

# The Paleo Times

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## EMSP SOAPBOX

By Ryan Fairbanks & Faye Whobrey

If you have any articles, comments, or need to communicate with me I can be reached through the following: [emsp.sec@mofossils.com](mailto:emsp.sec@mofossils.com).

### Next meeting

Next meeting is **Friday, April 11, 2014** at 7:30 pm in the New Earth and Planetary Sciences building at Washington University (see more details below).

## PRESIDENT'S BOX

Our substitute program for March was an astounding success! Tom brought the Mosasaur that he and others bought in Tucson this year. It was a juvenile and showed great detail (including fish bones in the stomach area that had not been digested as well as shark teeth scattered throughout the matrix). This captured the interest of EVERYONE in attendance. Dr. Bruce also brought several specimens of head, mouth, and teeth of larger Mosasaurs. Also there was an ammonite with bite holes (presumably from a Mosasaur as ammonites were one of many shell creature they ate). Dr. Bruce and Tom both did an excellent job providing information and answering the many, many questions from our club members.

I really appreciated everyone staying after the program and participating in the Committee Meetings. As a result, there were good suggestions generated for speakers, field trips, and a few more volunteers for the Education/Outreach Committee.

Several of the club members went to the fossil/artifact show in Belleville the weekend of our club meeting. There some good buys there and I had a very interesting conversation with one of the dealers about his collecting in Crawford, IN. They have been experiencing the same type of winter weather that we have (lots of freezing and thawing) and he said his collecting has been great. Hopefully, we will see more of his "finds" at his booth at MAPS. Also, this freezing/thawing will have made more fossils available in our road cuts for our collecting!

MAPS (Mid-America Paleontology Society) is April 4, 5, and 6, 2014, and is always a great show for buying, trading, and education. It is the BIGGEST fossil only show in the United States! There are several from the club who will have booths there as well as other going to SHOP & LEARN! If you have never been, call one of the club officers or someone you know has been before and get more information.

Please be sure to check out the information for our upcoming trip to Danville Quarry, Danville, MO, on April 12. That is always a great collecting site.

### Speaker Outline:

April 11: Dr. Casey Holliday, University of Missouri, Department of Pathology and Anatomical Sciences: "Inside Dinosaurs: using modern anatomical and biomechanical approaches to learn about the lives of extinct reptiles"

May 09: Professor Carl Campbell, Touring Great Britain, 2013

### Website:

1. If you don't have your picture posted, please let us know. It is a great way for new members to learn who we are and for us to recognize them. Remember they have a lot more faces to recognize than we do.
2. Please submit pictures of your field trip to Pat for posting on website.

### Scholarships:

There are scholarships available to earth science students. For you, your child or grandchild to be eligible you must be a member of one of the earth science clubs of the Greater St. Louis Association of Earth Science Clubs. Forms are available on the websites or at club meetings.

A link to Scholarship Information can be found here: <http://mofossils.com/fossillinks.html>

Our website can be found here: <http://www.mofossils.com/>

### **Field Trip: Danville Quarry**

We have a new field trip coming up soon to Danville Quarry. John was able to set up the trip for us on Saturday April 12<sup>th</sup>. That is the Saturday after the EMSP meeting. Young members are welcome to come along as long as they are accompanied by a parent/guardian. Everyone who wants to go will have to have a liability waiver signed by the April 11<sup>th</sup> meeting.

The plan is to meet at the rest area at 9am off of highway 70 west of Wright City, MO. We will then all drive to the quarry together and plan to be there by about 10am to fill out the necessary paperwork. Bring along hard hats, reflective vests, sturdy boots, safety glasses (if breaking rock) and a lunch. You will probably also want a sledge hammer because the rock there is very hard.

The quarry is in the Decora formation. You will probably find some sponges, brachiopods, crinoids and even some trilobites have been found there in the past. You can also find some small mineral specimens.

A few things to remember if you plan on going on the trip.

Field trips, as with other club activities, are for EMSP members only; no guests. All members must have a current year Liability Waiver on file in order to participate. Members under 18 years old must have their own waiver signed by a parent or guardian. A legal guardian is defined as a person being appointed by a court, not just a relative or family friend. The guardian must also be a current EMSP member. Returning members should contact Rick at the April meeting to update your waiver. New members should contact Rick at the April meeting to fill out a form or you can request Rick send you one by email, or you can download one from the club website. New members should also see Rick to obtain a copy of the Field Trip Rules and Procedures.

