

The Paleo Times

Volume 12 Number 3

March 2012

The Official Publication of the Eastern Missouri Society For Paleontology

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).

Next meeting

Next meeting is **Friday, March 9th** at 7:30 pm in the New Earth and Planetary Sciences building at Washington University (see more details below). BUT do not forget the Christmas party on Dec. 10th.

PRESIDENT'S CORNER

President's Corner: March, 2012

Your Board had a lengthy and vocal discussion about field trip guidelines at its February meeting. The conclusion was that we need to tighten our field trip procedures. More details and a chance for club input will be discussed at the March meeting. Apparently there are approximately forty club members who have not paid their dues (including yours truly, I keep forgetting). SLACKERS!!! Bring your cash to the March meeting or you will be dropped from club membership and won't be able to go on our field trips. Speaking of cash; bring some extra to the March meeting. We will offer club members first crack at the "new" fossils from this year's Tucson expedition. And there will be a few "one-of-a-kind" auction items. Finally, our April meeting will be at Wilson Hall, Room 214 to give us extra seating for Dr. Chin's presentation. Dave has attached a map.

Carl Campbell
President Eastern Missouri Society for Paleontology

Thanks / Congratulations

Thanks to everyone who brought food to the February meeting. Welcome to our guests. Thanks to everyone who put together slides and photos for the information on the visit to the Tucson show.

NEXT MEETING (March)

Items to be discussed during the March meeting

- Dues are due, note sent out to the ~41 members who are not current.
- Plans for Spring field trips
- Discuss renewing scholarship for STLCC summer geology course.
- Presentation will be by Marie Shoemaker, Carlton Laird, Mark Fedde on Vertebrate Fossil Prep

Upcoming Events/ Field Trips

1. Fossil pricing party at Tom & Keri's house on March 3 at 2 PM to price the fossils from Tucson.
2. Upcoming Board of Directors meetings
4/23/12- David's house
8/11/12 – Prior to picnic, Kirkwood Park
10/22/12 – Faye's house
Meetings start at 6 PM, club members are welcome but need to RSVP to club officer. For addresses, please contact myself or another club officer.
3. 4/7/12 (Sat.) - Field trip to Parson's Quarry in Parson, Tennessee (about 6 hours / 310 miles one way). This is Easter Weekend. Trip has been arranged by John & Dorothy. Access to the quarry is only available to groups and not to individuals. The quarry did not set any age limitations last year. The collecting is from 7AM to 12:00 (noon). The collecting is

in the Birdsong Shale where there are lots of crinoids, trilobites, and blastoids. Since this is a working quarry hardhats, safety glasses, and boots may be required (they were not required last year). You will need rock hammers and probably chisels as the rock is hard. Map will be available at the March meeting.

4. 4/13/12 – EMSP Annual Speaker – Karen Chin (Associate Professor, Department of Geological Sciences and Curator of Paleontology, University of Colorado Museum. Expert on Coprolites (fossil poop) from the Univ of Co. – Boulder. More details to follow. Talk will be titled “why dinosaurs ate wood” and will be on the Hell Creek Formation Coprolites. Presentation will be at Washington University’s Wilson Hall Room 214 starting at 7:30 pm.
5. 8/11/12 - EMSP annual club picnic and fossil raffle at Kirkwood Park (NE corner near the tennis courts). Same shelter as previously. Reserved from 9 am to 9 pm, with food usually served around 11 am. B of D meeting prior. We will have fossil trading again this year along with fossil giveaways and a fossil auction.

EASTERN MISSOURI SOCIETY FOR PALEONTOLOGY

Board of Directors Meeting
27 February 2012

Minutes

The February 27, 2012, meeting of the Board of Directors for the Eastern Missouri Society for Paleontology was called to order at 6:30 pm by President Carl Campbell at his home.

Those in attendance were: Carl Campbell, Rick Poropat, Don Howell, III, Marie Shoemaker, Pat Eicks, David Lukens, Ryan Fairbanks, and Faye Whobrey.

Old Business Discussed:

1. By-Laws: a preliminary draft with amendments is to be reviewed by April with the final results to be presented by September 2012 meeting.
2. Name Tags: Don Howell was congratulated on the quick response to the club’s need for name tags.

A “drop box” will be provided starting with the March meeting so club members and guests can drop in their name tag and it will always be available for the next meeting.

3. Membership: Family membership is for the family members of a household (same address). Relatives living in other households must have their own family membership.

