

# PALEO FOOTNOTES

NEWSLETTER OF THE PALEONTOLOGICAL SOCIETY OF AUSTIN

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FEBRUARY 2025



## President's Note

I hope everyone is enjoying the mild weather we have recently had. If it sticks around, we may have beautiful days for our upcoming field trips. There are two this month: our regularly scheduled outing and a second outing to the Permian Red Beds. The second requires coordination with our field trip chair, Jamie Shelton, and there is a fee associated with attending so please reach out to Jamie if you wish to go on that one.

We have had an uptick in requests for outreach. Thank you to all that have volunteered to participate. I would expect this trend to continue throughout (continued on page 2)

## This Month's Speaker

**My Journey**  
Speaker: **Jared Cook**

This month's presentation today will illustrate Jared's start in paleontology, documenting his progress as he transitions from an amateur fossil hunter to a paleontologist. You will get an inside look into how he started, his most significant fossil finds, what comes next for these specimens, and his goals for academia.

Jared Cooke is a Texas fossil hunter, paleontology content creator, and Zoology student at Texas A&M University.

February 2025

**PSoA Regular Meeting**  
Tuesday February 18th - 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**  
Harker Heights  
Saturday February 22nd  
(see page 2 for details)

## President's Note

(continued from page 1)

the spring so please keep an eye on your inbox for outreach opportunities. Again, you do not need to be an expert in fossils to staff a touch table or speak to the public about fossils. Mike has a binder worth of resources that you can print out to help convey scientific information at outreach events. We are currently trying to get touch table fossil sets distributed to members in different areas so that we can minimize driving times.

I have contacted Westcave and confirmed the date and time for our April auction and potluck. This year's event will be on April 19th from 12:00 pm – 3:00 pm.

### Heather Aziz

PSoA President



## February 2025 Field Trip:

### Harker Heights

Date: **Saturday February 22nd - 9:00am**  
Meet-up: **HEB Parking Lot**  
601 Indian Trail Drive, Harker Heights  
Formation: **Walnut**

Meet in the HEB Parking lot on Indian Trail Drive off of 190 as you come into Harker Heights. Look for Jamie's dark blue Scion with turquoise wheels. The site is easily accessible, facilities are within a short driving distance and a sack lunch is a good idea.

Lots of good finds here – gastropods, echinoids, the occasional ammonite and if you are super lucky...shark teeth. Some finds can be tiny, so small containers are a good idea. No digging required, but a screwdriver or some other implement is always useful.

Please pay attention to the weather - the temperature can be unpredictable this time of year - and dress appropriately. This is an easily accessible site with easy picking - a great spot to bring the kids!

If you have any questions, feel free to email Jamie at [fieldtripchair@austinpaleo.org](mailto:fieldtripchair@austinpaleo.org) before the weekend or you can reach her at (512) 214-2589 the day of. See you there!

### Jamie Shelton

Field Trip Co-Chair

## Outreach Report:

### Summitt Elementary School

The outreach event at the Summitt Elementary School STEM fair was a hit! My kids, Hailey and Bruce, worked the table and did a great job of sharing knowledge with the students. Even the adults learned something new as well!

### Trevor Thompson

PSoA Webmaster



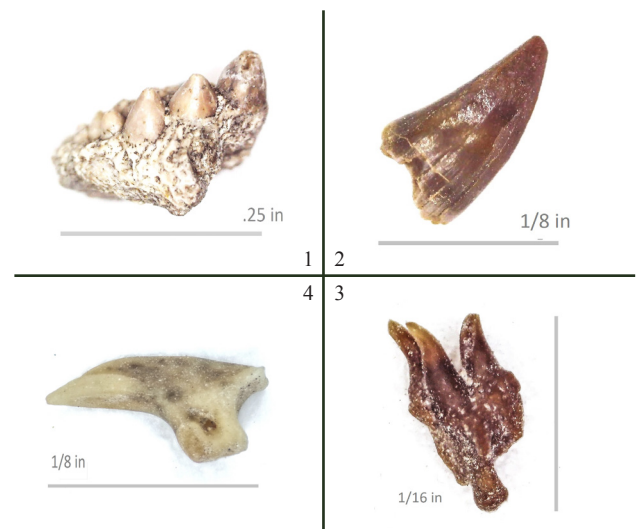
## The Micro Matrix

Since some of our members get to go to the Permian Red Beds this month, I thought I'd showcase a few Texas Permian Finds

