

# The Paleo Times

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## 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](mailto:dmslukens@yahoo.com) (personal).

### Next meeting

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

## PRESIDENT'S CORNER

I hope to see every one of you at the March meeting. Remember there is a board meeting at 6:45. Anyone interested or with concerns or ideas for the betterment of the club is welcome to join us.

Your Prez, Don Howell III

## Thanks / Congratulations

Thanks to Carl, Rich, Lisa, Pat, Marie, and Carlton (and anyone I missed) for going to the Tucson and helping to get the things for us to sell and to Pat for bringing them back. Thanks to Pat, Marie, and Carl for their slide show presentation on the Tucson show.

We would also like to welcome some of our recent members Calvin, Dave and family, and Steve. Welcome to the club.

A huge congratulations to Stephanie (Novak) Kuster. She recently accepted a job as adjunct professor in Geology at Bentley University near Boston MA. She and her husband are also awaiting their first child, a girl, due in May.

## Treasurer's Report

Club members may hear the treasurer's report at the monthly meeting.

## NEXT MEETING

- .Other items to be discussed during the next meeting
- Start planning for the field trips in the spring.
  - Mastodon State Park Show?

## Upcoming Events/ Field Trips

Remember that annual dues were due starting in January. If you have not paid, please get your money in. If it is not paid by March 1<sup>st</sup>, your newsletters will stop.

Fossil collecting at Lee Creek Mine, Aurora, NC has been suspended until Spring. PCS Phosphate are working in the collecting trip staging. All volunteer hours for 2010 will be counted for the 2011 season

We have arranged a lot of field trips for the spring, dates and descriptions are provided below.

March 27, 2010 (Saturday) – Field trip to MAPS (Mid-America Paleontology Show) at Macomb Illinois (Western IL University). We will be meeting to form a carpool to go the MAPS fossil show. It is billed as the largest Fossil only show in the USA. There are lots of displays and many fossils for sale ranging from a couple of dollars to tens of thousands of dollars. MAPS is on March 26, 27, and 28 (Sunday is pretty dead). We will be traveling up on Saturday March 27 and coming back late in the day. It is between 3 to 3 ½ hours each way so expect a long day. More details on departure time and site will be available at the next meeting.

April 3, 2010 (Saturday) – 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 Stade. Access to the quarry is only available to groups and not to individuals. 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 steel toe shoes / boots are required. You will be rock hammers and probably chisels as the rock is hard. Map will be available at the next meeting. General directions are I-55 south to I-155 (20 miles north of AK border). I-155 east to Hwy 412. Hwy 412 south to Jackson then to Parsons. Most of road is 4 lane. Quarry is north of town (Parsons) on Hwy 69. Meeting site is Hardee’s restaurant in Parsons at 7AM on April 3 on Hwy 69 just north of Hwy 412. Local hotel is Deerfield Inn. Mousetail Landing State Park is nearby and has camping.

April 25, 2010 (Sunday) – Field to Bruce’s Barite Pit. Location is just off of Route 21 about 15 miles north of Potosi and across the Highway from Washington State Park. This is about 1 hour from I44 & I270. We will need to carpool to the site as it is about 5 miles down a gravel road on property owned by Bruce. Without him leading, you will not find it. We will be arranging a meeting point to depart from more details will be available later. We will be leaving at 9AM in the morning for the site. There are some fossils at the site (difficult to find) but it is a trove of crystals and minerals including barite, druzey quartz and other things laying everywhere.

May 22, 2010 - Combined field trip with Greater St. Louis Rock & Gem club to Mark Twain Lake (about 3 hour drive) on May 22<sup>nd</sup> (Saturday). We had great success on this trip last year. More details as the date gets closer. We will be meeting at the at one of the Marina (exact one to be decided) at 10:00am with departure promptly at 10:30. We are usually out on the lake for at least 3-4 hours so you will need to bring lunch & drinks for yourself. Cost of the boat rentals will be split between the people taking the trip, typically the cost for the rental is between \$10-15 per person. This is a great family trip. Again, we would like to know ahead of time how

many people will be going so we know if we need to reserve 1 or 2 boats.

June 12, 2010 (Saturday) – Field trip for collecting at the Chronister site in southern Missouri. Bruce Stinchcomb is planning to open up an area of Ordovician deposits containing brachiopods and corals that are silicized (sp?) for collecting for the club. Departure site will be the commuter parking lot located at the south-west corner of I-55 and Richardson Road. From there we will carpool down to the site. It is about a 2 ½ - 3 hour drive. We will leave the lot at 9:30am so I would suggest you be at the parking lot by 9:15 am. This will be the first time for collecting at this spot in at least 10 years. The trip is based on Bruce arranging for a backhoe to open up the site the weekend before.

The annual EMSP picnic will be on Sunday, August 15<sup>th</sup> at the Lion's Pavilion in Kirkwood Park, mark your calendars.

