

PALEO FOOTNOTES

NEWSLETTER OF THE PALEONTOLOGICAL SOCIETY OF AUSTIN

VOLUME 17 | NUMBER 06

JUNE 2022



President's Note

Welcome back to in person!

Are you all ready for this month's meeting? I sure am. This will be our first in-person meeting since who knows when. But I think it is time to give it a try.

Covid is still present and more and more folks are getting it. Luckily only a small percentage are ending up in the hospital or worse. We want everyone to feel safe and comfortable so we will be asking everyone who attends to take the time take a test before attending. If you are feeling a bit under the weather or if you know you have been exposed (continued on page 2)

This Month's Speaker

Member's Show and Tell

Presented by: all of US!

Hello everyone – this month our meeting will be devoted to in person, face to face, in our club house “show and tell” presentations with members sharing with each other their favorite discoveries over the past couple years.

We are looking for exciting new fossils that you have found, traded, or purchased during our COVID year(s) that you would like to share with the club. This might be a fossil you found on one of the club trips that you would like to share or something from a (continued on page 2)

JUNE 2022

PSoA Hybrid June Meeting

Tuesday June 21st - 7pm

In Person @ AGMS Clubhouse

6719 Burnet Lane

OR Remote on Zoom:

<https://us02web.zoom.us/j/82136429965?pwd=bGN5dGpIclpkWHVTYm5oU0VWb2hrdz09>

Meeting ID: 821 3642 9965

Passcode: 210774

PSoA June Field Trip

Saturday June 25th

8:00am Pipe Creek Post Office
(see page 2 for more details)

President's Note

(continued from page 1)

then please stay home. And if you are like me a bit more at risk, then please wear a mask. The AGMS club house is a small space and we don't have room to spread out. It would be a real shame if a meeting became a spreading event.

For this first meeting we also be changing up how we do refreshments. We will try and provide beverages and snacks in individual servings. No big bowls of dip for a while.

And instead of a scheduled speaker for this first meeting we will have an hour of show and tell. What fossils have you found or purchased since last we gathered together? Did you visit any cool museums, professional digs or other cool locations? Bring your specimens or bring pics of them on a USB thumb drive to present. Depending on how many folks want to share you will have 5, 10, 15 minutes. I know there has been a request to also present some of what was found in Oklahoma and get it identified. It should be fun, see you all there!

Erich Rose

PSoA President



Fossil Fest 2022 Update

I would like to thank everyone that attended the May Zoom meeting. Here is a brief update before the June in person PSoA meeting:

- We have nine vendors participating this year.
- The University of Texas has confirmed participating this year.
- We will have the Dig Pit, Touch Table, and Wheel.
- We will have pre-packaged snacks available in the kitchen.
- Jamie Shelton has graciously offered to put together the Paleo Passports.

Adult and youth size Fossil Fest T-shirts will be available to purchase at the June PSoA meeting. Cost of shirts for PSoA members = \$10.00

A friendly reminder to indicate your interest in volunteering at Fossil Fest by following the link below. Briefly, in the evening on Friday November 4th is setup. Saturday November 5th and Sunday November 6th are event days. <https://www.signupgenius.com/go/60B0F49AFAD2AA3F49-fossil>

Heather Aziz

Show Chair

June 2022 Field Trip

Bandera Road Cuts

The June field trip will be to Bandera, TX. We will meet at the Post Office in Pipe Creek at 8am Saturday morning June 25th. There is a field area to the side and it will be best to park there. Take highway 16 west and look for the post office on the right as you come into town. From Austin take I 35 to the 1604 loop in San Antonio and take a right. Go several miles till you get to highway 16 on right and follow that to Pipe Creek. Or from Bourne take highway 46 southwest to highway 16 and take a right. Give it a minimum of one and a half hours drive from Austin.