4. Field Trips:

(a) Recognizing the need for new locations, Rick has compiled a list of several potential sites (some old ones but many new ones). Most of these are out of state. We will have at least three (3) to local areas while others may be 2-3 day trips.

(b) A “sign in/out” roster will be used for each trip and will be maintained by that Field Trip Leader.

(c) A waiver of liability form must be signed by every member in order to attend any field trip sponsored by EMSP. This will be in a permanent binder and will be in the possession of the Field Trip Leader.

(d) Field trips will be open to just EMSP members other than when we have a combined trip with another club.

(e) All members on a field trip must wear a hunter orange vest. Don will check at Denny Dennis to determine cost, etc.

(f) When there is a combined trip, the other club has to have insurance and a liability form signed by each of their members present.

(5) Show Committee:

(a) Don will contact Mastodon State Park to checkout Fossil Days in June.

(b) There will be a “pricing” event for the Tucson purchases on Saturday, 03 March, at 2:00 pm, at home of Tom and Keri.

(c) An inventory will be developed of all items and will be updated as new purchases are made and as items are sold at sales. A tally sheet will be maintained for each show and subtracted from the inventory.

(d) The application and fee of \$255 is being mailed in for the Affton show. We hope to get ½ of fee returned by taking down the tables as was done in 2011.

(6) Speaker Committee:

(a) April meeting will be in Wilson Hall, Room 214, which is the big lecture hall. The speaker will be Dr. Karen Chin, University of

Colorado paleontologist, on “Why Dinosaurs Ate Wood,” i.e., “Dinosaur Poop.” In the March 2003 issue of National Geographic, there was an article “Dinosaurs, Cracking the Mystery of How They Lived.” Included in this article was a picture of “dino poop” with the following commentary: “Seventeen inches long and about two and a half quarts in volume, a 65-million-year-old coprolite, fossilized feces, scooped up in Saskatchewan, Canada, is one of the largest such deposits known from a carnivorous dinosaur. “It’s not pretty, but it’s pretty exciting in terms of what it means,” says Karen Chin, a University of Colorado paleontologist. Size, age, composition, and place all point to T. Rex as the producer. Studying a section with a microscope, Chin has identified bones from a mean—certainly a dinosaur and probably a young herbivore. The fragmented bones offer solid clues to how T. rex may have fed: shattering limbs, tearing at flesh, and chomping up mouthfuls before it swallowed.”

(7) Treasurer:

(a) Rick will mail copy to Secretary for inclusion in the newsletter.

(b) Will be changing to a new bank with multiple locations for ease in making deposits, etc., as soon as outstanding commitments have been processed.

(c) A Pro Forma annual forecast will be made of expenses and income through December by April Board Meeting.

(8) Secretary:

(a) Membership List has been sent for review. Members need to verify or respond with changes.

(b) Membership List will only include paid memberships.

(c) Newsletter will be mailed to only one address.

(d) Photo Directory: All new photos have been submitted to Pat Eicks.

(e) Need President’s Corner and Room # for April meeting.

(f) Another letter to be sent for March for payment of dues.

(g) A printed copy of membership list will be made available at meetings.

New Business: None

Compliments to Mrs. Campbell for the delicious deserts.

Meeting adjourned at 8:00 pm and then we viewed Carl’s purchases from Tucson.

Notes from the Meeting

We had another packed meeting in February with over 50 members and others in attendance. We have numerous guests this time including Al & Jan, Donna & Gavin, Mike, Ben, Steve & James & Grace, and Tim & Jennifer. Welcome and thank you all for coming. Several of our visitors joined during the meeting. Old business was discussed including the treasurers report which is included in the report. Other items discussed included the following

- Dues are do, a list of being generated and a reminder will be sent out to members who are not current.
- Photos are still be taken of club members for the website and a number were taken during the meeting break.
- Rich discussed the upcoming presentation on 2/21 by Dave Peters on the Early Evolution of Birds. (At least 7 members of the club attended this presentation, which was excellent.)
- Committee Reports – field trip C is still working on getting into the Hannibal Quarry and discussion was held about possible trip to MAPS in March.
- Show Committee purchased fossils for resale in Tucson. The contact for 2012 Affton White show was voted on and approved, price for tables and credit for setup are the same.
- Speaker Committee is working on setting up a 2 year list of speakers.
- Fossils from the Tucson show will be brought to the next meeting and be up for sale.
- There will be a fossil pricing party at Tom & Keri’s house on March 3 at 2 PM to price the fossils from Tucson.
- Presentation was given by several club members on the Tucson show and the trip there.