The 2010 Viking show will be November 19-21. EMSP has the same location as previously with is assigned the same location as last year, including two 8 ft tables with plenty of room for back tables. There are two additional 8 ft. display tables in the lobby area and that are offered to EMSP for display

### **Notes from the Meeting**

Collections are still ongoing for Joe’s Scholarship Fund and Karoline Stinchcomb funds.

Current membership stands at approximately 67 e-mail + 17 letters. Last meeting the room was completely full with no empty seats. We had 3 new members or guests at the meeting.

We were able to see the supply of fossils purchased at the Tucson show.

At the March Meeting we will be having a meeting of the members of the board of EMSP starting at 6:45 PM, prior to the regular meeting. If you are an officer of the club or a member of the board of directors, please try to attend.

At the Feb meeting a number of items were auctioned off to club members. The items are listed below along.

Carl Campbell's newest addition of his Earth Science Text Book.

Barbie Paleontologist (donated by Stephanie Novak)

Dino Puzzle

Walking with Dinosaurs guide

Bruce Stinchcomb's latest book (Cenozoic fossils) -. He will have this book for sale at future meetings.

Carl Campbell attended a recent meeting of the Greater St. Louis Association of Earth Science clubs and passed on some information (they host the Viking show).

- Dues for EMSP are around \$40, but we get it back in what we make as our share of the Viking show.
- There will be no swap area at the show next year (were one two people this year). EMSP has been asked to run the display area at the front. We will need to put the display boxes up and arrange for people to display at the Viking show. We feel that the club should be able to fill up at least a couple of the display cases.
- We need to put a list of speakers together including people from EMSP that can speak at our club and at other clubs. If you have a subject you would like to talk on, please let us know.
- The association also runs a Scholarship fund open to members of the various clubs and their children. It is up to \$350/student. It is focused on study of Geology or science but is open to other fields depending on how many people apply. Carl C. has he forms.

Rick is working on organizing the fossils and minerals donated by Addie to the club. Some of them will require prep work or cutting. Once Rick has determined what needs to be done, we will be looking for volunteers to help with the prep work.

## 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://news.discovery.com/dinosaurs/dinosaur-freeway-near-british-motorway-gains-protection.html>

A huge set of 165 million year old dinosaur trackways in England have now been protected. The tracks from both sauropods and from Tyrannosaurs, are located in Oxfordshire near the M40 road. These are the first tracks of this type in England and are uncommon. They will be protected from both erosion and from weather so scientists can study them.

<http://blog.taragana.com/science/2010/03/02/scientists-find-fossil-of-ancient-snake-killed-while-dining-on-dinosaur-eggs-in-india-7490/>

Apparently ancient mammals were not the only animals to go after dinosaur eggs. Recently in India, a 67 million year old snake was found fossilized around a dinosaur egg. The 12 foot snake apparently ate both eggs and baby sauropods. This also indicates that snakes may have developed specialized jaws as much as 100 million years ago. The fossil remains were first found in 1987 and contained snake bones among the broken egg shells and baby dino bones. Originally only the egg and dinosaur bones were identified and it was not until 2001 that the snake's bones were noted. The snake named *Sanajeh indicus*, is believe to have been eating the eggs when it and the eggs were buried by either a storm or other disaster. Further examination of the site found at least 30 sauropod nests and two other snakes.

<http://blog.taragana.com/science/2010/02/23/paleontologists-new-species-of-long-necked-dinosaur-found-hidden-in-slabs-of-utah-rock-7016/>

Bones from 105 million year old dinosaurs, including a previously unknown species have been found in Dinosaur National Monument. The slabs where the bones were found were so hard that explosives were used to remove some of the remains. The bones included the complete skulls of two sauropods. Of the 120 sauropods species, only 8 species have had skulls found because the skulls are thin and fragile. The bones of the *Abydosaurus mcintoshi*, are in a quarry found in 1977 where excavations started in the 1990's. The skulls were

found in 2005. The rock was so hard that it could not be removed with jackhammers or concrete saws so hand placed explosives were used. The remains of at least 4 juvenile dinosaurs about 25' long have been found so far. The skulls, one intact and the other broken provide evidence that the sauropods simply grabbed and swallowed their food without chewing. What would their mother's say!. Previous evidence show that early sauropods had wide teeth and later ones had narrow pencil like teeth. The teeth of these sauropods are in between.

<http://news.bbc.co.uk/2/hi/science/nature/8547735.stm>

A new species of herbivore animal which predated the dinosaurs and is dated to 245 million years ago has been found. The *Asilisaurus kongwen* comes from about 10 million years before dinosaurs appears and is a member of the group silesaurs, which along with dinosaurs, pterosaurs, and several crocodile like animals began to diversity at this point in time. Scientists had thought the early relatives to dinosaurs would be small two legged meat eaters but this animal was 4 legged, had a beak, and ate plants. But it shows an evolutionary step between primitive reptiles and dinosaurs. But these types of animals only survived about 45 million years before going extinct.