Most specimens can be picked up by hand, a screwdriver or other hand tool and something to put specimens in is suggested. Bring plenty of water and something to eat or snack on. A hat and sunscreen are recommended. This area is the Cretaceous, lower Glen Rose formation. A large variety of fossils can be found in this area. Gastropods, Oysters, Bivalves, Forams, the round Porocystis algae fruits, crab claws on occasion and Heteraster Obliquatus heart urchins. Common urchins can be found such Coenholectypus and Leptosalenia, but the real prize are 2 types of Crinoid, a oblong free floating Crinoid and the round, like a bottle cap Solanocrinites. Look for Jamie's dark blue Scion with turquoise wheels or Melvin's blue Toyota truck. Even though many of us have been vaccinated, we ask to be respectable to others that may have any immunodeficiency disorder or may be susceptible to the virus. Being outside is good, but please be conscious of our members health!

Jamie Shelton

Field Trip Co-Chair

This Month's Speaker

(continued from page 1)

personal trip that gives us a taste of the pickings out of state. Folks will be in attendance to help with identifying your fossils if you have some questions – and this is a perfect time to bring to the table some really unusual finds. Closer to the meeting time we will send out an email blast with specific instructions on how presenters will be selected and the duration of each presentation. T-shirts and hats for fossil fest will also be available for sale!

We meet in the Austin Gem and Mineral Society Clubhouse at 6719 Burnet Lane - entrance is around back adjacent to the parking lot.



Enjoy the first face-to-face meeting in quite awhile. Sorry I can't be there with you. I'm still recovering from knee replacement surgery. Hope you enjoy this month's meeting.

Paul Hammerschmidt

Programs Chair



Side Trip: Jurassic Park at the Blue Hole

First outreach event of the year!

Once a year the Blue Hole kicks off the summer season with a screening of Jurassic Park along the banks of the Cypress Creek. This was our first chance to get out into the community since COVID hit over two years ago and there was a fantastic turn out.

Mike Smith, Erich Rose and John Hinte represented the club and had plenty of fossils on display for folks to touch and explore. The UT Vertebrate Lab was also in attendance with some more fearsome goods to behold.

We look forward to many more of these events as the the

community opens up to events like this and we can once again fulfill our mission of sharing a love of fossils and paleontology with our neighbors.

If anyone knows of any organizations, schools, or other community groups who would appreciate a visit from the club, please do not hesitate to reach out to one of the board members or mention it at our next meeting. This is a fantastic way for us to pay forward the fortune we have had in our fossil adventures as well as a way to let folks know who we are and encourage new membership. Also, if you would be interested in volunteering for the next event, let us know - it is always a rewarding experience!

May Field Trip: ADA, OK

Oklahoma, where the wind comes sweepin' down the plain!



At eight am, Linda McCall, Ed Elliot, John Henti, Dr Sprinkle, Mike Smith, Lee and Susan, Jamie Shelton, Erich Rose, Dave Hoppes, Kevin Bills, Sean Caradine, Leia Pfaff, Bob McDonald, Eric Jones, Gary and Cathy Rylander and me, Melvin, met at the fossilized Callixylon tree in downtown Ada, OK for a group picture. Ed was about to lead us out to the first collecting site of the weekend, Yellow Bluff. This site is Devonian, Bois d'arc formation, Hunton group, but some where there is a Silurian boundary.

It was a little rainy but the weatherman said it would clear out about 9am so although it was damp, it was pleasantly cool on a great spring morning. The breeze became a little bit brisk later plus it was a cool 66 degrees and cloudy. We made it across the creek which was low. One group of people went one route through a ravine and the another people went a different route and climbed up to the top of the bluff. Apparently two barb wire fences were put in the creek for some reason and one had a beer keg holding stuff in place? As we got on the hill there were lots of beautiful cone flowers and one of the great things about Yellow Bluff is the spectacular view when you get up the hill.



Fig. 1 Floating Crinoid bulb (Sean Caradine)



Fig. 2 Crinoid Plate (Gary Rylander)

Leia found the first trilobite but many more were to follow. Sean found a real nice complete trilobite and a really nice floating crinoid bulb with lots of nice detail on the top part (fig. 1). Then Lee and Susie found a nice crinoid bulb comparable to Seans also. Jamie found a nice trilobite (fig.3) as well as Mike (fig. 5). I have not seen so many trilobites found at yellow bluff and I finally found one at the end. In the meantime Gary was hunting in the creek and found a awesome slab with crinoid material on it (fig. 2).

