

PALEO FOOTNOTES NEWSLETTER OF THE PALEONTOLOGICAL SOCIETY OF AUSTIN

VOLUME 19 | NUMBER 11

NOVEMBER 2024



President's Note

Thank you to everyone that helped make Fossil Fest successful this year!

If you attended, helped spread the word, or were one of our fabulous vendors, speakers, or volunteers: without you our event wouldn't have been as successful as it was. I would also like to thank our Show Chair & VP, Eric, for pulling off his first Fossil Fest with flying colors. We hope to see everyone back at Fossil Fest in November of 2025!

Remember the December meeting on Tuesday 12/17 at 7:00 PM will be a White Mammoth Fossil Swap and Potluck. Please bring a dish to share

This Month's Speaker

New rodents from the Devil's Graveyard Formation, and the rediscovery of Bone Hash Hill from the Eocene of West Texas

Speaker: Ben Rodwell

Today rodents are the most diverse group of all living mammals, and historically they make up a significant component of fossil collections during the early Cenozoic (~65 million years ago-Present). Recent fieldwork the Eocene (~56-34 million years ago) aged Devil's Graveyard Formation of West Texas, and in the collections of the Vertebrate Paleontology (continued on page 2)

November 2024

PSoA Regular Meeting Tuesday November 19th - 7pm **AGMS Clubhouse** 6719 Burnet Lane

Join Zoom Meeting https://us02web.zoom.us/j/88451710052?pwd= Uy9hV05BTy9rUmIzYIMzdVVnNTVjdz09 Meeting ID: 884 5171 0052 Passcode: 603270

> PSoA Club Field Trip November 23rd - 8am Brownwood (see details page 2)

President's Note

(continued from page 1)

with your fellow PSoA members! If you'd like to participate in our annual White Mammoth Gift Swap, please bring a wrapped fossil, or fossil themed gift. Do not include a gift tag/ information about who the gift is from. The "price range" is \$20.00. You can RSVP and include the food item you will be bringing <u>here</u>.

See you all at the monthly meeting!

Heather Aziz

PSoA President



This Month's Speaker

(continued from page 1)

Laboratory at The University of Texas at Austin, have led to the discovery and identification of fossils that belong two new genera of a not very well-known group of rodents called the Cylindrodontidae, which are presented here.

Additionally, recent fieldwork in early 2023, in the Sierra Vieja area of West Texas has led to the rediscovery of an exciting fossil locality named "Bone Hash Hill." Bone Hash Hill is a notable locality due to the exceptional preservation of fossils that are likely to represent new species of primates, insectivores, and other small vertebrates. Most of these new fossils are found encased a very hard sandstone that is extremely hard to mechanically prepare, and we have turned to digital preparation of them using high resolution (~56-34 million years ago) CT scanning. I will discuss some of the thrilling new findings and challenges of working with this new site.

Ben Rodwell is currently a PhD student in the department of Anthropology at The University of Texas at Austin. Ben is originally from Littleton, Colorado and attended Colorado State University where he discovered his love for mammalian paleontology. Ben's interests in the early evolution of small mammals such as primates and rodents during the Eocene Epoch (~56-34 million years ago) led him to pursue a PhD under the supervision of Dr. Chris Kirk at UT Austin. Ben is actively involved in field projects looking for new fossils in West Texas and Wyoming, and has done paleontological field work all over the Rocky Mountain region. Ben's dissertation research is broadly focused describing new and important fossils of some of the earliest primates and rodents in the fossil record.

November 2024 Field Trip: Brownwood

Date: Saturday November 23rd - 8am

We will meet at 8:00 am, Saturday Nov 23rd, in Brownwood at the Underwood Cafeteria (402 W Commerce St. Brownwood TX 76801) and carpool to site Look for Melvin's blue Toyota Tacoma or Ed's white Toyota Tundra. This is a newer meeting place so please take note. Please be on time as we have about a 30 minute drive to get to the site and its out in the country.

This site is in the Harpersville Formation, Cisco group, Virgilian series ~ 297 million years (MYA) and we will be hunting for upper Pennsylvanian marine fossils. Crinoid material abounds here as well as brachiopods, bryozoans, bivalves, sponges, corals, gastropods and rare paleozoic shark teeth, such as Petalodus, Orodus or Deltodus. Trilobites have also been found here but are very rare. Most material will be small to hand size but there are larger boulders around the site with nice things in them you may want to hammer away at. Consider bringing containers of various sizes, bags for larger items, hammer and chisels, eye protection and something to wrap fragile things in. We are very much out in the boonies, so bring lots of water, sturdy footwear, food for lunch or snacks, and watch the weather for Brownwood for appropriate clothing. It can be colder there than here. It is a long way back to town and there are no facilities, so be prepared. Given the quantity and quality of fossils, it's always a good trip to Brownwood. If you need more info, contact Melvin Noble fieldtripchair@austinpaleo.org

Melvin Noble

Field Trip Co-Chair

Proposed Slate of Officers for 2025

At the November meeting we will vote on Officers and Board Members for 2025

President	Heather Aziz (Board Member)
VP & Show Chair	Eric Jones (Board Member)
Treasurer	Mike Smith (Board Member)
Secretary	Brian Bedrosian (Board Member)
Editor	Brian Bedrosian
Co-Field Trip Chair	Melvin Noble (Board Member)
Co-Field Trip Chair	Jamie Shelton (Board Member)
Program Chair	Jamie Shelton
Webmaster	Randy Whited



Outreach Report: Fossil Fest 2024!

Thank you to all of the volunteers and vendors for helping make a successful Fossil Fest! We could not have done it without you. The number of attendees was down this year, but we still did well with sales of merchandise and raffle tickets. We also benefited from selling books this year. It was definitely a learning experience for me, and I have many ideas of how I can improve things without too much trouble. Mostly in the planning and outreach stages, and more around making it less stressful behind the scenes to coordinate. We ended up losing some vendors, but then gaining some new ones to balance it out. We're not quite back up to the level of pre-covid, but it's getting there. If you go to any other fossil shows, or visit any fossil stores, please encourage them to reach out to showchair@austinpaleo.org if they'd like a booth. We can easily accommodate a few more.

We have chosen next year's theme, and it is Trilobites! Should be a fun one! It's always the first weekend of November, which for next year means the show will be on November 1st and 2nd. Please put it in your calendar and keep it clear so we can have enough volunteers to keep putting on the show.



Eric Jones Vice President + Show Chair



October Field Trip Report: Brady + Santa Ana

Fig. 1 Starfish arm (Gary Rylander)

Lt was a nice cool early fall morning that Gary and Cathy Rylander, Ron Dipronio, Gary Kendricks and me, Melvin Noble, met to enjoy some fossil collecting in the Pennsylvanian and Permian period.

At the first spot (Pennsylvanian) not much was found but Gary Rylander found a crinoid cup and Gary Kendricks found a bit of nice bryozoan. I was hoping that after a year the rain would have washed more material out but this year it seemed a little thin. In spite of few fossils the view was spectacular plus it was nice to be back in my old stomping grounds. Its fossil collecting, some times you find stuff, sometimes you don't.

Since we came to collect fossils and find something we decided to go to the Santa Ana site to collect in the Permian Period. After we got there it was starting to get a little warmer, but a cool breeze that blew across the lake and up the hill where we were collecting kept us cool for awhile. I found a trilobite pygidium with a little of the thorax attached that was laid out (fig. 4). My first time to find any trilobite material here. Ron found a nice sized enrolled trilobite, a real beauty. Gary Rylander found one right after that then later on Gary found two more enrolled trilobites for a total of three (figs. 3).



Fig. 2 Starfish arm (Gary Rylander)



A rare find, Gary also managed to hook a conularid - we find these at other sites, but I don't recall one coming from here (fig. 3) There were several beautiful Welleria brachiopods to be found and Gary Kendricks found a nice Spirifer s.p. brachiopod in the matrix. There were some big fat crinoid stems found, I normally would not mention it but these were pretty good size and I believe Ron found one that was about six inches long.

But now for the find of the day: Gary Rylander found a starfish arm - one that was inflated not flattened with lots of detail (figs. 1+2). A really cool and rare scientific specimen. Its not everyday you get to see something like this. We are hoping maybe Dr Sprinkle can look at it. I remember when John Henti found a complete new species starfish in Oklahoma. We collected to about till about three o'clock but the heat was starting to effect us so we decided to call it a day. At this point even the breeze coming off the lake could not cool us down. We saw a couple of ravens fly overhead plus the view of the lake and hills was very beautiful. It was nice to be collecting in the Permian of the West Texas area (The Big Country) and a good time was had by all.

Melvin Noble

Field Trip Co-Chair

Fig. 3 Enrolled trilobite and conularid (Gary Rylander)



Fig. 4 Trilobite pigidium (Melvin Noble)



Field Trip Opportunity: Dinotour 2025 Southern Alberta

Have you ever dreamed of exploring and discovering a dinosaur fossil with some of the world's greatest dinosaur hunters? This is your opportunity to register for Dinotour 2025 Southern Alberta to be held July 4 to July 7th, 2025 inclusive. During this four-day family-oriented event you will:

- Learn about the dinosaurs of southern Alberta from worldrenowned scientists Dr. Philip Currie, Dr. Eva Koppelhus and Dr. Caleb Brown and your tour coordinator Mona Trick
- Tour the Royal Tyrrell Museum gallery and the labs and backrooms
- Hike to "Dinosite"
- Hike to the Albertosaurus dinosaur quarry in Dry Island Provincial Park
- Explore Dinosaur Provincial Park with hikes and a bus tour

Tour includes:

- Guided tour including bus transportation to and from Calgary, Alberta
- 3 nights accommodation (double occupancy)
- All meals over the 4 days of the tour
- Admission to the activities at the Royal Tyrrell Museum of Palaeontology and Dinosaur Provincial Park
- Guidebook and T-shirt
- Canadian charitable tax donation receipt for a significant portion of the fees

Cost of tour: CDN \$2,495.00 per person (double occupancy). Minimum age: 14 years old as of July 4, 2025

Optional extras:

- Single supplement: CDN \$328.80
- Calgary hotel room July 3: CDN \$216.91
- Calgary hotel room July 7: CDN \$216.91

Proceeds generated from this tour support the work of the Dinosaur Research Institute, a non-profit charitable organization that finances western Canadian dinosaur research.

Get a registration form from <u>Mona Trick</u> at or select at the <u>website</u>. Your spot will be reserved once we receive your deposit of \$500 CDN for each person (by cheque, money order, Visa or MasterCard credit card or INTERAC e-transfer to <u>info@dinosaurresearch.com</u>). The balance of the tour cost and signed waiver form is due by May 31, 2025. Dinotour 2025 is limited to only 24 participants, only 12 spots are still available.

For more details, email <u>Mona Trick</u> Phone or text 587-578-4579





Tailings...

In The News

New Extinct Species of 'Ridiculously Cute,' