



Paleo Footnotes

Volume 14, Number 7

July 2019

President's Note

Erich Rose

PSoA President

Hope all of you are staying cool and enjoying this so far as it goes mild summer. I mean what's up? Already mid-July and there have barely been two days over 100 degrees. Of course the cooler temps are a result of the amazing amount of rain and resulting humidity. But as of today, the 7th, I am looking at the first forecast with no rain in the next 10 days. Maybe like 2015 when after the record rains that spring it went completely dry after the fourth of July. Cross your fingers, we could yet get a Pleistocene float trip in on the Brazos if things get drier.

But we will have to wait and see what Ed has in mind. If the river doesn't cooperate then maybe we will be off to a museum for our typical July "indoor" field trip.

Pretty sure Emelia will have new T-shirts by the next meeting. Make sure to bring your cash, checks or plastic if you want one. And Fossil Fest volunteers get the best discount!

So stay cool and see you soon.

Erich

Next Meeting

Tuesday, July 16 – 7 p.m.

Austin Gem and Mineral Society Building
6719 Burnet Lane Austin, Texas

Next Field Trip

Saturday, July 20th – 8 a.m.

Whiskey Bridge

Between Caldwell & Bryan, TX

Upcoming Meeting Program

Paul Hammerschmidt

Programs Chair

Not available at publication time.

June Meeting Minutes

Lisa Izzi

PSoA Secretary

- Meeting started a little late due to technical difficulties with the projector.
- Presentation:
Echinoids of the Glen Rose Formation Redux, By Erich Rose
 - Smith & Rader created a list of echinoid species
 - Tetragrama vs. Phymosoma
 - Tetragramas have perforated tubercles, with holes
 - Phymosomas have imperforate tubercles, no holes
 - In 2016 Bill Thompson published some new species, some are still to be confirmed
- Business:
 - We discussed T-shirt designs and got feedback
 - Hope to have for the July meeting
 - No recent calls for outreach
 - It was decided that this weekend, the field trip will be at Sansom Park in Ft Worth

Upcoming Field Trip

Ed Elliott

PSoA Field Trip Chair

Whiskey Bridge - Stone City Bluff, Middle Eocene Marine Fossils

Known for excellent fossils since the mid 1800's, this site continues to produce a wide variety of well-preserved marine fossils. More than 220 species of molluscs, corals, bryozoa, and worms can be found alongside shark, ray and fish teeth.

Upcoming Field Trip (cont'd)

The collecting is easy. All you need is a small tool like a pointed trowel, screwdriver or knife to carefully dig into the soft matrix. There is some hard matrix to sample, so a rock hammer can be handy, but not necessary. More than anything you will want to bring PLENTY of small containers such as plastic divider boxes, pill bottles, Ziploc bags, etc. The fossils are small and delicate, so tissue paper for packing is a must. A magnifying lens, tweezers, small brush and dental pick would also be useful.

Typically we start in the sun and end in the shade. We will be sitting, kneeling or crawling in the dirt or mud, so you may want to pack a change of clothes for the end of the day. Poison Ivy is rampant along the upper levels of the river bank, so beware.

We will be halfway between Caldwell and Bryan, so food and facilities are less than 15 minutes away in either direction on TX-21. However, it's best to pack a lunch and lots of water to maximize your collecting time.

Whiskey Bridge is an old train bridge crossing the Brazos River at Texas State Highway 21. From Austin, take either US-290 or TX-71 east and turn left onto TX-21 heading north toward Caldwell. Eleven miles past Caldwell, just after FM-50 on the right and County Rd-221 on the left, you will see the rusty railroad bridge. SLOW DOWN and prepare to turn left across the highway and onto a small pull-off along the left side of the road just before the bridge. If you miss the turn, cross the bridge, make a U-turn, and come back to the pull off. DO NOT PARK near the railroad equipment, but instead park along the small road/grass above the river. We will be collecting along the west bank of the river just below the parking area, so if you get there late just walk down to the river and you will find us.

June Field Trip Report

Fort Worth area, TX, June 2019 (Ed Elliott)

At 8am the following group of PSA members had gathered in the parking lot of Marion Sansom Park in NW Fort Worth. Ed Elliott, Mike Zimmer, Bob & Dianne Vlasik, Melvin Noble, Kevin Bills, Charles Strasser, Frederick & Melinda Falk, Erich Rose and Jerald Pinson. Jerald is a biologist and 2019 AAAS Mass Media Fellow working as a science writer for the Statesman this summer.

Walking from the parking lot we are dropping down thru the poorly exposed Duck Creek and a thin layer of the Kiamichi Formations before getting into the main exposures of the Goodland where the best collecting took place. And luckily that was often in the shade of the wooded area below the bluff.

The two most abundant fossils were the oysters *Texigryphaea mucronata* and *Texigryphaea navia* followed by the absurdly abundant echinoid *Pliotoxaster whitei*. This heart urchin could be found in all sizes from one to four centimeters in length. I would then say the next most common fossils were ammonites. Fragments of *Oxytropidoceras* were everywhere along with *Engonoceras* and possibly another genus. Complete specimens were harder to come by but I know a few small *Engonoceras* specimens went home.

In addition to the many *Pliotoxaster* echinoids I took home I also found *Leptosalenia scotti*, *Heteraster texanus* and a large *Tetragramma* that resembles *T. taffi*.

There were also plenty of other invertebrates including a variety of gastropods and bivalves, solitary corals, crab claws and more.

