



# The Exposure

Journal of the Kansas and Missouri Paleontological Society

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Web Site - [ksmopaleo.org](http://ksmopaleo.org)

February 2012

**2012 Officers of the  
Kansas and Missouri Paleontological Society:**

Ken Stalder - President - 816-807-3094  
Ron Pridgen - Vice President - 816-781-5719  
Katie Moore - Secretary - 913-334-5281  
Dennis Whitney - Treasurer - 816-763-9351

**2011 Board Members:**

Ron Pridgen  
Don Smith  
Bruce Wake  
Jim Hedstrom  
Marc Smith

**2011 Gem & Mineral Show Association Representatives:**

Ken Stalder - Delegate  
Don Smith - Delegate  
Marc Smith - Alternate  
Katie Moore - Alternate

**School Display Committee:** Gilbert Moore

**Museum Display Committee:** Tim Kearns

## December 2011 Meeting Announcement

The February 2012 meeting will be on the 19th from 2:00 P.M. to 4:00 P.M. at Park University, in Parkville Missouri in the Science Building, Room 5. The building is located in the middle of the campus. Take Highway 9 to 6th Street in Parkville, just 2 blocks north of the Post Office, then east on 6th to a street just past the large domed gymnasium on the right. Turn right and continue on this street. Parking is available on the right side of the street or drive past the large natural limestone building which is the science building and park in the nearby lots. The classroom is in the basement at the south end of the science hall. Entrance is easiest at the south end of the building.

Regular meetings for the following months will usually be held on the 3<sup>rd</sup> Sunday of the month at 2:00 P.M. Check with the web site [www.ksmopaleo.org](http://www.ksmopaleo.org) for changes. Remember club dues in January and the KC Gem Show in March from the 9<sup>th</sup> to 11<sup>th</sup>.

The January meeting was attended by 23 members of the society. Our program was held at Princess Gardens on Wornall Road in Kansas City. Lunch was followed by a great lecture and Power Point Presentation by Dr. Stephen T. Hasiotis, Professor of Geology at the University of Kansas at Lawrence. His topic was "Trace Fossils of the Antarctic", which he conducted in the winter of 2011. His lecture was both fascinating and very informative. Many of the members brought in specimen they had collected for Dr. Hasiotis to identify. We really put him to work, sorry for that. I hope he becomes a permanent part of our group so we can continue to learn from him and we can in-turn provide him with assistance in finding and studying trace fossils of the Kansas City area.

**Paleo-Shorts by way of The Paleo Times Dec 2011**  
Eastern Missouri Society for Paleontology

**Paleo-Shorts by David Lukens**

-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.livescience.com/17615-ancient-fungi-plant-symbiosis-amber.html>

A 52 MYA piece of amber from India has been determined to be the oldest example of a symbiotic relationship ever found. Inside of the amber was a fungus attached to a plant root, the fungi's cells act to increase the surface area of the roots to allow it to get more food. Pollen in the amber identified the tree as being from the Dipterocarpaceae family, common in rainforests. Melanin, a black pigment, was also found in the amber, the first fossil of this that has been found.

<http://www.sciencecentric.com/news/11120221-archaeologists-find-new-evidence-animals-being-introduced-prehistoric-caribbean.html>

Scientists investigating the small island of Carriacou in the Caribbean have found the remains of a diverse group of non-native animals. At least 5 different species including pigs, armadillos, guinea pigs, and small rodents were brought to the island by humans between 1,000-1,400 years ago. Based on the limited locations where remains were found it is likely that the animals were used in rituals. The remains were found at 2 distinct sites and dated to between 600-1400 A.D., though some were present for shorter periods of time. Non-native remains have been found on other Caribbean islands before but not in this variety and never including guinea pigs. This combined with indications of trade items from other islands and South America indicates that this island may have been an important intersection point of a large trading system.

<http://www.sciencedaily.com/releases/2011/12/111221092001.htm>

Scientists studying evolutionary changes in fish after mass extinctions have determined that the head is the first section to change, before the body changes. This was determined by looking at the physical features and indicates that feeding pressures are the main drivers for changes. The diet and feeding habits cause changes such as crushing jaws, large teeth, etc. on bodies that have not changed. These changes show the adaptive radiations that occur after a large extinction within a group. There two models for adaptive radiations, one is single burst and the other is a series of stages where habitats cause the body to change following by changes in the head. But neither has been verified by looking at fossils after extinctions before. The new study looked at two different types of fish, one after an extinction event 360 MYA and another at the end of the age of dinosaurs another extinction event. The scientists looked at different physical features but separated the analysis of the body versus the head. The two types cleared showed head changes before body changes.

<http://www.sciencedaily.com/releases/2011/12/111227093055.htm>

A study of mammals in North America over the last 65 million years indication that climate changes were one of the principal drivers of 6 waves of mammal diversification. While it was previously known that mammals change with climate, this is the first time it has been tied clearly to the climate change, but that it is also altered by other factors such as migration. Of the 6 diversification waves studied, 4 show significant correlations to large changes in temperatures, the other two episodes show a weaker connection but also related to immigrations of large numbers of mammals from other continents. This study looked at not only the change in species versus temperature but also showed that characteristics within a species also changed as the climate changed. Around 20 MYA when North America moved from woodland to grassland, the teeth of the herbivores changes to high crowned teeth more adapted to eating grasses.

<http://www.sciencedaily.com/releases/2011/12/111219102054.htm>

Paleontologists from Argentina have reported finding for the first time, the fossils of a large titanosaurs in Antarctica dated to between 65-99 MYA. Previously, large sauropod herbivores have been found on all continents except Antarctica. This group has more than 150 different species, some of which were the largest of land animals. Only a tail vertebra was found but the morphology shows it to be a titanosaur.

<http://www.vancouversun.com/technology/Yukon+permafrost+yields+answers+mysteries/5914237/story.html>

A Canadian scientist, with assistance from a miner in the Klondike has found important new Ice Age fossils. The scientist was contacted by a miner who assisted him in previous years in digging up mammoths, cats, and bears. The miner was exposing a large wedge of permafrost that the paleontologist was interested in. In addition to mammoth bones, the skull of a giant horse was also found, something unique. The animal, the size of a modern Clydesdale, is rarely seen in North America but would have been better adapted to escaping from short faced bears and American lions. Previous excavations in the 1960's and 1970's found remains of mammoths, felines, and giant beavers indicating that they lived on a vast steppe clear of ice because the dryness prevented glaciers. But because of low sea levels, animals were able to migrate from Siberia. Various theories exist as to why these animals went extinct but none have been proven. Several years ago paleontologists found evidence indicating that some animals such as mammoths and giant horses continued for thousands of years past the periods of rapid warming, possibly finding small refuges where they could survive. Evidence in that case was not in bones, but in DNA found in hair, feces, and urine found frozen in the permafrost.

<http://www.paleontologynews.com/link.asp?ID=1532049&Title=12:59>

Fishermen in Turkey have found the remains of a 10 MYA whale fossil. While fishing, the men recovered some strange stones which they took to a university to identify. They were sent onto experts who identified them as whale bones including arm and rib bones. This is the first fossils of baleen whales found in Turkey.

## **Upcoming shows**

### **January 2012**

1-31—QUARTZSITE, ARIZONA: Wholesale and retail show; Desert Gardens RV Park; 1055 Kuehn St.; I-10 Exit 17; Sun. 9-6 daily; free admission; crystals, minerals, rough, polished, jewelry Web site: [www.desertgardensrvpark.net](http://www.desertgardensrvpark.net)

### **January 2012-February 2012**

Jan 28-Feb 11—TUCSON, ARIZONA: Arizona Mineral & Fossil Show; Martin Zinn Expositions; Ramada Ltd.; 665 N. Freeway; Thu. 10-6 daily; free admission; more than 400 dealers, free shuttle among locations, Artists' Gallery at the Hotel Tucson City Center; contact Martin Zinn Expositions, PO Box 665, Bernalillo, NM 87004-0665; e-mail: [mzexpos@gmail.com](mailto:mzexpos@gmail.com); Web site: [www.mzexpos.com](http://www.mzexpos.com)

### **March 2012**

2-4—RICHMOND, INDIANA: Annual show; Eastern Indiana Gem & Geological Society; Wayne County Fairgrounds; 861 N. Salisbury Rd.; Fri. 10-6, Sat. 10-6, Sun. 11-4.

9-11—Kansas City, Missouri: 51<sup>st</sup> Annual Greater KC Gem & Mineral Show; at KCI Expo Center-11730 NW Ambassador Dr. Exit 112<sup>th</sup> St. off I-29 or KCI Exit off I-435; [www.kcgemshow.org](http://www.kcgemshow.org) or [www.gemshowkc.org](http://www.gemshowkc.org) Coupons available on-line.

23-25—INDIANAPOLIS, INDIANA: 14th Annual Indianapolis Spring Gem, Mineral & Jewelry Show; Treasures of the Earth Gem & Jewelry Shows; Indiana State Fairgrounds - Agriculture/Horticulture Bldg.; 1202 E. 38th St.; Fri. 10-6, Sat. 10-6, Sun. 11-5; Web site: [www.toteshow.com](http://www.toteshow.com)

30-April 1—National Fossil Exposition XXXIII sponsored by MAPS Mid America Paleontological Society: at Western Illinois University, Macomb, Illinois; Web Site: [www.midamericapaleo.org](http://www.midamericapaleo.org) Free Admission.

### 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](http://www.TheEarthWideOpen.com)

### KC Gem & Mineral Show

As members of the Association of Earth Science Clubs of Greater Kansas City we at KMPS are ask to support the March Gem and Mineral Show with a few jobs that need our assistance. The show is open from 9am to 8pm on Friday, 10am to 7pm on Friday and 10am to 5pm on Sunday. We are asking for volunteers to work one or more of the jobs listed below. Please let me know which jobs and when you are willing to sign up for by mail, e-mail [gilparker@comcast.net](mailto:gilparker@comcast.net) or phone 816-678-1943 or contact Ken Stalder at [kstalder@kc.rr.com](mailto:kstalder@kc.rr.com). Just a few hours of your time would be greatly appreciated. And remember, we currently get into the show Free with our paid club membership. Without volunteers I don't know how long "Free" will last.

**AD = Admissions** - Sell tickets (handle money), (or) stamp hands, and give program books.

**DM = Demonstrations** - Sit in demo area working on a project of your choice.

**SU = Set Up - Wednesday** (set up tables, cover tables), **Thursday** (covering tables, placing signs, serving pot-luck dinner or set up displays)

**BS = Banner** Hang various banners on the walls.

**SA = Silent Auction** - Collect & display auction items, keep track of hourly deadlines, etc.

**LA = Live Auction** - This is on Saturday night only, after show closes. Need runners to move items from display to projector, then to highest bidder. Or help treasurer keep track of bids.

**IB = Info Booth** - Make announcements on loudspeaker system and direct people as needed. (David Wright usually does this, but he needs assistance for breaks)

**AB = Association Booth**. Sell rock, fossil and mineral samples and answer questions as needed at the Association booth.

### FYI Club Displays

Private displays of our collections will be setup on Thursday anytime until 8pm. Each club usually receives \$20 dollars returned to the club treasury for each display. So help us support the KMPS treasury with you display. Gil Parker has an extra display case if you need one.

## Dues are due by the end of January 2012

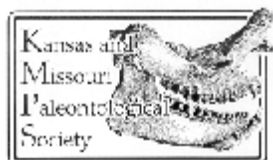
### KMPS Membership Form

The Kansas and Missouri Paleontological Society would like to have you and your family as members. Memberships are \$12.00 for one year (January through December.) These fees will cover printing and postage for bulletins which will include meeting announcements and news in the field of paleontology and other minor expenses. We hope that you can join us in our exciting and informative new adventure. For more information contact: Gilbert Parker @ 816-373-9453.

Names of all family members:	
Mailing address:	Apt.:
City and State:	Zip code:
Phone numbers:	
E-mail address:	
Special Paleontological interests, comments, questions:	

Please make checks payable to the Kansas and Missouri Paleontological Society or (KMPS)  
c/o Gilbert Parker, 15505 E. 44th Terrace, Independence, MO 64055.

**website at [www.ksmopaleo.org](http://www.ksmopaleo.org)**



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FIRST CLASS MAIL

Dated Material - Meeting Notice