1. **Archeria** - amphibian tooth plate
2. **Edaphosaurus** - tooth
3. **Xenocanth** - shark dermal denticle
4. **Unknown** - claw

### Jamie Shelton

PSoA Member, Programs Chair, Field Trip Co-Chair



## Volunteer Opportunity: Texas Science & Natural History Museum - Texas Memorial Museum

Texas Science & Natural History Museum is looking to expand its volunteer team. Are you or someone you know passionate about informal science education?

Volunteers at Texas Science & Natural History Museum are part of the Education Team and are called Gallery Guides. Gallery Guides interpret up-to-date and engaging scientific information to visitors to the museum's exhibit galleries, lead guided tours, participate in museum events, and provide identifications of local fossils. Join us by applying to be a Gallery Guide. Please send your resume to [TMMEducation@austin.utexas.edu](mailto:TMMEducation@austin.utexas.edu) and complete the following application form. [Apply Now](#)

**Liam A Norris**  
Graduate Research Assistant  
Texas Science & Natural History Museum



## General Announcement: Austin Gem and Mineral Society Celebrates 75 years!

This year is the 75th Anniversary since AGMS was founded! To mark the celebration, we are hosting a year-long celebration culminated by our Gem Capers Show in October with "Diamonds" as the theme.

The kickoff event is our General Club Meeting which will be held on Saturday, March 22 starting at 2:30 PM at the clubhouse (6719 Burnet Lane, Austin). We are planning a cookout with hamburgers and hot dogs, speakers, presentations, etc. Dan Shurtz, SCFMS President will be attending as well as representatives from ACC and other community partners.

Please extend our invitation to your club members to join us for a fun afternoon and help us celebrate our Diamond Jubilee! If any of you would like to say a few words about AGMS, our history together, remembrances, etc, please email [me](#) or [Mark Barber](#) so we can include you in the event.

We look forward to seeing you in March!

**John Connors**  
AGMS President

**Become a Gallery Guide at  
Texas Science & Natural History Museum!**

- Join the Education Team
- Engage & inspire visitors
- Lead guided tours
- Learn more about natural history of Texas

**Volunteers needed!**

Scan me to learn more and apply!

## Outreach Opportunities: Wild Basin and Austin Botanical

The past two years for spring break we have provided and outreach table for a spring break event at Wild Basin called Wild by Wild Basin (WXWB). They provide a pop up tent at the trailhead and we interacted with guests before or after they hike. They are looking for us to host a tabling event from 9:30-12:30pm or 10-1pm on Tuesday March 18th, Wednesday March 19th or Thursday March 20th. They only need us one day and are open to afternoons as well - but mornings are popular at this time of the year. Let us know if you are available and would like to participate.

Starting later this month there is also an opportunity to volunteer for a touch table at the Austin Botanical Gardens event: Dino Days. This is a great event and runs from the end of the month through March. Great way to spend some time outside in the beautiful gardens and talk to interested folks! Stay tuned for email announcements and more details at our upcoming February Club Meeting.

Please reach out to our president Heather if you are interested in participating in these or future events: [president@austinpaleo.org](mailto:president@austinpaleo.org)

## Club Accolades: SCFMS Website Contest Winner!

The 2024 SCFMS Website Contest winner was the Paleontological Society of Austin! Congratulations to Randy Whited and Mike Smith for all the great work they have been doing!

The top two Regional Federation submissions are automatically entered into the AFMS (American Federation of Mineral Societies) competition and we anxiously await that announcement! It is always great to have the efforts of club members recognized by the broader community!



