

# PALEO FOOTNOTES

NEWSLETTER OF THE PALEONTOLOGICAL SOCIETY OF AUSTIN

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AUGUST 2024



## President's Note

### Back from the field!

South Dakota was a whirlwind of fossils and fun, but I sure am glad to be back! My find of the trip was a sacrum (two fused vertebrae uncovered by the time I had to leave) from either a Triceratops or an Edmontosaurus.

It's about time to start diving into Fossil Fest so keep an eye out for calls for volunteers and help with this year's event from VP and Show Chair Eric Jones! See you all at the monthly meeting.

**Heather Aziz**  
PSoA President

## This Month's Speaker

### Bring out your Fossils!

August is Museum Month, so for our presentation, we want to see YOUR fossils! We will have a member Show and Tell so gather up your (up to) three best fossils (personal finds or purchases) and plan on presenting a 5ish minute Show and Tell.

If you would like your fossils to be included in a power point presentation on the screen and for our Zoom members, please send three images to [jamielynn@gmx.com](mailto:jamielynn@gmx.com) by August 18th. This is particularly good for small fossils that might be difficult to see, (continued on page 2)

August 2024

**PSoA Regular Meeting**  
Tuesday August 20th - 7pm  
**AGMS Clubhouse**  
6719 Burnet Lane

Join Zoom Meeting  
<https://us02web.zoom.us/j/88451710052?pwd=Uy9hV05BTy9rUmIzYlMzdVVnNTVjdz09>  
Meeting ID: 884 5171 0052  
Passcode: 603270

**PSoA Club Field Trip**  
August 24th  
**Perot Museum of Nature + Science**  
(see details page 2)

## Minutes of the July Meeting

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**Speaker:** Our speaker this month was Rex Kowalski

- Rex spoke on the process of making fossil replicas
- Limitations on old style of casting and molding.
- New scanning technology and 3d printing FDM and SLA (resin)
- Making replicas allows fossils to be accessible to more people
- Fossils are being destroyed by erosion everyday
- Replicas allow private collecting and public sharing
- Replicas in museums are lighter, safer, easier to move. Allows preservation of original in controlled environment

**Business:**

- Jamie discussed the details for the upcoming field trip to the Perot Musuem in Dallas
- Next meeting is member fossil show and tell - please see the email blast as well as the information in the newsletter
- New shirts available \$12 for members \$15 for public
- Door prizes were given out!

**Eric Jones**

PSoA Vice President

## This Month's Speaker

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(continued from page 1)

even for our in-person audience. This is for ALL members, young and not so young! Please send me an email if you want to participate in Show and Tell!

**Jamie Shelton**

Programs Chair

## The Micro Matrix

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Fossils are usually fairly easy to find in Texas, you just look at a rocky spot and likely you are going to find some kind of fossil in our limestone. But sometimes, there are even MORE fossils that you might not even notice....Micro Fossils! So small they either get overlooked or need an actual microscope to be seen. This new addition to our newsletter will highlight Micro Fossils found by PSoA members. Please feel free to submit up to 4 images for the monthly Micro Matrix!

We hunt the Glen Rose Formation pretty extensively here in Central Texas, but there are so many more tiny fossils that can be found when looking at micro matrix....like these from various sites in Blanco County.

1. **Leptosalenia sp.** (according to Smith & Rader, this is different than a *Leptosalenia texana*)
2. **Unknown Crab Claw**
3. **Partial Starfish**
4. **Ray Tooth Pseudohypolophus menultyi**

**Jamie Shelton**

PSoA Member, Programs Chair, Field Trip Co-Chair

## August 2023 Field Trip:

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### Perot Museum of Nature + Science

**DATE: Saturday August 24th**

2201 North Field Street, Dallas, TX 75201

Meet at 10am Saturday August 24th at the front entrance. General Admission tickets are around \$20 for adults and the General Admission + T.Rex Experience is \$35 for adults (as far as I can tell!). It is a good idea to get your tickets ahead of time on their [website](#). Parking is \$10 for the Museum Lot. There are also other lots within walking distance - prices vary.

With the temperatures soaring into the 100's lets spend a month in the AC and enjoy some fossils others have spent time digging up and prepping! If you have not yet been, the Perot is a huge modern museum combing the best of Science and Natural History museums into one house - with a little petroleum science mixed in to remind you how it was paid for :). Hope you are able to make it!

**Jamie Shelton**

Field Trip Co-Chair

## Outreach Opportunity

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### Girl Scout Troop Meeting

We have been contacted by a Girl Scout Troop Leader with a request for a member to give a 15–20-minute talk to girls in grades 1-3. Their troop meetings on the first Tuesday of the month in Austin at the Asian American Resource Center on Cameron Road. If you are interested in this outreach opportunity, please contact [president@austinpaleo.org](mailto:president@austinpaleo.org).