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.

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://www.foxnews.com/scitech/2012/02/23/triceratops-no-slouch-new-forelimb-study-reveals/>

New studies indicate that triceratops walked with its legs held like a mammal's. This information is a result of studies of the elbow joints on the front limbs. Mammal elbows have larger triceps and a larger humerus while animals such as lizards which have a more splayed position have muscles called adductors that hold the elbows close to the body. A study of over 300 varied modern skeletons, indicated 3 key indicators. When this data was applied to several extinct animals including triceratops, a pterosaur, and a species of mammal, all indicated an upright position.

<http://www.foxnews.com/scitech/2012/02/22/fossil-footprints-reveal-oldest-elephant-herd/>

A trackway dating to over 7 million years ago has been found in the United Arab Emirates. Closer studies have shown it to be made by a herd of 13 elephant ancestors. At the time of the tracks the area had a large river and was home to varied wildlife including , antelopes, giraffes, pigs, monkeys, rodents, small and large carnivores, ostriches, turtles, crocodiles and fish. The trackway covers over 12 acres and were probably made by *Stegotrabelodon syrticus*, an ancestor of modern elephants with 4 tusks. The trackway is the largest ever found for mammals and is over 850 feet long with the individual tracks being around 15 inches wide. Due to the size, they could not be seen with satellites. So the scientists mounted a digital camera on a kite and flew it over the site and put together a montage of hundreds of photos. In addition to the herd, solo tracks of another elephant, probably a solitary male were also found.

<http://www.livescience.com/18627-global-warming-shrunk-horses.html>

Fossils evidence is indicating that global warming might result in size reduction. About 56 MYA there was a significant temperature increase of about 10F that lasted for 175,000 years. During this period,

about 1/3 of mammal species became smaller to adapt. One example is *Sifrhippus*, an early horse that started as 12 lbs but shrank to 8 ½ lbs during the first 130,000 years. During the last 45,000 years they grew back to around 15 lbs.

<http://www.sciencedaily.com/releases/2012/02/120225110942.htm>

New investigations indicate that Neanderthals were going extinct as long as 50,000 years ago prior to the arrival of modern humans. The DNA study indicate that a small group survived and repopulated parts of central and western Europe for another 10,000 years. This may point to the fact that they were more sensitive to climate change than previously realized. The information was determined based on an evaluation of the genetic variation which dropped drastically around 50,000 years ago.

<http://www.sciencedaily.com/releases/2012/02/120220161307.htm>

Scientists from China have discovered tropical forest preserved in volcanic ash dating to 300 MYA in Wuda China. The forest was covered over a large area in a few days fossilizing the plants and trees where they fell or were. In many cases leaves are still attached to branches and even to the trees. As the area was in a coal mining area, over 1000 m² of rock has been exposed at 3 locations. At this time at the start of the Permian, China was split into 2 continents, was located in the tropics, and the Earth had climate similar to now. At least 6 groups of trees have been identified ranging from short tree ferns to other trees over 80 feet tall. Another species of tree named *Noeggerathiales* were identified. They have been rarely found in America and Europe in fossils but appear to be more common in Asia. But the concentrations vary significantly between the 3 sites.

<http://news.discovery.com/animals/fossilized-dinosaur-mom-found-120221.html>

Paleontologists in Mongolia have found the 70 MYA remains of a feathered dinosaur brooding on its nest. The remains of the *Nemegtomaia barsboldi*, an ostrich-like theropod was killed and partially buried by a sandstorm along with its nest. The body was partially complete but had been damaged by

dermestid type beetles. The mother was standing in the ring of eggs with its wings folded over the eggs. There are two layers of eggs below with at least 7 eggs in the lower layer. These dinosaurs only lay 2 eggs at a time so a large nest indicates collective layings. It is likely the adults shared the brooding duties which may indicate that males participated too.

<http://news.discovery.com/animals/pterosaur-teeth-121402.html>

Paleontologists have found the remains of a 100 MYA pterosaur with large teeth. The animal named *Coloborhynchus capito*, had a 23 feet wingspan. The two front teeth were 3" long and inclined to the front and the teeth behind were 4" long. The teeth interlocked when the mouth closed. The fossils are in the London Natural History Museum and came from eastern England. At the time the area was tropical and along the edge of the sea and was rich with sea life. While there were other pterosaurs the were larger, they lacked teeth.