<http://news.bbc.co.uk/2/hi/science/nature/8502076.stm>

Paleontologists in China have announced the discovery of a trackway with over 3,000 dinosaur prints near the area of Zhucheng. The area has become famous because of the fact that there are nearly 30 sites with dinosaur fossils in the area. The tracks covering an area a little over 1/2 acre date to 100 million years ago and may be from a migration. The prints vary from 4 to 24 inches long and come from a variety of animals including tyrannosaurs, coelurosaurs and hadrosaurs.

<http://news.bbc.co.uk/2/hi/science/nature/8481448.stm>

Paleontologists studying the remains of 125 million year old dinosaur *Sinosauropteryx* have been able to determine the color of its feathers which are ginger color. In addition, it had a striped tail and a ridge of feathers along its head and back. The color was determined based on the shape of the melanosomes in the feathers. The shape of these features determine the color. Long thin one produce blacks

or grays and round ones produce reddish or ginger colors. The turkey sized *Sinosauropteryx* had round features which would have made the feathers ginger colored. It also shows that primitive meat eating dinosaurs really had feathers indicating the birds likely evolved from them. Previously some scientists have claimed that the spiny structures were damaged connective tissues. It also indicates that feathers developed for insulation or display and not for flight initially.

<http://news.bbc.co.uk/2/hi/science/nature/8550504.stm>

### **An international panel of experts has strongly endorsed evidence that a space impact was behind the mass extinction event that killed off the dinosaurs.**

A large panel of experts at the 41st Lunar and Planetary Science Conference, after reviewing 20 years of research, have agreed that the evidence points to the impact of an asteroid as the cause of the K-T extinction 65 million year ago that killed off half of the species on Earth. The asteroid impact at Chicxulub on Mexico's Yucatan Peninsula was likely caused by a rock 10-15 km in size the released the energy equal to a billion atomic bombs. The panel discarded the theory of volcanic eruptions as the cause of the extinction. Evidence site includes the distribution of debris across the globe that gets thicker as you get closer to Mexico.

<http://www.livescience.com/animals/polar-bear-dna-100301.html>

DNA recovered from a polar bear jawbone found on an island off Norway indicate that polar bears originated about 150,000 years ago. The bone, found in 2004, is between 110-130,000 years old. Using mitochondrial DNA from this bone and from modern polar bears and modern brown bears, scientists were able to construct a family tree. They were able to determine that this bear is from a time almost when polar bears split from brown bears. While brown bears can thrive in a variety of environments, polar bears are adapted to a specialized environment. For spend much of their life on the ice and feed on a few species of seals. But the changing environment may not allow them to adapt quick enough to survive.

<http://www.livescience.com/animals/clawed-dinosaur-birds-100128.html>

Scientists in China have named a new species of dinosaur *Haplocheirus sollers*. The 160 million year old 2 legged meat eater probably fed on termites and other small animals. They were bird like animals with short strong arms with one large claw. They stood about 7 feet tall and weighed 30 pounds. They are part of the family Alvarezsauridae, which previously had only been traced back 85 million years. Later varieties have a much larger single claw on the hand that is 2x as long and 5x as wide as its other claws. This species had a mouth like an anteater and its claws are 1.5x as long and 2x as wide as its other claws.

From Jim Hickner

<http://news.discovery.com/dinosaurs/stolen-rare-dinosaur-skeleton-found-in-montana.html>

The dinosaur that was at the center of a controversy surrounding Nate Murphy has been given to the Black Hills Institute. The skeleton was removed from private land without the owners permission and after a court case Mr. Murphy was sentenced to 60 days in jail in state court for removing the 70 million year old turkey sized raptor. In a separate case, he was also sentenced in federal court to 4 months in a halfway house, probation, and fined over \$17,000. The raptor skeleton had been returned to the landowners, the Bruckner's who sent it to the Black Hills Institute. They hope to finish preparation of the skeleton before summer. Two museums have already expressed interest in buying it. The institute will be allowed to recover the money they have spent on preparing the fossil by selling replicas for around \$12,500 each. One replica will be donated to the new dinosaur museum in Malta.

### Upcoming Gem & Fossil shows-

MAPS 2010 – Western ILL University, Macomb IL  
March 26-28, 2010.

### Reports

If you have suggestions for field trip locations, please e-mail them to me and I will begin putting together a list.

### NEEDED

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.

### 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 – Don Howell

([donhowelliii@sbcglobal.net](mailto:donhowelliii@sbcglobal.net))

Vice-President: Bruce Stinchcomb

Treasurer: Pete Smith

Secretaries: David Lukens

([dmslukens@yahoo.com](mailto:dmslukens@yahoo.com)) and Peggy Cole

### DUES ARE DUE

Our treasurer, Pete Smith 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 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 we pick some...) E-mail requests to [dmslukens@yahoo.com](mailto:dmslukens@yahoo.com), [motirek@gmail.com](mailto:motirek@gmail.com) or [abfactor@gmail.com](mailto: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.

# 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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