

# The Paleo Times

Volume 16 Number 11

December 2017

The Official Publication of the Eastern Missouri Society for Paleontology

Rick Poropat, Editor

## Presidents Corner

The winter season is upon us. It's time to stop collecting and finally clean up and label everything you collected this year. Ha, Ha. It's also time for elections which were postponed to our holiday party. Let's make that segment nice and short so we can get on with the food and party games. I'm hoping some newer members or ones that have never been officers have decided to step up to help keep the club going. FYI- the vice president would not like to be president again until he has retired in a few years so we do need a vice-president and president in addition to the other positions we will announce.

I hope I did at least an adequate job keeping the meetings and club activities interesting. It is hard to accomplish everything you had in mind while president. I still have a few activity ideas to pass on; and plan to accomplish some club related paperwork and speaker contact lists. Traditionally the former president attends some board meetings to help transition so no one needs to be an expert on fossils or media relations.

I would also like to take this time to thank all of the current/transiting officers and volunteers for their hard work to balance the books, put out newsletters, take notes, follow up on insurance issues, and arrange our booth sales.

See you at the party,

Abby

## Treasurer's Report

The end-of-November club account balance is available by request from the treasurer.

## Calendar

### 2017

Dec. 16 Holiday Party  
Kirkwood Community Center

### 2018

Jan.27-Feb. 10 Tucson Gem, Mineral & Fossil Show  
Many Venues, Tucson, Arizona

Feb 16-18 Cabin Fever Show  
Kirkwood Community Center

Feb 16-18 Geofest Show  
Indiana State Museum  
Indianapolis, Indiana

Mar. 23-25 Rock Hobby Show  
Machinist Hall Auditorium  
Bridgeton, Missouri

Apr. 6-8 MAPS Fossil Exposition XL  
Sharpless Auction Facility  
Iowa City, Iowa

Apr. 14-15 S. Illinois Each Science Club Show  
Marion, Illinois Pavilion

## DUES ARE DUE

Dues for 2018 are payable in January and are \$20.00 per household per year if receiving the newsletter by e-mail or \$25 for those receiving the newsletter by regular mail. See Rick Poropat at the January meeting or mail a check (payable to Eastern Missouri Society for Paleontology) to:

**EMSP**

**P.O. Box 220273**

**St. Louis, MO. 63122**



## DID YOU KNOW?

New analysis of Chicxulub asteroid suggests it may have struck in vulnerable spot.

*Phys.org* has a story about the Chicxulub asteroid that took out the dinosaurs. A paper published in the journal *Scientific Reports* suggests that had the asteroid struck the Earth in a different location it is possible the non-avian dinosaurs may have survived the event. The researchers from Tokohu University analyzed multiple data sources about the area surrounding the impact. The resulting simulation showed how much soot was generated by the hydrocarbons in the ground under and around the impact site.

Scientists around the world have reached a consensus regarding the reason that the dinosaurs (except for bird relatives) went extinct—a large asteroid struck the Earth just off what is now the Yucatan peninsula, hurling so much soot and other material into the atmosphere that the planet became too cold (for approximately three years) for the dinosaurs and most other land animals to survive. But now, it appears that they might have survived had the asteroid struck almost anywhere else.

To learn more about the event that had such a huge impact on the history of our planet, Kaiho and Oshima used a computer to analyze multiple data sources surrounding the impact and the location where it struck—the resulting simulation showed how much soot would have been generated based on the amount of hydrocarbon material in the ground near the impact site. Such hydrocarbons would include not just oil or coal deposits, but other rocks that also contained oil—more hydrocarbons would mean more soot and gases making their way into the atmosphere. The research team also created a density map that illustrated surface hydrocarbon densities across the globe at the time.

They found that the site where the asteroid struck was particularly dense in hydrocarbons; 87 percent of the planet surface was less dense. That means, they claim, that if the asteroid had struck a place where it was less dense (which would have been almost anywhere else), much less soot would have been generated, and thus, the planet would not have cooled as much. If the planet had not cooled so much, the dinosaurs might have survived, and that might have meant that we humans would never have had a

## Holiday Party

Our annual holiday party will be held on Saturday, December 16 in room 201 A&B of the Kirkwood Community Center. This event is for **Members-Only**.

Set-up will begin about 6:15pm with festivities beginning at 7:00. The community center is located on Geyer Road, just south of the Geyer Road/Adams intersection. There is plenty of lighted parking available on the west side of the building. The party room is on the second floor. Stairs and an elevator are located in the lobby to the left of the main desk.

