

The Paleo Times

Volume 14 Number 6

May 2015

The Official Publication of the Eastern Missouri Society For Paleontology

EMSP SOAPBOX

By Ryan & Faye

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

Next meeting

Next meeting is **Friday, June 12, 2015** at 7:30 pm in the New Earth and Planetary Sciences building at Washington University (see more details below).

President's Corner

June 2015

Greater St. Louis Association of Earth Science Clubs – Scholarship Program:

REPEAT – WE NEED APPLICANTS: The Association has funds available for up to three (3) scholarships up to \$500 each for this year. There is a link under “Fossil Links” on our website (www.mofossils.com/fossillinks.html) for more information regarding the scholarship program.

Click on the link that has “forms” in it to get the application.

Proceeds from the “boutique” and the “wheel” go directly to the scholarship fund. Bob Morse, Rockwood Gem & Mineral Club, requested the clubs donate petrified wood that can be tumbled (he will tumble them) and any other items that would be appropriate (larger pieces of petrified wood, **marine fossils**, etc.). When you are out collecting and you see something “nice” but not what you would want in your collection, pick it up and bring to the next meeting.

I will make sure it gets to Bob for the next show.

Meeting Schedule. Remember our new format where program will be first and business meeting after break.

- **June 12, 2015:** Guest speaker will be George Phillips, Paleontology Curator for Mississippi Museum of Natural Science. His presentation will be on “The Fossil History of Mississippi.” I am personally very excited about this program as I had the honor of meeting George last fall when I attended a seminar at his Museum.
- **July 2015:** No meeting scheduled for July.
- **August 09, 2015:** Club picnic at Kirkwood Park.
- **September 11, 2015:** What we did on our summer vacation (Show and Tell)
- **October 09, 2015:** Bruce on St. Louis Pleistocene.
- **November 13, 2015:** Introduction on How To Prep Fossils and election of officers
- **December 2015:** Annual Christmas Party (date & location to be announced).

We want to have “MINI” Presentations at most of our meetings. Have you read a good book? Have you researched a specific fossil? What is your favorite formation for collecting – Why – Examples? Let me know so we can add you to the agenda. We have openings for these for each of our meetings starting with September.

Field Trips: If you have suggestions for field trips or would like to lead a trip, please contact Bruce, Chris or Faye.

- June: Saturday, June 20, to Ardeola. About 2-1/2 hours south of St. Louis. Lots of

poison ivy so be prepared. (Owl Creek formation – Cretaceous)

- Fall trips to Mark Twain Lake (Keokuk and Burlington formations), HWY MM (Decorah formation), Barite Pit (Potosi formation), Mark Twain Nation Forest south of Cherokee Pass (Cambrian and Pre-Cambrian) and possibly to Fulton area (Keokuk formation and others) to be planned.
- Steve Bynum would appreciate volunteers with our out-reach program for scouts and schools. Contact him for details.

Paleotrek – Dino Dig:

Paleotrek will run from July 4 – 23 for 2015. It is open to EMSP members and prior participants. Much of our field work will consist of prospecting for new excavation sites. There is a one-time fee of \$75/person to help cover storage costs and supplies.

Contact Carl Campbell if you are interested in participating and/or need additional information. He needs to know when and who will be participating before he leaves on July 1.

Shows:

- a. **Missouri Mines Rock Swap**, June 12-14, 2015. Historic Site on south side of Highway 32, 1.5 miles west of US highway 67. The museum is open during this event and is an unbelievable collection of specimens not only from the Missouri mining area but from around the world. They have silent auctions that run continually throughout the show (usually every hour) and all proceeds from the auctions go to the museum. Bring the kids and have a great day.
- b. **Greater St. Louis Association of Earth Science Clubs**. August 14-16, 2015. Machinist Hall in Bridgeton, MO. We need volunteers for setup/teardown and for working our booth and ticket booth.
- c. **St. Louis Mineral and Gem Club**. November 20-22, 2015. White Rogers Community Center, Afton, MO. We need volunteers for setup/teardown and for working our booth.

Summer Collecting: How to Make the Most of a Summer Afternoon or a Scheduled Vacation:

- Research what's available where you are going – google on internet, call other club members, call other Earth Science Clubs in the area you will be passing through or visiting. If they are having a field trip while you are there, ask about joining their club so you can go on their field trip.
- Prepare a bucket or bag of your “collecting essentials” for just in case.
- Google fossil and rock shops in the areas noting what days and times they are open.
- Contact local conservation agencies as to location and accessibility of sites that are legal for collecting and what you might find.
- Purchase “Rockhounding” books for the states you will be traveling through. These have little maps and directions and list the fossils and minerals that should be found. The directions on many of these are very accurate; however, some of the sites may now be urbanized or private and no longer available to collecting.
- Get a state road map for all the states you will be traveling through and mark all the interesting places (from Rockhounding books and suggestions from others). Easier to plan the driving if you have all the locations marked on one map.
- Keep a log of where you went and what you found.
- Bring your “finds” to the September meeting.

LOG BOOK: A record or log of all your specimens (either on computer or on paper). What's important is to have a log. The following are suggested columns for your log:

- Event (fossil show, field trip, etc)
- Date
- Name of Specimen
- Category of Specimen
- Location of find
- Location of where Stored
- Quantity
- Formation
- Time Period

Arriving Late to a Meeting

An incident that occurred at the May meeting requires a review of club policy regarding late arrival to a meeting. It is EMSP's published policy that meetings begin at 7:30 pm, however, members and guests are encouraged to arrive early to socialize and get a good seat. Another good reason to arrive early is that the front door to the building *automatically locks* at 7:30 pm. A 'back door or lower level door' is sometimes open until 8:00 pm, but that isn't always a certainty. If you think you will arrive after 7:30 pm, you should be prepared to use your cell phone to call someone (preferably an officer) already at the meeting to come and let you in. It is totally unacceptable to throw a rock or other item at a window in an effort to draw someone's attention. Such rude behavior is vandalism, reflects badly on our club and jeopardizes our relationship with Washington University. It is also unacceptable to call campus security to let you into the building. They have better things to do.

Everyone should remember that behavior posing a danger to members and guests or that jeopardizes our club's relationship with Washington University (or property owner if on a field trip) is grounds for removal from club membership (forfeiture of dues) and exclusion from all club activities.

New members- we have a photo database for members to help us remember faces. Please consider posing for a portrait at January's meeting.

Volunteer outreach help needed-

NO EXPERIENCE NECESSARY!

Please sign up to help staff the Rockwood school district requests and any other for fossil presentations/demonstrations/science night tables. Last year we reached at least 3 science nights at elementary schools, a number of day time presentations, and a library summer reading club. We have the outreach kit- just take and open the lid for an instant interactive table. An accompanying book has more details on each fossil. A PowerPoint presentation is also in the works

Paleo-shorts

Laser-beam scanning illuminates new details in dinosaur fossils

Scientists have developed methods of using commercial-grade laser equipment to find and analyze fossils of dinosaurs. The new laser method causes fossil samples to fluoresce, revealing complex details unseen with traditional visual enhancers like ultraviolet light

University of Kansas. "Laser-beam scanning illuminates new details in dinosaur fossils."

ScienceDaily. ScienceDaily, 27 May 2015.

<<http://www.sciencedaily.com/releases/2015/05/150527180908.htm>>.

Retracing the birds beak back to its dinosaur origins, in the laboratory

Using the fossil record as a guide, a research team led by Yale paleontologist and developmental biologist Bhart-Anjan S. Bhullar and Harvard developmental biologist Arhat Abzhanov conducted the first successful reversion of a bird's skull features. The scientists replicated ancestral molecular development to transform chicken embryos in a laboratory into specimens with a snout and palate configuration similar to that of small dinosaurs such as *Velociraptor* and *Archaeopteryx*.

Yale University. "Tweaking the beak: Retracing the bird's beak to its dinosaur origins, in the laboratory."

ScienceDaily. ScienceDaily, 12 May 2015.

<<http://www.sciencedaily.com/releases/2015/05/150512075417.htm>>.

First dinosaur fossil found in Washington state

Burke Museum paleontologists have published a description of the first dinosaur fossil from Washington state. The fossil was collected by a Burke Museum research team along the shores of Sucia Island State Park in the San Juan Islands.

University of Washington. "First dinosaur fossil discovered in Washington state." ScienceDaily.

ScienceDaily, 20 May 2015.

<<http://www.sciencedaily.com/releases/2015/05/150520151618.htm>>.

From chicken to dinosaur: Scientists experimentally "reverse evolution" of perching toe

A unique adaptation in the foot of birds is the presence of a thumb-like opposable toe, which allows them to grasp and perch. However, in their dinosaur ancestors, this toe was small and non-opposable, and did not even touch the ground, resembling the dewclaws of dogs and cats. Remarkably, the embryonic development of birds provides a parallel of this evolutionary history: The toe starts out like their dinosaur ancestors, but then its base (the metatarsal) becomes twisted, making it opposable.

Universidad de Chile. "From chicken to dinosaur: Scientists experimentally 'reverse evolution' of perching toe." ScienceDaily. ScienceDaily, 22 May 2015.

<<http://www.sciencedaily.com/releases/2015/05/150522174534.htm>>.

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.

President: Fay Whobrey
(emsp.pres@mofossils.com)
Vice Pres: Abigail Fairbanks
(emsp.vp@mofossils.com)
Treasurer: Rick Poropat
(emsp.tr@mofossils.com)
Secretary: Ryan Fairbanks
(emsp.sec@mofossils.com)
Educational Outreach: Steve Bynum(emsp.outreach@mofossils.com)

DUES

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



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