Field Trip:  
**Day 1 - Lake Jacksboro**

Fig. 1 Unknown specimen (Brian Bedrosian)



Fig. 2 *Metacoceras* sp. (Alan Keith)



Fig. 3 *Tainoceras* sp. (Eric Jones)



Fig. 4 *Tainoceras* sp. (Brian Bedrosian)



Fig. 5 *Goniatite* (Gary Rylander)



Fig. 6 *Goniatite* (Gary Rylander)



Fig. 7 *Gonioloboceras* (Gary Rylander)

**O**n a cold but dry January day, twelve members of the PSOA met up by the Jack County Courthouse in downtown Jacksboro. Jean Higgins, Ray Atkinson, Alan Keith, John Herron, Rob Ferguson, Eric Jones, Ron Dipranio, Gary and Cathy Rylander, Ed Elliot, Brian Bedrosian and me, Melvin Noble took off to collect in the Pennsylvanian Finis Shale. As we collected the day turned out sunny with just a few clouds high in the blue sky. The wind was out of the south bringing warmer air and blowing the cold air towards the lake, away from us. Warm clothes combined with a windbreaker made it a pleasant collecting experience. I started out over by the lake, searching for what few little areas are left that have not grown over with grass, but didn't find much. I did find an nice extra large *Straparollus* gastropod which I happily pocketed.

Later on I went over to the hill out of the wind with the sun shining down warmly against us. Strangely there were little patches of ice that had not fully melted. Several people found goniatites and nautiloids. Gary found some nice nautiloids that were almost complete and beautiful (fig. 7), along with a complete round goniatite (fig. 5), really pretty. Several chunks of the nautiloids, including *Tainoceras* and *Metacoceras*,

were found by Alan (fig. 2), Eric (fig. 3), and Brian (fig. 4) with most of them having some nice detail. They were worth collecting for sure even if not complete. Eric found a goniatite that appears to be a *Gonioloboceras* as per the distinctive suture pattern. He also found a well preserved large productid brachiopod, what appears to be a *J. Nebrascensis*. I also saw a really nice *Brachycycloceras* nautiloid, one of my favorite of the straight nautiloids with all the ridges on the shell. Some *Bellerophons* that were found, the gastropod that looks a little like a nautiloid. As the day warmed up, the ice patches began to melt and quite a bit of water started coming out of the gray clay. You had to watch where you walked or your boots would cake up and you'd find yourself several inches taller!

As the sun began to set, we reluctantly packed up and started to head back across the dam. On the way we stopped at a little out crop where Ed showed others how to find micro-morphs goniatites, while I gathered more dirt for Jamie so she could look for micro fossils. That night we stayed in Mineral Wells so we would be close to the collecting sites in that area the following morning. Several of us met up at the Mesquite Pit Steakhouse that evening for a fine meal and the camaraderie of fellow collectors.



Fig. 8 Encrusting Sponge (Eric Jones)

Field Trip:  
**Day 2 - Mineral Wells**

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Fig. 9 *Michelina* sp. (Alan Keith)



Fig. 10 *Michelina* sp. - detail of base (Alan Keith)



Fig. 11 Unknown specimen (Eric Jones)



Fig. 12 Conularid (Brian Bedrosian)

On Sunday morning a cold cloudy day broke that was supposedly warmer, but the humidity, lack of sun and dampness causing it to feel so much colder. It also sprinkled just a little in morning to make sure we were fully committed to our hunt. We first stopped at the Union Hill site where Alan Keith found a nice *Michelina* coral with the base intact (figs 9+10). Finding one with the base is pretty rare - especially as large as this one. I found one also although it was quite a bit smaller than his and not nearly as nice. Brian found a lot of the free floating crinoids, *Paragassizocrinus tarri*, that the site is known to produce. Jean found a piece of a Metacoceras nautiloid with nodules on the side (fig. 13). Brian and Eric found some also - first time I have seen them found here - and so many. Jean and Alan went to the top of the hill to explore. Later Alan showed me some plant material that he had collected outside of Austin. The plates of rock had some cool seed pods in them. Eric found some encrusting sponges (fig. 8) and a strange rounded 6 sided fossil of something (fig. 11)? Brian found a bunch of the enigmatic *Conularid* fossils (fig. 12). After several hours of hunting, I would say that Union Hill got combed pretty good this time by everyone.



Fig. 13 *Metacoceras* sp. (Jean Higgins)



Close to noon we went on to another road cut on a hill close by to look for gastropods, corals and whatever we may find. Those of you that have been here before know the hunting can be difficult in this steep slope. Huddled close to the ground, most had their eyes out for a small gastropod, *Trachydomia nodosa*, with a shell decorated in little bumps. Several were found and all went home with at least one. It was a good collecting trip and great to see other members of the club that live further away.