EMSP will provide turkey & ham, sliced cheese, condiments, bread, ice, plates, cups, napkins and plastic ware. Members are asked to bring something to share with others. Suggested items include: appetizers, salads, hot dishes, (baked beans, potato casseroles, etc.) desserts & non-alcoholic drinks such as juice, soda or apple cider. BYOB. (beer & wine only, please.) We don't have a permit for anything stronger.)

There will be entertainment! This year we will be playing *Dino Bingo* for some great prizes. We will also hold our election of officers, which was postponed from the November meeting.

## Field Trip Report

Fourteen members attended the fall trip to central Mississippi in the hope of finding new fossils not available in the St. Louis area. They didn't not come home empty handed.

Our original plan was to visit a large limestone quarry near Bay Springs to collect a variety of Oligocene marine fossils. Unfortunately, heavy rain a few days before our trip caused us to change plans. Our first stop was to a Lower Eocene site along the Chickasawhay River to collect echinoids. Imbedded in a rotten sandstone, collecting was easy! There were literally thousands of pieces and complete specimens to choose from. Other fossils found included gastropods, bivalves and coiled cephalopods. Everyone collected a bag full of specimens.

Our second stop was to a "road cut" south of Meridian to collect Middle Eocene fossils. The term "road cut" is used loosely since the area was nothing more than a bare spot along the highway. Driving by, I would never have thought to look for

a large variety of very interesting fossils (although most were small) including: corals, bivalves, gastropods, bryozoans and echinoids. Just goes to show that we never know where we will find fossils. It pays to stop at insignificant-looking sites!

Thanks to George Phillips for leading this very successful trip! Maybe the weather will cooperate next time and we will find ourselves collecting Oligocene fossils in that quarry.



Collecting Eocene Echinoids near Enterprise, MS.



A view of the Middle Eocene "road cut".

## Rick's Ramblings

As the year winds down, I hope many of you will be able to join us on December 16 for our annual holiday party. Everyone always has a good time playing the games and the food and fellowship is outstanding!

**A Big Thanks** to our volunteers who staffed the club booth and helped take down tables at the Affton show! Your hard work helped make this our best show ever, and providing important outreach to the public.

We are also working to become involved with the Rock Hobby show in March at Machinist's Hall, either as a vendor or a demonstrator. It probably won't happen in 2018 unless a dealer cancels, but we remain optimistic for the future. Our continued association with GSLAESC and their August show at Machinist's Hall remains questionable.

If I don't see you at our holiday party, I wish everyone a Happy Holiday and a Happy New Year! See you in January.

## Fossil of the Month



The fossil for the month of December is the Lower Carboniferous (Mississippian, Chesterian) crinoid *Onychocrinus* sp., Lyon and Casseday, 1860, from the Ridenhower Formation, Paint Creek Group, Vogel School locality near Floraville, Illinois. (age range: 353.8 to 318.1 million years ago) The pictured specimen is about 9cm long and was collected from a shaley clay at the base of the exposure near the old bridge. Note the blastoid (*Pentremites godoni*) at the top of the crinoid.

There are a number of species of this crinoid described in the literature, but it is not limited to Chesterian rocks, but can be found throughout the Mississippian System in North America.

The Chesterian Series (sometimes referred to as the Chester) is the upper-most major stratigraphic division of North American rocks of the Mississippian Period (the Mississippian began about 345 million years ago and lasted about 20 million years). Many excellent exposures of Chesterian rocks occur in the Mississippi Valley region, where they consist of about 1,500 feet of alternating limestones, sandstones, and shales, much of which is very fossiliferous.

The Eastern Missouri Society for Paleontology (EMSP) is a registered Missouri 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 ancient life on earth. The club membership includes professional paleontologists as well as amateur hobbyists, providing an open forum for the exchange of information as well as 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 Room 203, on the second floor of the Earth and Planetary Sciences Building on the campus of Washington University. The building is located at the SW corner of the intersection of Forest Park Parkway and Hoyt Drive. Each meeting includes an informal exchange of information and speakers on a variety of fossil-related topics. Note: the building doors automatically lock at 7:30pm.

Club activities include occasional field trips led by experienced collectors, a great way to augment discussions at the monthly meetings. The club also participates in joint field trips with other paleo clubs, visiting fossil sites throughout the United States. EMSP is also proud to be involved in a partnership with the St. Louis Science Center as well as STEM outreach to classrooms, community events and science fairs.

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