

PALEO FOOTNOTES

NEWSLETTER OF THE PALEONTOLOGICAL SOCIETY OF AUSTIN

VOLUME 19 | NUMBER 04

APRIL 2024



President's Note

I hope everyone was able to view the totality over Texas this month! Although cloudy, we got glimpses out my way.

No field trip or monthly meeting this month. Instead, join your fellow members on Saturday, April 20th for our annual auction and potluck. Please bring a dish or beverage to share with others. And if you are looking to thin your fossil hoards, bring a few fossils or fossil related items to donate and be auctioned off to your fellow members after lunch.

Auction and Potluck!

Intro to Fossils

On April 20th from 12:00 pm - 3:00 pm PSoA members will gather at Westcave Outdoor Discovery Center (24814 Hamilton Pool Rd, Round Mountain, TX 78663) for our annual auction and potluck. Please RSVP here so that we can make sure we order enough BBQ!

If you have fossils to donate to the auction, bring them with you. Additionally, as this is also a potluck, bring your favorite side, dessert, or beverage to share! April 2024

PSoA Regular MeetingNo Club Meeting this Month!

April Auction & Potluck

April 20th 12-3pm Westcave Outdoor Discovery Center (see details this page)

Club Field Trip

No Club Field Trip this Month

May Club Field Trip

May 25th+ 26th
Ada OK sites
(see details page 2)

(continued on page 2)



President's Note

(continued from page 1)

We will also feature a touch table indoors as a gesture of gratitude to Westcave for their continued support. If you would like to volunteer to staff the touch table in the morning before the event, please let me know.

See you all soon,

Heather Aziz PSoA President

May 2023 Field Trip:

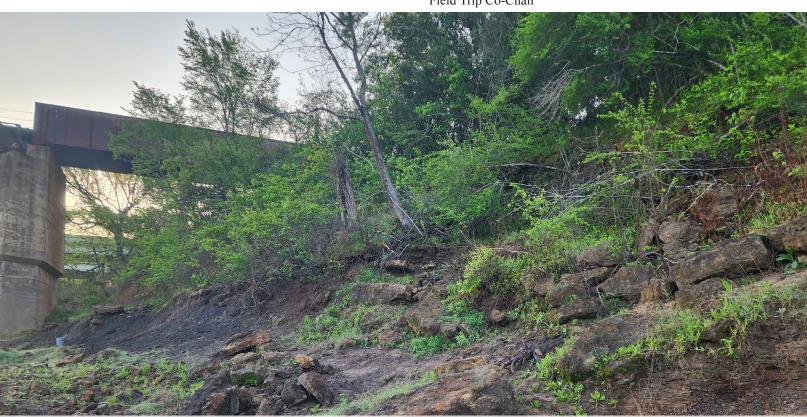
Ada, OK

DATE: Saturday + Sunday May 25th + 26st Ada Oklahoma - Divonian, Silurian, Ordovician

The Club's next field trip will be to Ada, OK for some Devonian, Silurian and Ordovician collecting. We'll meet on the East Central University Campus on the corner of E. 12th. and N. Francis Ave. near the petrified Callixylon tree (1 block over by East Main St) at 8 a.m. Saturday, May 25th. This is a two-day trip and we will visit numerous sites. Facilities will be scarce, so be prepared. Bring at least a gallon of water a day for each person, food, hats, long-sleeve shirts, sunblock, kneepads, etc. Bug spray is also recommended for chiggers and ticks. Also watch out for snakes. Some of the locations will require a short hike. Depending on the site, you may need a hammer and chisel. Bring lots of containers, zipper bags, soda flats, newspaper, etc. and something to label your finds. Ada is a college town with a number of motels and restaurants.

Please note that the Sunday site will have limitations on the number of folks who are able to enter so please call or text Jamie (512) 214-2589 and let her know if you plan to attend. These are unfortunately not kid friendly environments...so we are going to request no kids under 12 attend. This is a very exciting trip but also a long drive - so we want to make sure you are aware of the opportunities before you make plans and leave Austin.