Other Articles (from Marie Shoemaker)

This one is about T-Rex;

<http://news.discovery.com/animals/t-rex-bite-122802.html>

This one is about Coldwater Creek:

http://www.stltoday.com/search/?l=50&sd=desc&s=start_time&f=html&q=coldwater+creek

Upcoming shows

March 2012

March 9, 10, 11, 2012

51st Annual Gem, Mineral and Jewelry Show

Kansas City Expo Center, 11730 N. Ambassador Dr., Kansas City, MO

Friday 9am to 8pm Saturday 10am to 7pm Sunday 10am to 5pm

17-18, 2012 - North American Prehistoric Artifact Show. Gateway Center Collinsville, IL. Sat 7-5, Su 7-2

April 2012

28-29—MEMPHIS, TENNESSEE: Annual show; Memphis Archaeological & Geological Society; Memphis International Agricenter; 7777 Walnut Grove Rd.; Sat. 9-6, Sun. 10-5 Web site: www.TheEarthWideOpen.com

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: Carl Campbell (cecampbell@stlcc.edu)

Vice-President: Faye Whobrey

(ewhobrey@sbcglobal.net)

Treasurer: Rick Poropat (poropatr@att.net)

Secretaries: David Lukens

(dmslukens@yahoo.com, cel 636-751-8746) and

Ryan Fairbanks

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

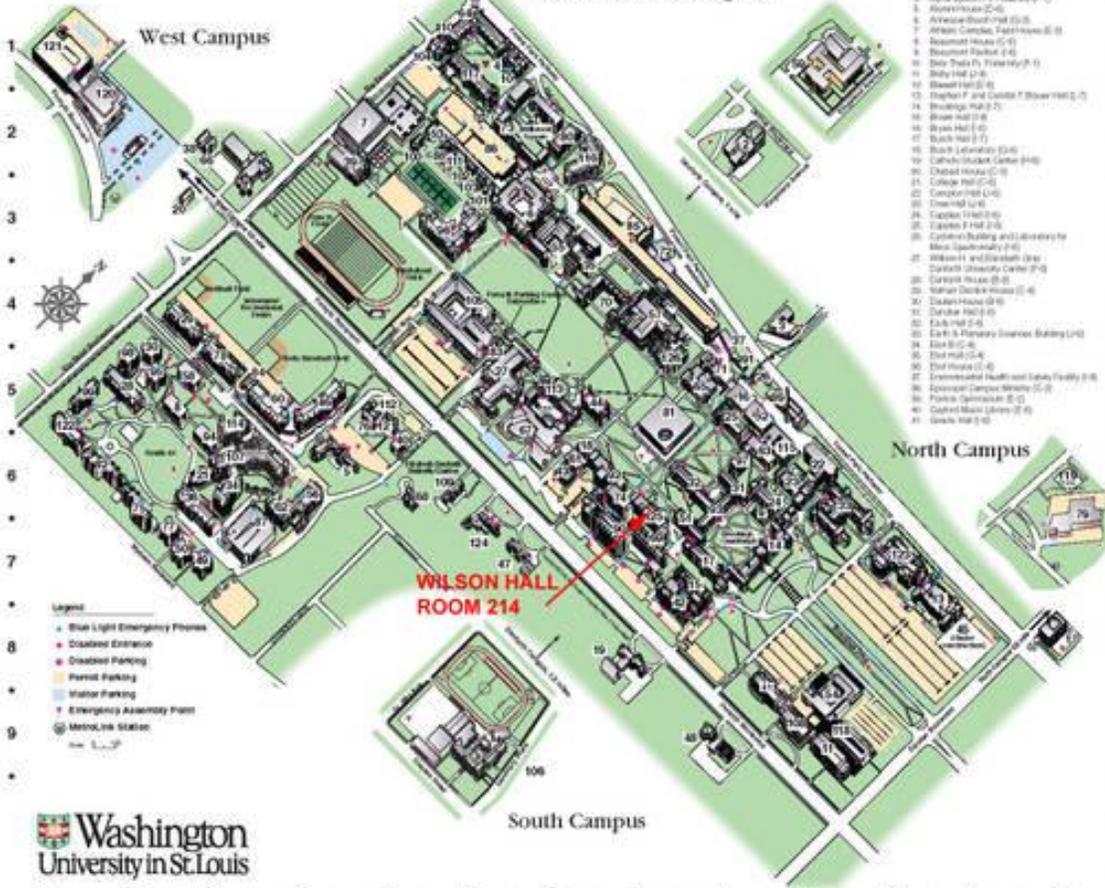
Can't find your newsletter, just when you need it for a trip? Then sign up for the e-mail version. This also saves the club money so we can bring in speakers (once we pick some...) E-mail requests to dmslukens@yahoo.com



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.

A • B • C • D • E • F • G • H • I • J • K • L • M

Danforth Campus



- Legend**
- Blue Light Emergency Phones
 - Disabled Entrance
 - Disabled Parking
 - Permit Parking
 - Visitor Parking
 - Emergency Assembly Point
 - MetroLink Station

1. 214 N. Center St. B
2. 1st Music Center B-2
3. Academic Building C-4
4. Alpha Chapter, Phi Kappa Phi Fraternity F-3
5. Alumni House C-4
6. Aronson Hall C-4
7. Artiles Center, East House B-3
8. Beaman House C-5
9. Beaman Student C-5
10. Bels Tower, Phi Kappa Phi Fraternity F-3
11. Bels Hall D-6
12. Bels Hall D-6
13. Bels Hall D-6
14. Bels Hall D-6
15. Bels Hall D-6
16. Bels Hall D-6
17. Bels Hall D-6
18. Bels Hall D-6
19. Bels Hall D-6
20. Bels Hall D-6
21. Bels Hall D-6
22. Bels Hall D-6
23. Bels Hall D-6
24. Bels Hall D-6
25. Bels Hall D-6
26. Bels Hall D-6
27. Bels Hall D-6
28. Bels Hall D-6
29. Bels Hall D-6
30. Bels Hall D-6
31. Bels Hall D-6
32. Bels Hall D-6
33. Bels Hall D-6
34. Bels Hall D-6
35. Bels Hall D-6
36. Bels Hall D-6
37. Bels Hall D-6
38. Bels Hall D-6
39. Bels Hall D-6
40. Bels Hall D-6
41. Bels Hall D-6
42. Bels Hall D-6
43. Bels Hall D-6
44. Bels Hall D-6
45. Bels Hall D-6
46. Bels Hall D-6
47. Bels Hall D-6
48. Bels Hall D-6
49. Bels Hall D-6
50. Bels Hall D-6
51. Bels Hall D-6
52. Bels Hall D-6
53. Bels Hall D-6
54. Bels Hall D-6
55. Bels Hall D-6
56. Bels Hall D-6
57. Bels Hall D-6
58. Bels Hall D-6
59. Bels Hall D-6
60. Bels Hall D-6
61. Bels Hall D-6
62. Bels Hall D-6
63. Bels Hall D-6
64. Bels Hall D-6
65. Bels Hall D-6
66. Bels Hall D-6
67. Bels Hall D-6
68. Bels Hall D-6
69. Bels Hall D-6
70. Bels Hall D-6
71. Bels Hall D-6
72. Bels Hall D-6
73. Bels Hall D-6
74. Bels Hall D-6
75. Bels Hall D-6
76. Bels Hall D-6
77. Bels Hall D-6
78. Bels Hall D-6
79. Bels Hall D-6
80. Bels Hall D-6
81. Bels Hall D-6
82. Bels Hall D-6
83. Bels Hall D-6
84. Bels Hall D-6
85. Bels Hall D-6
86. Bels Hall D-6
87. Bels Hall D-6
88. Bels Hall D-6
89. Bels Hall D-6
90. Bels Hall D-6
91. Bels Hall D-6
92. Bels Hall D-6
93. Bels Hall D-6
94. Bels Hall D-6
95. Bels Hall D-6
96. Bels Hall D-6
97. Bels Hall D-6
98. Bels Hall D-6
99. Bels Hall D-6
100. Bels Hall D-6
101. Bels Hall D-6
102. Bels Hall D-6
103. Bels Hall D-6
104. Bels Hall D-6
105. Bels Hall D-6
106. Bels Hall D-6
107. Bels Hall D-6
108. Bels Hall D-6
109. Bels Hall D-6
110. Bels Hall D-6
111. Bels Hall D-6
112. Bels Hall D-6
113. Bels Hall D-6
114. Bels Hall D-6
115. Bels Hall D-6
116. Bels Hall D-6
117. Bels Hall D-6
118. Bels Hall D-6
119. Bels Hall D-6
120. Bels Hall D-6



A • B • C • D • E • F • G • H • I • J • K • L • M

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.

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

FIRST CLASS MAIL

