachnids (a group including spiders, scorpions, mites and ticks)

The evolution of gigantic sea scorpions might have been due to higher levels of oxygen in the atmosphere or because they developed in an "arms race" alongside their likely prey (fish) that had armor on their outer bodies. The scorpions were also known to cannibalize each other. So bigger was better.

On TV:

The History Channel has a series called “MonsterQuest: Birdzilla”

I happened to tune in to an episode on Terratorns. Recently Clarence Zacher has been submitting articles on the ice age giant raptor so the title caught my attention. The show discussed the fossil evidence, known habits of the largest modern raptor – the Crown Eagle of Africa that is known to eat 20lb monkeys, and the possibility of such a huge bird existing today. Experts in raptors, cryozoologists, video analysts (to discuss video footage), and other scientists discussed the ancient bird and the possibility of one escaping detection in present day. The show also explored the mind trick of estimating size without a good frame of reference. As an experiment a 24 ft spanned, raptor shaped kite was suspended a few hundred feet in the air and by-standers were asked to estimate its size. Most guesses were around 50-100ft wide. This was admitted as evidence that an eagle or vulture could appear twice the normal size while flying in mid-air. Apparently reports of birds with 12-24 foot wing spans continue today. Video footage and a case of a 65lb boy being picked up by a huge raptor both occurred in Western Illinois in the 1970s. The main areas of such sightings are Texas and Illinois. The Piasa bird legend was discussed. Cable channels tend to repeat episodes for month so look for it in your line-up or on-line on the History Channel’s website. Other MonsterQuest episodes related to fossils include: giant jaws, giant squid, and the Real Hobbit.

Various Sources:

The **mummified remains of another hadrosaur** have been made public. The skeleton was found by a paleontology

student on his family’s ranch in North Dakota. The animal appears to be intact and articulated- including skin and other tissues preserved in 3D. Yale and a University in England are working on the skeleton. The research team attempted a CT scan of the 5-ton block. Analysis continues but National Geographic has some more information on their website. The society appears to be putting together a program on the specimen.

St. Louis Post-Dispatch

Aug 7th, 2007

Addis Ababa, Ethiopia

The fossil skeleton of the early hominid Lucy was secreted out of Ethiopia. The fossil will be displayed until April 2008 in the Houston Museum of Natural Science.

There is no further explanation in the article, however, I recall reading that conservative movements in various countries in Africa including Kenya and Ethiopia are physically threatening fossil collections and scientists that concern human evolution. This may be why the Ethiopian museum snuck it out of the country.

What Ravages of Time?

Smithsonian Oct 2007

Microbes frozen in Antarctic ice were found to be alive. Once thawed, they began to replicate despite being dated to 8 million years old! The researched described microbial DNA in the ice as a “gene popsicle”.

Fossil Mystery Solved?

Science News, Oct 13th 2007 vol 172

Water living insects have been found encased in amber. Theories to explain the occurrence include the water bugs living in the clefts of tree limbs. However Alexander Schmidt from the Museum of Natural History in Berlin and paleobotanist David Dilcher of the University of Florida in Gainesville tried a field experiment to the contrary. They dropped resin into water from a damaged pine tree. Many organisms including a water beetle became stuck within hours. The resin could plausibly solidify when a swamp dries out- fossilizing the beetles in amber.

Membership Dues

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 some are selected) E-mail requests to 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- WashU parking signs need not be heeded Friday evenings.

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 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