**Heather Aziz**

PSoA President

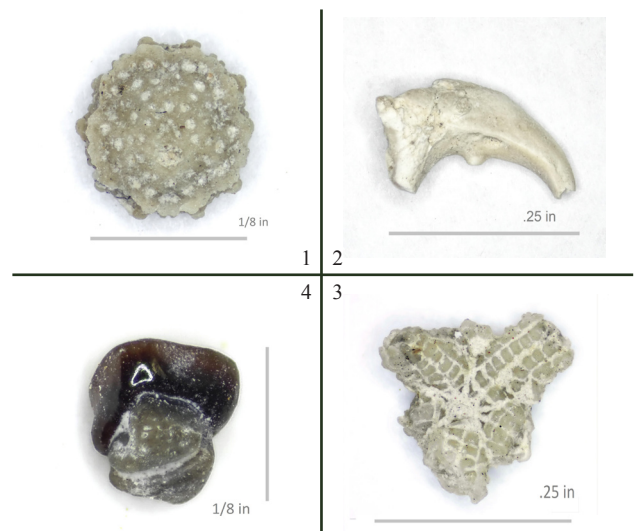






Fig. 1 *Loriola* echinoid (Melvin Noble)

## July Field Trip Report: Johnson City

**O**n a warm summer day 10 members of the club met to collect at a site close to Johnson city. New members Bruce, his daughter Kalley and son Trevor, Raoul and his son Angel, Andrew Peters, Cindy Collins and me, Melvin Noble showed up to collect in the cretaceous. If I forgot some one, I apologize. Eric Rose, our last president found a possible cretaceous alligator bone at this site in the past. We started at the base of the hill, slowly working our way to the top where there seemed to be more promising material. The kids found lots of stuff: gastropods, bivalves, etc, and asked many

Fig. 2 Epic haul! (Kalley + Trevor)





## July Field Trip Report (Cont'd):

### Johnson City

questions. Kalley, Trevor and Angel made quite a fossil haul (Fig. 2). I am happy we have more young people learning about paleontology and just getting outside. Kalley found a cool specimen of a serpula worm tube and I explained how these were quite common and are found on shells of *Exogra Ponderosa* oysters and *Macraster* echinoids. Andy found several examples of the bivalves *Protocardia* and *Arctica*, along with some ammonite pieces and lots of *Turritella* and *Mesalia* gastropods (Fig 4). He also found a large *Tylostoma* gastropod, possibly a *Lunatia Praegrandis*. Several people found some *Trigonias*, a very cool bivalve. I know the kids found some. Unfortunately they do not preserve well and its hard to find a real ornate specimen. I found some *Loriola* echinoids (Fig. 1) and many other people did also (Fig. 3). By about 10:30 am most everyone had enough for the day and drifted off to the cool retreat of their A/C at home. The sun was heating up the hill and the day was gonna be a hot one but it was nice to get out of the house for awhile to collect.

#### Melvin Noble

Field Trip Co-chair



Fig. 3 *Loriolia* echinoids (Andrew Peters)

Fig. 4 Gastropods (Andrew Peters)







Fig. 1 Steel Dimetrodon and Mural WMNH - Seymour TX

## Side Trip Report: Whiteside Museum of Natural History

The unfortunate passing of a dear friend found me out of town for a funeral and to spend time with a family I am close to. But after seeing that I was just 24 miles from Seymour, I decided to head to the Whiteside Museum of Natural History in Seymour Texas to take some time by myself. Seymour is deep in the heart of the Texas red-beds. This is a great place to learn about these Permian Period and lots of fossils from these famous beds have been discovered in this area. The Whiteside Museum is known for their close connection to these discoveries.

As early as 1882, Permian fossils were being found on a ranch just out side of Seymour by Charles H Sternberg. These were sent to Harvard and Mr. Sternberg corresponded with a Dr. Broili in Munich, Germany. Many years later, in 1939, Dr. T. E. White of Harvard found the boxed fossils. During a trip to the area, Dr. Broili determined that Sternberg's fossils were of a new species and named it *Seymouria Baylorensis* after the town and county it was found. It was an important scientific discovery in the evolutionary timeline because it was a cross between an amphibian and a reptile. Its one of my personal favorite animals from the Permian.