Jamie SheltonField Trip Co-Chair



Marine fossils in the river bank - see Field Trip report page 3



March Field Trip Report:

Whiskey Bridge

Liven though it was a little chilly, it was a fine spring morning for collecting fossils as I arrived at Whiskey Bridge. It rained hard the day before so I was a little concerned as I walked down to the collecting site. The walking area turned out to be in good shape, not too slippery. When I looked up I was already greated by Helen Riggins coming down so I decided to go back up to greet people, especially any new people. Helen Riggins, Gary and Cathy Rylander, Gary Hendrix, Melanie Faulk, Leah Plaff, Heather Aziz, Miriam Jacks, John Herron and me, Melvin Noble, all headed down to collect Eocene fossils at Whiskey Bridge.

The matrix was in fairly good shape, it wasn't too dry but had enough moisture in it so that the fossils came out with out breaking up. But even with all that rain there were some still hard spots. I did find quite a bit of stuff just on the surface that was easy to see so I left it for newbies to find. I found a lot of otoliths (fish ear-bones) laying on the surface where they had



Fig. 3 Conus gastropod (PSoA Members)

March Field Trip Report (Continued)

Whiskey Bridge

washed out of matrix that people had dug. I kept several and gave the rest away. Several people found some nice conus shells. These conus species are middle Eocene so they are 47.8 to 38 million years old and though they look modern - the organisms are long gone making them safe to pick up. But do not pick up their living decendents you might find on the beach, they have a little barb and they are deadly poisonous.



Fig. 2 Parscyathus Granulosus coral on Anonmis sp. bivalve (Heather Aziz)

Miriam, a new member, showed up so I showed her how to carefully dig in the matrix and a few areas that were good to dig. Gary, Cathy and Melinda went to a spot under the bridge to start collecting in a different area. Heather found a really nice Parscyathus Granulosus coral growing on an Anonmis sp. bi-valve shell. Leah found one of the biggest and nicest Belosaepia beaks (squid beak) I have ever seen. It had a plate called the corona on it and I have never seen one found with this plate in the field. Someone found a nice piece of Madracis coral in good shape that had a bunch of nice branches on it that was not to weathered (sorry, I can't remember who). The weather turned out to be perfect and while it was sunny it wasn't too hot. Most everyone left about 1:00 pm. It was just a nice spring day to collect and everyone I talk to said they enjoyed themselves.

Please see the Tailings page for some resources to help you identify your finds!

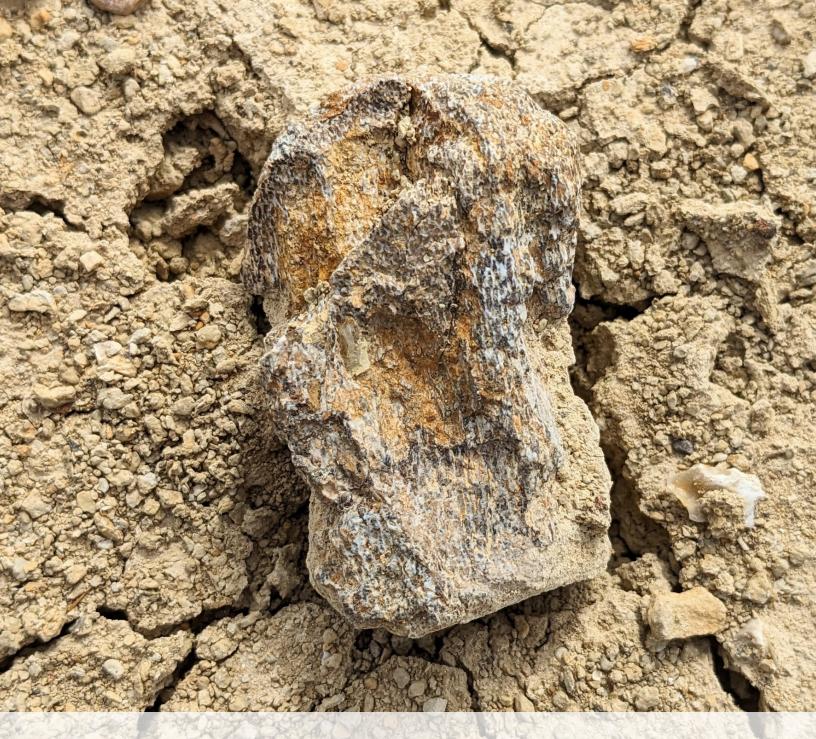
Melvin NobleField Trip Co-chair



Fig. 3 Belosaepia squid beak (Leah Plaff)