I wound up taking a nap after climbing to the top of the hill, I probably needed it after recovering from health problems. We were all keeping an eye out for crinoid material and an other starfish for Dr Sprinkle but nothing was found at this time - maybe next year. As the evening wore on several people left and went to P7, a Silurian site close by. Dr. Sprinkle and Linda found some specific crinoids they were looking for it this area



Collecting at Black Cat Mountain

and Allen was able to hack some trilobites out of the side of the cliff.

Everyone met again at 8am the next day and went to the Black Cat Mountain: Devonian, Haragan and Bios d'Arc formation of the Hunton group site. Dr Sprinkle and few others went to Wrigglys Quarry. At Black Cat we were told by Bob to avoid two little Hills were the Collared Lizards live. We were very happy to oblige. I'm glad that someone cares about the wildlife. Luckily we did not run into any Rattlesnakes. Several people went to the back to collect and some stayed up at the front. Linda collected several brachiopods for her research at the back. Kathy and Jamie collected in the road, they found several enrolled trilobites and some lovely brachiopods and button bryozoans. Eric Jones found an interesting trilobite with spines and he had a fun time making friends with a little brown tarantula that had a hidey-hole right over were everybody was hunting. Most of the trilobites commonly found seem to be Phacops so it is nice to find something different.

We all collected late into the evening and I believe everybody went home with at least one trilobite. A good book to find info on Black Cat Trilobites is Trilobites of Black Cat Mountain by George P. Hansen - although it is very technical. Also there is a book coming out that has a section with Black Cat and Bob in it, Travels with Trilobites by Andy Secher.

I believe it was a very successful Oklahoma trip and it was nice to be back after a long hiatus. Next year will be even better!

Melvin Noble
Field Trip Co-Chair



Fig. 3 Enrolled Trilobite (Jamie Shelton)



Fig. 4 Trilobite with Spines (Eric Jones)



Fig. 5 Trilobite (Mike Smith)



Fig. 6 Trilobite with Long Spines (Erich Rose)



ON AMBER

By Virginia Friedman

I have long been fascinated by amber. The different colors, its texture, its warmth to the touch and so on. Then later, by starting to study everything related to amber, I became a true believer, so to speak.

Soon I discovered that the study of amber is a very interdisciplinary field. Amber has been found in all continents except Antarctica. Being of biological origin, it was nevertheless treated as a mineral for a long time. So, like all fossils, it lies at the intersection of Biology and the Geosciences. Moreover, due to the presence of bioinclusions contained in amber there are at the present time many entomologists interested in the ancient creatures trapped in amber through the ages (i.e. from late Carboniferous to late Pleistocene). Amber also sometimes contains vegetal material. As a result, it is of high interest for paleobotanists interested in the evolution and phylogenetic position of ancient plants trapped in this fossil resin. Some ambers also entrapped a great number of microorganisms as well as pollen and spores which brings another group into this broad field: paleomicrobiologists and palynologists. In addition, there is the rare vertebrate material find, in the shape of bones, feathers, whole lizards, salamanders, frogs, etc.

There is also a very strong interest by the organic chemists and geochemists of the elucidation of the molecular structure of this ancient resin. This, I believe, is a very strong and promising field. A few other scientists (physicists, material engineers, etc.) have engaged themselves into studying the optical properties of this resin. There are also rheological studies of it.

The study of this fossilized resin is a very fertile ground for interdisciplinary research. I have had the good fortune of being engaged in several projects concerning this resin. In our case, we specifically study amber found recently (about 6 years ago) here in our great state of Texas.

This is indeed a blessing since nothing compares to the finding of the pieces of amber in the matrix sediments. Our amber here in Texas is about 97 Ma, early Cenomanian. It was found fortuitously as the sun shined on the sediments where it was recently exposed to the elements.

The research is ongoing as I managed to assemble a team of scientists in several fields of study, i.e., organic chemists, geochemists, entomologists, palynologists and paleontologists. The pictures enclosed are from our trip to the Baltic Sea area. It was 2019 and I had a presentation for an international congress on amber studies in Gdansk, Poland. We traveled also to Lithuania and Latvia. To collect amber on the Baltic shore (Lithuania) was for me a magical experience, an almost mystical one. It was simply great. Unforgettable!