**Melvin Noble**  
Field Trip Co-Chair



Fig. 14 **Gastropod** (Brian Bedrosian)



Fig. 15 **Solitary Coral** (Brian Bedrosian)



Fig. 14 **Trachydomia nodosa** (Brian Bedrosian)





## Tailings...

### In The News

#### Rare Neck Fossil With Puncture Mark Suggests a Prehistoric Crocodylian Snacked on a Young Pterosaur 76 Million Years Ago

The fossil sheds light on interactions within the Cretaceous food web and may represent the first record of this type of predation in North America

Margherita Bassi, [Smithsonian Magazine](#), February 10th 2025

#### Rare Fossil of 183-Million-Year-Old ‘Sea Monster’ Reveals Both Smooth and Scaly Skin

For the first time, scientists have completed an in-depth analysis of fossilized soft tissues from a plesiosaur

Sarah Kuta, [Smithsonian Magazine](#), February 7th 2025

#### Paleontologists Discover Fossil of the Oldest Known Modern Bird—but It Raises More Questions Than It Answers

The fossil suggests that modern birds evolved before the dinosaur-killing asteroid, perhaps in Antarctica

Margherita Bassi, [Smithsonian Magazine](#), February 6th 2025

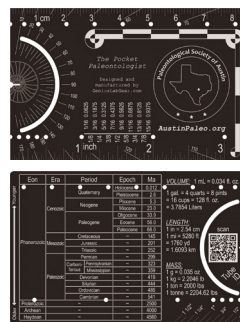
### 2025 Field Trip Schedule

February	<b>Harker Heights</b>
March	<b>Whiskey Bridge / East Texas</b> <i>Midlothian Quarry</i>
April	<b>PSoA Picnic and Auction</b>
May	<b>Ada Oklahoma</b>
June	<b>Midlothian Quarry</b> <i>Whiskey Bridge</i>
July	<b>Loop 360</b>
August	<b>Texas Through Time</b> <i>Evant/Moody</i>
September	<b>North Sulfur River</b>
October	<b>Lake Texoma / Post Oak Creek</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.

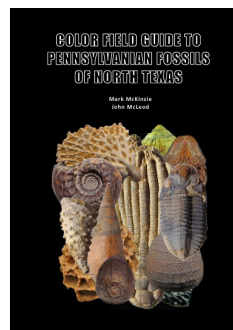
### Austin Paleo Gear!



#### The Pocket Paleontologist

Eric Jones, on behalf of the PSoA, produced this awesome laser etched card that includes handy scales and other information for use in the field. The size of a credit card, it fits neatly in you wallet so you always have it with you. Available for sale at our meetings or by contacting Mike Smith. Makes a great gift!

### 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 Pennsylvanian sites frequented by PSA members with color images of specimens.

### WhatsApp for PSoA Members

This would be handy for folks to have on their phones for Fossil Fest - or just an easy way for the board to communicate with you when email is not practical. We are not setting this up for random interactions, like “anyone know what this fossil is”. The goal is to have something we can use to broadcast last minute field trip changes, emergency notifications (like “we are locked out of AGMS, meeting cancelled”), pleas for help at Fossil Fest, etc.

To start you need WhatsApp installed on your phone. If you don’t already know, WhatsApp is an app similar to normal texting and will show up as a text message on your mobile devices. If you want to get real-time information without having to check the app, then make sure to allow push notifications when you set it up. Then just scan the QR code and an Admin will approve your joining the group.



## 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.

11. Over the past year we have had several new members joining the club from all walks of life - it is important to remember that we may have differing views on the world. However, we are all united by our common appreciation of paleontology and science. When meeting in the field or at the clubhouse, please be respectful and refrain from topics that may be alienating to others - such as religion and politics - as we want all people to feel welcome and a part of the club.



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>
Treasurer	<b>Mike Smith</b>	<a href="mailto:treasurer@austinpaleo.org">treasurer@austinpaleo.org</a>
Secretary	<b>Paul Hammerschmidt</b>	<a href="mailto:secretary@austinpaleo.org">secretary@austinpaleo.org</a>
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