Fig. 4 Madracis coral (PSoA Member)



Side Trip:

Adventures in the Austin Chalk

Bounty of Baculites...in Austin?? I've been hunting in the Austin area since I was a kid. Granted, there was an over 30 year hiatus from the time I used to go fossil hunting in the creek behind my house and actually joining the PSoA and REALLY learning about fossils... but I like to think I know this area pretty well. I have obviously missed some of the "glory days" of Austin fossil hunting...all those stories by long time PSoA Members about Round Rock Shark Teeth and such!! But I feel like I've done a fair job of finding fossils in Austin. One of my most prized fossils is from the



Side Trip: (continued)

Adventures in the Austin Chalk

Austin Chalk Formation, from a creek right in the middle of town, a lovely portion of a straight shelled ammonite called a Baculites. I've hoped to find another ever since, but alas, no such luck.

So when fellow PSoA member Will Jo came up to me and said," hey, look at all these Baculites I found" I seriously thought he meant from the North Sulphur River or somesuch. Then he says, "here in Austin!". I just about fell over. Sure enough, he gives me a handful of good sized Baculites in various degrees of preservation. "I have a jar full" he says, so I can keep all these. Ummm....wow.. Now I know that the Ozan Formation, same as is found in the North Sulphur River, crops up in East Austin, so I'm thinking he must have stumbled upon an Ozan outcrop, because that formation is RIFE with baculites. I was super excited about that, because finding an Ozan exposure is particularly difficult! So Will was nice enough to take me to the spot, to see what we could find and maybe figure out if it was Ozan, and was it an actual exposure or was it trucked in as part of fill for this housing development.

Once there, we start looking about and sure enough.... Baculites EVERYWHERE. I've never seen so many, even on



Boehmoceras arculus ?



Adventures in the Austin Chalk

the NSR. Picking them up was like an easy easter egg hunt....I had a bag full before I even knew it! But once I got past the excitement of the baculites, I started seeing other stuff too.... gastropods and ammonite chunks and other fossils. I was still undecided as to whether it was brought in fill or an actual exposure. We did a pretty thorough gathering in the gullys and washouts, with a surprising amount of success... I found a nice long section of baculites and both of us found whole ammonites (most were chunks so the whole ones were a real thrill) and quite a few nautiloids. Another exciting find was a very interestingly geometric gastropod called a Xenophoria that I had been hoping to find for a while. I found three in not great condition, but found them nonetheless! Some other notable finds were small shark teeth found by Will, a small fish vertebra and some lovely little Trigonia bivalves which are a particular favorite of mine.

But the BIG Payoff was down in the wash, walking along looking for little stuff...I see something that made my heart leap. It looked like very weathered bone with a concave end and a convex end. A VERTEBRA!! Not only that, but A MOSASAUR VERTEBRA!!! My very first ever I've found... and in AUSTIN! I have been to the NSR many times hoping to find one with no success but I find one practically in my own backyard! And, to top it off, not a foot away was....A TOOTH! A little busted up, granted, but beautifully colored Mosasaur tooth! Another item that I had hoped to find on the NSR, but found it here. Surprise! I do admit, I felt a little bad that here Will had generously shared his site with me and I find the vert and tooth...but happily, he did find a vertebra too! Plus he found a shark tooth, and if I find another mosasaur tooth, I'll consider giving it to him. Maybe.





So back to the baculites. I was trying to figure out what they were because they are ODD. Different than anything I've found in the Ozan or Austin Chalk. They have strangely strong "nodes" or ribs. In the HGMS book, the only thing that closely resembles it is not actually Baculites, but rather Boehmoceras arculus. I sent a picture of one to a friend who is well versed in Ammonites and she said that it looked "Santonian". If you are not familiar with Santonian, it is the European name for the time frame of 80-82 Million Years Ago. I am still thinking this is Ozan Formation, but it is a younger age - Campanian or 68-80 MYA. Another well versed fossil friend pointed out that Nautiloids are not found in the Ozan but are well known in the Santonian....which is Austin Chalk. Which is what it said on the Texas Geological map. Plus while ID'ing the other fossils, a little Neithea I found is DEFINITELY a N. casteeli which is only found in the Austin Chalk. So the Fossil Detective Work convinced me that we had an exposure of Austin Chalk that had a very robust population of these very odd Fossils! I hope that we get some more good rains to help expose some more exciting stuff, because, as we know, construction sites don't stay accessible for very long here in Texas!

Jamie Shelton

Field Trip Co-Chair / Programs Chair



Tailings...

In The News

'The first dolphin of its kind:' Remains of ancient giant dolphin discovered in the Amazon.

Scientists Wednesday announced the discovery of the 16-million-year-old remains of the largest river dolphin ever found on Earth.

Doyle Rice, USA Today, March 20th 2024

Alaska's Frigid North Slope Was Once a Lush, Wet, Dinosaur Hotspot, Fossils Reveal

Conditions north of the Arctic Circle, where dinosaurs roamed in abundance during the mid-Cretaceous, were warmer than today, with rainfall comparable to "modern-day Miami" Christian Thorsberg, Smithsonian Magazine, March 20th 2024

You Can Visit the World's Largest Continuous Dinosaur Trackway, Now on Protected Public Land

In the Late Jurassic, a long-necked dinosaur made a 270-degree turn while walking in present-day Colorado—and left behind a rare treat for paleontologists

Sarah Kuta, Smithsonian Magazine, April 18th 2024

New Extinct Species of Giant Dolphin Discovered in Peru From a 16-Million-Year-Old Skull

Pebanista yacuruna is the largest freshwater dolphin ever found, but it is more closely related to today's river dolphins of South Asia than those in the Amazon

Sarah Kuta, Smithsonian Magazine, March 21st 2024

2024 Field Trip Schedule

April Club Auction + Picnic
May Oklahoma (2 days)

June Austin Loop 360 Lower Brazos

July Johnson City

August Ross Perot Museum Dallas
September Texoma Moody / Evant (2 days)

October Brady / Santa Anna

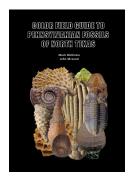
November Brownwood

December White Mammoth and Pot Luck

Locations in italics are alternates depending on weather and availability.

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. Please note that dates and locations are subject to change - check the monthly newletter or come to our monthly meetings for updates.

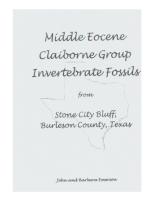
Great Resource for Jacksboro Fossils!



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 Pennsylanian sites frequented by PSA members with color images of specimens.

Whiskey Bridge / Eocene Resources



Middle Eocene Claiborne Group Invertebrate Fossils from Stone City Bluff, Burleson

County Texas by John and Barbara Emerson. This self published volume catalogs over 200 species known to come from this exposure. All specimens are described in detail and shown in black and white photographs. It is available from the Houston Gem and Mineral Society website for \$20 (paperback copy) or \$10 (digital download).

Stone City Member, Middle Eocene, Clairborne Group, Stone City Bluff, Burleson Co., Texas Main Glauconite Bed

(MGB) Study Guide by James E. Flis and Christopher J. Flis (2015) Rights Reserved v. 1.1) This study guide available on the Houston Geological Society website is great primer on the exposure and provides a faunal menu with full color photographs.

WhatsApp for PSoA Members

This would be handy for folks to have on their phones for Field Trips - or just an easy way for the board to communicate with you when email is not practical.



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 plop 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, our monthly meetings are currently held in a hybrid format, with in person gatherings at the AGMS Clubhouse which can also be attended virtually via Zoom. Please see information provided on page one of this newsletter each month. While we are not currently requiring masks at any in person gatherings, we ask that you maintain a safe distance from others when socializing. 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 Society's website or another publically accessible venue as benefits the goals of the club listed above.

Membership Information

Pay on-line at:

Send payment to

Current Club Officers

Annual Dues: \$18/individual \$24/family

\$12/associate (non-voting, receiving newsletter)

https://www.austinpaleo.org/newMembership.html Treasurer, Paleontological Society of Austin. P.O. Box 90791, Austin, TX 78749-0791

PSoA Web Site www.austinpaleo.org

Facebook: https://www.facebook.com/austinpaleo President President Emeritus Vice President Treasurer

Secretary Field Trip Co-Chairs Programs Webmaster

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