All Danville Quarry trip participants, including children, must have the following safety equipment: hard hat, reflective safety vest, sturdy shoes/boots, long pants and safety goggles. The hard hat, safety vest and goggles can be purchased at low cost at most home improvement stores. This safety equipment is a requirement of both EMSP and quarry operators, but only applies to quarry trips. Please remember to bring these items with you. Danville quarry is a long way to travel, only to find out you can't enter because you didn't bring the required equipment. Heavy gloves, lunch and plenty of water are also recommended.

More info will be provided at the April meeting.

### **OTHER ITEMS**

As most of you know, Steve runs the Outreach Program for the club and does an excellent job of it. But he cannot do it on his own. We need volunteers to sign up and let Steve know that you can help. This is a great opportunity to spread the news about the club and about fossils to people.

Please pick a day and time and let me know so I can coordinate with the Rockwood school system for confirmation.

Thank you,  
Steve  
[emsp.outreach@mofossils.com](mailto:emsp.outreach@mofossils.com)

## Paleo-shorts

I would like to see some old articles that people have written for past newsletters. The club has had a surge of new membership in the last few years and I think there are a lot of people now that would love to read those old stories for the first time. I don't have anything old or new this time around; but here are a few article summaries from online.

### Huge turtle fossil eventually comes together

A broken fossil turtle bone discovered by an amateur paleontologist in 2012 turned out to be the missing half of a bone first described in 1849. The surprising puzzle discovery has led paleontologists to revise conventional wisdom of how long fossils can survive exposed to surface conditions. It also provides insight into one of the largest turtle species ever known.

<http://www.sciencedaily.com/releases/2014/03/140325095822.htm>

### Mammoth inbreeding

Researchers recently noticed that the remains of woolly mammoths from the North Sea often possess a 'cervical' (neck) rib -- in fact, 10 times more frequently than in modern elephants (33.3 percent versus 3.3 percent). In modern animals, these cervical ribs are often associated with inbreeding and adverse environmental conditions during pregnancy. If the same factors were behind the anomalies in mammoths, this reproductive stress could have further pushed declining mammoth populations towards ultimate extinction.

<http://www.sciencedaily.com/releases/2014/03/140325095820.htm>

### Shedding new light on old leaves

Scientists have used one of the brightest lights in the Universe to expose the biochemical structure of a 50 million-year-old fossil plant to stunning visual effect. The team of paleontologists, geochemists and physicists investigated the chemistry of exceptionally preserved fossil leaves from the Eocene-aged 'Green River Formation' of the western United States by bombarding the fossils with X-rays

brighter than a million suns produced by synchrotron particle accelerators.

<http://www.sciencedaily.com/releases/2014/03/140325210416.htm>

## UPCOMING ROCK, GEM OR FOSSIL SHOWS

April 19th Earth Day Celebration at the Kirkwood Farmers Market. We need two volunteers to help out at our booth from 10am to 3pm. We will be showing off some Missouri fossils. We will also try to show some photos of our field trips and good MO fossils; so if anyone has any good ones you would like to show to the public, then bring them to the April meeting.

MAPS is April 4-6 this year, in Iowa City, IA. This is the biggest all fossil show in the country held every year. If you haven't been then I highly recommend going at least once. Plus later in the evening is the unofficial Travel Lodge hotel show where all the neat mineral specimens come out. Imagine a miniature Tucson show. More info here. <http://www.midamericapaleo.org>

Also the St. Louis Science Center currently has a show "Titans of the Ice Age" at the Omnimax theater. I haven't seen it myself; but it may be a good one to bring the kids to.

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 building is on the southwest corner of Hoyt Dr. and Forest Park Pkwy. There is a large parking lot just across the street.

## 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. Please note that the e-mail contacts have changed

President: Fay Whobrey  
([emsp.pres@mofossils.com](mailto:emsp.pres@mofossils.com))

Vice Pres: Abigail Fairbanks  
([emsp.vp@mofossils.com](mailto:emsp.vp@mofossils.com))

Treasurer: Rick Poropat ([emsp.tr@mofossils.com](mailto:emsp.tr@mofossils.com))

Secretary: Ryan Fairbanks  
([emsp.sec@mofossils.com](mailto:emsp.sec@mofossils.com))

## DUES ARE DUE

Our treasurer, Rick 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 Rick 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. E-mail requests to [ryfairbanks@gmail.com](mailto:ryfairbanks@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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