The pictures were taken in August, 2019. Due to the pandemic we haven't been able to go back again, but we remain hopeful. In the meantime the Texas amber keeps us busy, especially now that I had the good fortune of finding the first insect in this resin. It is a beetle (Order Coleoptera). I imagine the little fellow flying in an amber forest around 97 Ma in a land that is now North Texas. Suddenly it got caught in the sticky resin, and from that time until now, to be discovered in Texas in the 21st century. Aside from what appears to be bacteria and fungal hyphae it is the only bioinclusion found to this date in this amber. It is being studied at the Smithsonian nowadays. The publication (in prep.) will see the light of the day soon and so "Mr. Beetle" (1st inclusion in Texas amber) will be born again.



Tailings...

In The News

New Dinosaur Species With Bulldog-Like Face Uncovered in Egypt

The fossil is the first evidence of a bipedal abelisaurid in the one of the world's richest fossil deposits

Elizabeth Gamillo, [Smithsonian Magazine](#), June 15th 2022

Meet the Scientist Who Uses Magnetic Fossils to Navigate Changing Oceans

Geobiologist Courtney Wagner uses giant magnets and microscopic fossils to make sense of ancient climate change

Jack Tamisiea, [Smithsonian Magazine](#), June 8th 2022

First Dinosaur Belly Button Discovered in Fossil From China

The navel was found with unique imaging technology and is similar to scars living alligators sport

Elizabeth Gamillo, [Smithsonian Magazine](#), June 13th 2022

Five Places to See Trilobites in the United States

In a new book, fossil collector Andy Secher takes readers on a worldwide trek of trilobite hotspots

Jennifer Nalewicki, [Smithsonian Magazine](#), June 8th 2022

An Extinct, Head-Butting Animal May Help Explain Giraffes' Long Necks

The giraffe's ancestor used its sturdy head and neck to fight for mates

Sarah Kuta, [Smithsonian Magazine](#), June 3rd 2022

2022 Field Trip Schedule

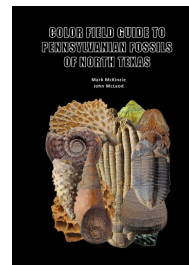
- June: **Bandera Road Cuts**
- July: **Austin Loop 360** (or Brazos backup)
- August: **Houston Museum of Natural Sciences**
- September: **Brady / Santa Ana Sites**
- October: **Texoma** (Moody/Evant as backup)
- November: **Brownwood**
- December: **Christmas Party!**

Important Note: Please refrain from visiting sites the club is scheduled to access as part of a scheduled field trip. Doing so can clear a site of quality fossils and negatively impact the experience folks will have, especially new members, if the site suddenly feels "picked over". We do our best to carefully space out trips to allow them to recover, so please be respectful of the club and stay off these sites within 3 months of a planned trip.

Publications on Recent Sites

Below are some publications that provide information and identification on recent sites the club has visited.

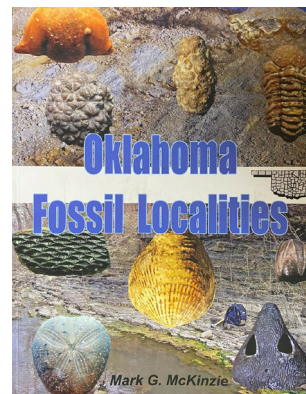
New Pennsylvanian Publication!



Color Field Guide to Pennsylvanian Fossils of North Texas by Mark

McKinzie and John McLeod 2021 This is a spiral bound field ready version of their seminal volume available for \$22 from Lulu.com. The book includes descriptions of the exposures at Lake Bridgeport, Wilson Claypit, Jacksboro and other Texas Pennsylvanian sites frequented by PSA members with color images of specimens.

Oklahoma Sites Resources



Oklahoma Fossil Localities by Mark G McKinzie, 2014

Published by a long time member of the Dallas Paleontological Society and Co-Author of the book above on Texas Pennsylvanian Fossils, this book has been sited as a fantastic resource for the fossils we collect at our OK sites. Rumor has it this book is ripe for republication - we'll keep an eye out and let you know when it is available. For now, happy hunting on Ebay and Amazon.



Good Field Trip Etiquette

1. Arrive on time or early. At the prescribed meeting time (often 8AM) you should be out of your car standing with the field trip leader, signed in and ready to hear the day's schedule, directions and helpful pointers.
2. Do your homework. Use one of the online mapping programs to determine travel time and directions from your home the day before. Take the map with you and leave at least 15-30 minutes early. This is critical when we are going to quarries, private property or if the first stop is a meeting-point, not the collecting site. The field trip leader will not wait more than 15 minutes beyond the scheduled time.
3. Make sure you have the field trip leader's phone number. Their number will appear in the field trip notice. Bring a copy of the notice from the newsletter or e-mail blast so you have the information. That is the best way to find the group if you do get delayed or lost. But do not count on it. Some of our remote sites have poor cell reception. We have no way to guarantee you will get there if you miss the meeting spot.
4. The first stop is not breakfast. Please do not expect the rest of the group to wait while you order food or take care of business. If you need to do that, arrive 30 minutes early and then be ready to go at 8:00AM sharp!
5. The field trip leader sets the schedule. Gather near the leader at the beginning of every trip and listen carefully. The leader will describe where and when things will happen. That will include directions, plans for breaks and everything else you need to know about how the day will unfold. If you are not sure about directions or the schedule speak directly with the field trip leader. Do not count on hearsay.
6. Do not ask the entire group to stop for unscheduled breaks. If you need to take a break during the day, do it after you know where the collecting site is located. The field trip leader will usually schedule a break around lunch but not between every stop. Follow the group to the site and then circle back for food or facilities. This is why we suggest bringing your own food and beverages. Also being prepared with TP, or whatever else, for "emergencies".
7. Sign in and don't forget to report to the leader when you leave. This is not critical, but he or she will greatly appreciate those two things. Having everyone's name let's him know how well attended the trip was and we like to list everyone in the follow up reports. Secondly, getting a chance to hear and see what you found that day and being able to keep track of who is on site at the very end is just a good thing.
8. Be prepared. Make sure you have the materials you need to collect safely. In particular, water, hat, sunscreen and food.

9. Don't crowd the next guy. Please be courteous of your fellow collectors space. If someone says "Hey I found a good one!" don't come rushing over and crowd into their collecting zone. Let them offer to share the space. You can ask them where they found it and then move off to one side or the other, but don't just flop down next to them.

10. Be safe. If someone is working an area on a slope do your best not to pass above them. If you need to do so, please let them know you are passing and do your best not to send any debris down on top of them. If someone is working above you and you must pass below, please alert them for the same reasons. Generally speaking, if someone is working a spot respect that they "own" that area and your passage through or around that location should only be done with their permission and/or invitation.



Editor's Note:

I would like to extend an invitation to all members to submit stories of their own travels for publish in future episodes of SIDE TRIPS. All I need is a short write up (and I can assist with this) as well as some photos of your trip (iPhone or Android photos are perfect - just make sure to send me the full resolution version). Fossil hunting trips are always welcome, but so are trips to museums, fossil/mineral shows, and other adventures that explore the world around us. You can reach me at editor@austinpaleo.org and I will do my best to include your stories in future issues.

Brian Bedrosian
Newsletter Editor

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 normally 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.

Please note, due to COVID 19, in person meetings have been temporarily paused, and monthly meetings are instead being held on Zoom. Please see instructions above to attend the meetings virtually. Please note all virtual meetings are recorded and the Society may elect to publish the video of these meetings, in part or in total, to the Societie's website or another publically accessible venue as benefits the goals of the club listed above.

Membership Information

Annual Dues: **\$18/individual**
\$24/family
\$12/associate (non-voting, receiving newsletter)

Pay on-line at: <https://www.austinpaleo.org/newMembership.html>

Send payment to: **Treasurer, Paleontological Society of Austin,**
P.O. Box 90791, Austin, TX 78749-0791

PSoA Web Site: www.austinpaleo.org

Webmaster: **Gordon Galligher, webmaster@austinpaleo.org**

Facebook: <https://www.facebook.com/austinpaleo>

Twitter: [@Austin_Paleo](https://twitter.com/Austin_Paleo)

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