This is a great museum with several exhibits from that era. This was a time when there was one super continent we call Pangaea. The Permian is often called the age of the reptiles. This museum helps to stir the imagination about that time period. There are fossils and replicas of the reptile Dimetrodon (our club mascot) the fascinating amphibian Eyropps, the Reptile like Synapsid called Edaphosaurus (Fig. 5),



Fig. 2 Triceratops skull





Fig. 3 Sarosuchus skull

Triceratops - famous dinosaur of the Cretaceous (Fig. 2)- and much more. There is also a natural history exhibit, a exhibit about big cats such as smilidon (another favorite) and their evolution (Fig.4), and more coming soon. There is a gift shop with shirts, books, and Dimetrodon plastic models - which I had to buy! The museum sells a book called the Permian Field Guide ( Bakker. Felis. Simon) that I highly recommend.

Be sure to look at the murals on the side of the building, the ammonites people have brought up and the steel Dimetrodon if you go (Fig. 1). Across the street is a great little music park. You can play these big metal xylophones and there are some drums. There I composed a piece called "Music for Permian Paleontology"- I will post a video on our member page soon. LOL. Its good to be a kid again. There are some good restaurants in Seymour like the Long Branch Roadhouse for good steaks and I had a great breakfast at La Familia Mexican Restaurant.

**Melvin Noble**  
Field Trip Co-chair



Fig. 4 Smilidon evolution

**Whiteside Museum of Natural History (WMNH)**  
310 North Washington Street  
Seymour TX 76380  
(940) 889-6548  
[WMNH.org](http://WMNH.org)

Fig. 5 Edaphosaurus recreation







## Tailings...

### In The News

#### How to bring a 75-foot-long dinosaur back to life

A team of scientists and artists transformed a jumble of bones entombed in tons of rock into a towering dinosaur that will leave visitors to L.A.'s Natural History Museum wonderstruck.

Richard Conniff, [National Geographic](#), August 13th 2024

#### A Dinosaur So Well Preserved, It Looks Like a Statue

Borealopelta, discovered accidentally by Canadian miners, is one of the most spectacular fossil finds of all time.

Ed Yong, [The Atlantic](#), August 3rd 2017

#### The Largest T. Rex Could Have Been 70 Percent Heavier Than Fossils Suggest

Two scientists used modeling to predict how big the giant carnivores could have really grown, making a point that fossils likely don't represent the largest or smallest individuals of a species

Margherita Bassi, [Smithsonian Magazine](#), July 31st 2024

#### Two Rare Jurassic Skulls Could Help Unlock the Secrets of Mammals' Evolutionary Success

Fossils reveal a prehistoric, mouse-like creature matured slower and lived longer than similar mammals of today

Margherita Bassi, [Smithsonian Magazine](#), July 29th 2024

#### No, Dinosaurs Did Not Trudge Through Thick Rainforests

The first jungles dense with flowering plants only formed after an asteroid impact wiped out the giant creatures

Riley Black, [Smithsonian Magazine](#), July 29th 2024

### 2024 Field Trip Schedule

August	<b>Perot Museum of Nature and Science - Dallas TX</b>
September	<b>Texoma Moody / Evant (2 days)</b>
October	<b>Brady / Santa Anna</b>
November	<b>Brownwood</b>
December	<b>White Mammoth and Pot Luck</b>

*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 newsletter or come to our monthly meetings for updates.

### Paleo Book Resources



#### Paleo Books from HGMS

This is a book series published by the Houston Gem and Mineral Society and contains several volumes on Cretaceous and Pennsylvanian fossils from Texas localities. These can be purchased as a bundle or individually, in print or as a digital download, from the [HGMS Website](#).

- Texas Cretaceous Echinoids (Print & Digital Options)
- Texas Pennsylvanian Brachiopods (Print & Digital Options)
- Texas Cretaceous Ammonites and Nautiloids (Digital Only)
- Texas Cretaceous Gastropods (Print & Digital Options)
- Texas Cretaceous Bivalves (Print & Digital Options)
- Middle Eocene Claiborne Invertebrate Fossils (Print & Digital Options)
- Cretaceous Oysters in Texas (Digital Only)

#### 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 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](mailto: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](http://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

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](http://www.austinpaleo.org)

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

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

#### Current Club Officers

President	<b>Heather Aziz</b>	<a href="mailto:president@austinpaleo.org">president@austinpaleo.org</a>
President Emeritus	<b>Erich Rose</b>	
Vice President	<b>Eric Jones</b>	<a href="mailto:vicepresident@austinpaleo.org">vicepresident@austinpaleo.org</a>
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Secretary	<b>Gary Vliet</b>	<a href="mailto:secretary@austinpaleo.org">secretary@austinpaleo.org</a>
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