Paleo Footnotes

Volume 11, Number 5 May 2016

President's Note

Erich Rose
PSoA President

Another wet year. Good for exposing new fossils, but maybe a bit hard on accessing those fossils. High water and mud are not always fun. But when they are....sorry, I digress. Our field trip leader, Ed, called asking if I had any good ideas for this month's field trip. I suggested staying local but the issue will be mud or high water. Ed will survey you folks during the meeting to decide where we'll go this weekend.

We are going to have a fascinating presentation on fossils and light on Tuesday. This is one not to miss. After the meeting, you will all be wanting a UV (black light) lamp of your own. I have been long aware of the fossils in my collection that fluoresce but I expect to learn so much more about why and how they do that.

I hope to see you Tuesday.

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Next Meeting

Tuesday, May 17 – 7 p.m.
Austin Gem and Mineral Society Building
6719 Burnet Lane
Austin, Texas

Next Field Trip

To be determined at the next meeting. Details will be sent via e-mail to all members who have filed e-mail addresses with the Club.

Upcoming Meeting

Luminescent Fossils: The use of UV lights in paleontology

Paul Hammerschmidt
PSoA Program Chair

Did you know that many fossils are radioactive? Did you know that some fossils can glow in the dark? Want to know how to spot a fake or restored fossil? Want to know how you can go fossil hunting at night?

Chase Jennings, M.Gsc., will shed some light (pun intended) on paleontology through a stunning visual demonstration of the use of UV lights. This presentation will use a cutting edge, professional, inspection-grade shortwave UV LED light as well as inexpensive long wave LED lights that are commonly available online. UV protective glasses are recommended but not necessary for such a short period of time. At the demonstration, you will see glowing megalodon teeth and dinosaur eggshell, an invisible crab, Russian and Moroccan trilobites, and many other fascinating fossils.

Chase has a bachelor's degree in environmental science and a master's in geoscience from Texas A&M. He currently works as an environmental scientist at Partner Engineering and Science, serves as the Publicity Chair and Trade Show Director of the Houston Gem and Mineral Society, and owns Microfossils Et Cetera, the only supplier of microfossil matrix in the United States and one of only two in the world. His research and focus in paleontology is based upon microfossils, mennegoxylon jonesii (snakewood), and luminescence in fossils.

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Field Trip Report

Ed Elliott
PSoA Field Trip Chair

On that beautiful Eastern Oklahoma morning, John Hinte, Melvin Noble, Kevin Bills, Melinda and Frederick Faulk, Bob McDonald, Cathy and Gary Rylander, Mike Smith, Paul Hammerschmidt, and Dr. Jim Sprinkle met me in Ada. After a short caravan and an even shorter hike, we arrived at our favorite Fittstown bluff. This outcrop is of the Bois d' Arc Formation, Hunton Group, lower Devonian (approx 390 mybp). Trilobites were not in abundance this trip. My best was about ninety percent with my next best missing the pygidium. I believe that Jim and Bob both found one. And Gary had gone down to the creek and found some in slab – have to wait for cleaning for the result. For the echinoderms, I believe that Jim (of course) took the prize with a nice complete crown of the flexible crinoid *Lecanocrinus brevis*. This is the one where the arms fold together on top of the cup and give the look of a sphere on a stick. I found a weathered cup that I believe is the camerate *Eucalyptocrinus sp.* And most of us found the ubiquitous small disparid crinoid *Pisocrinus sp.* A variety of corals, many brachiopod species, gastropods, bryozoans, and some straight nautiloids were also found at this excellent site.

Late in the afternoon we drove the short distance to Amsdens' P-7 roadcut. This is the upper Henryhouse Formation of the Hunton Group, late Silurian (approx. 420 mybp). Dr Sprinkle found several pieces of the tabulate coral *Favosites sp.* Several other kinds of solitary rugose coral were found. Frederick found a very nice specimen of *Amsdenoides sp*. I believe that Bob found a pygidium in matrix. Small brachiopods, bryozoans and crinoidal parts made up most of our faunal list. Afterwards, we met for a nice dinner and a lot of talk.

We met again on Sunday morning. Dr. Sprinkle had said that the ditch by the McLish Ranch near Bromide had been torn up by the rains and (with hopes of more specimens of *Bromidocrinus* being found) wanted to spend time there. We agreed and that was our last stop. This is basal upper Ordovician. It is the Lower Echinoderm Zone, Mountain Lake Member of the Bromide Formation (approx. 466 mybp). The main attraction are the disarticulated echinoderm parts and pieces and the large bryozoan colonies of *Prasopora fritzae*. No great echinoderm specimens were found, but the number of pieces was amazing. Dr. Sprinkle and I found sponge specimens within ten feet of each other. He said that it was something he wasn't aware of being present in this layer. Some of the largest bryozoan colonies I've ever seen were found, and quite a few of them had echinoderm holdfasts on them. Melvin found one with a very pretty and large holdfast. By midafternoon we were on our way home. Another great day playing in the Paleozoic of Oklahoma. I can't wait to go back. See you at the next one.

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Members taking a break in the shade at the bluff before getting back to work at the road cut.

The purpose of the **Paleontological Society of Austin,** a 501(c)(3) non-profit organization, is the scientific education of the public, the study and preservation of fossils and the fossil record, and assistance to individual, groups and institutions interested in various aspects of paleontology. Meetings of the **Paleontological Society of Austin** are held on the third Tuesday of each month at 7:00 p.m. in the Austin Gem and Mineral Society building located at 6719 Burnet Ln. in Austin, Texas. The public is welcome to attend. Visit austinpaleo.org for more information.

Annual Dues: $18/individual, $24/family and $12/associate (non-voting, receiving newsletter) Send to: Treasurer, Paleontological Society of Austin, P.O. Box 90791, Austin, TX 78749-0791.

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The Paleontological Society of Austin is a member of and affiliated with:

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