By lunch time folks were getting hot and after some discussion it was decided that the rest of the afternoon would be spent closer to home at Stillhouse Hollow. There we collected in the Walnut Formation. Once again echinoids were a prize with *Heteraster texanus* and *Leptosalenia mexicana* being the main choices. But being the Walnut the fauna was diverse and everything from more ammonites to crustaceans could be found.

Although I left early Ed informed me he was there until almost 7pm.



Special Notices

Fossil Fest Update (Emelia Rose):

Fossil Fest is coming soon, please start gathering fossils to donate for the Spinning Wheel, Dig Pit, and baggie stuffing and feel free to bring them to meetings and we will start storing them at our Storage Unit.

Display Cases

If you are interested in putting a display case together for our theme of "**New Discoveries**," please let me know and we can help you create labels or pair you up with someone if you only want to showcase a small portion of your collection.

We have a lot of display cases to fill in the Hall! If you're in need of exhibit case ideas, please consider:

- Collection of fossils from a specific locality around Texas and surrounding area
- Collection of a specific type of fossil from localities all around Texas and surrounding area
- Display of how a plant or animal becomes a fossil
- Examples and a brief description of changes to an organism over time
- Collection of a particular organism and their structures
- One organism - the characteristics used to identify it with samples and diagrams
- Fossil and display showing what we were able to learn about that fossil

T-Shirts

The t-shirts are in, and will be sold at meetings starting in July, and at Gem Capers and Fossil Fest. 100 shirts were ordered in four colors, and the sizing is from adult XS-3XL. The back design is roughly 11"x15" and the front logo is 4"x4". All shirts are first come first serve, but if you would like to guarantee a size and color, please feel free to email me at showchair@austinpaleo.org and I will set them aside.

Pricing will be \$8.00 for Fossil Fest Volunteers, \$10 for Members, and \$15 for the public. Please bring cash or a check. Thank you!

My crab got published – Congratulations to Mike Smith!

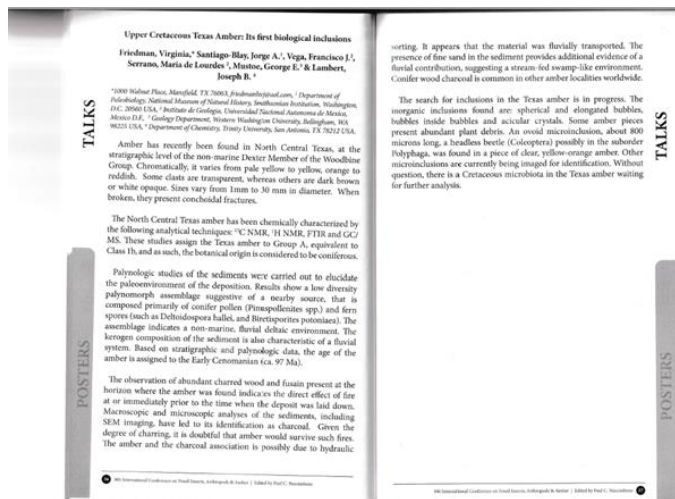
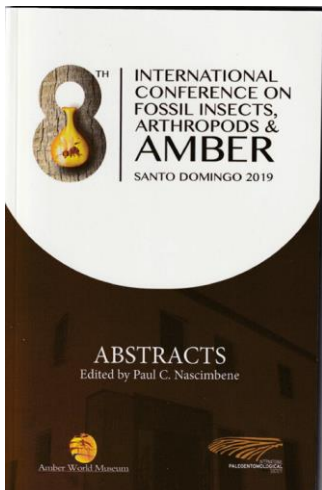
Another species named for a club member!

Caloxanthus kavanaghi sp. nov. (Decapoda, Brachyura) from the Del Rio Formation (Albian/Cenomanian boundary) of central Texas. J.S. H. Collins, C. L. Garvie, and C. J. T. Mellish. *Bulletin of the Mizunami Fossil Museum*, no. 45. March 15, 2019, p. 23-26.

Derivation of name: The species is named for Michael Kavanagh Smith who found the type specimen and kindly donated it to the University of Texas at Austin.

Abstract – Upper Cretaceous Texas Amber (Virginia Friedman):

Howdy Folks - I am submitting an abstract for the Paleo Footnotes Newsletter. I wanted to share this with you, since amber has not been reported in Texas before. (we used to live in Austin a long time ago, and I am still a PAS member). Thanks, Virginia Friedman - Paleontologist



Odds and Ends

How Do Scientists Date Fossils?

Geologists Erin DiMaggio and Alka Tripathy-Lang explain techniques for targeting the age of a fossil find.

Read more at <https://www.smithsonianmag.com/smithsonian-institution/how-do-scientists-date-fossils-180972391/>

Pterosaurs May Have Flown as Soon as They Hatched

A new analysis of the flying reptile's embryos indicates the bones needed for flight were highly developed in the egg.

Read more at <https://www.smithsonianmag.com/smart-news/pterosaurs-may-have-flown-soon-they-hatched-180972409/>

Prehistoric Crocodiles Preferred Plants Over Prey

A study of croc teeth show many species during the time of the dinos were herbivores and omnivores, not strict meat eaters

Read more at <https://www.smithsonianmag.com/smart-news/ancient-crocodiles-would-have-ordered-salad-180972518/>

This Little Brazilian Dinosaur Ran Across the Desert on One Toe

The recently unearthed dog-sized theropod is a rare example of monodactyl dinosaurs.

Read more at <https://www.smithsonianmag.com/smart-news/little-brazilian-dinosaur-ran-across-desert-one-toe-180972555/>

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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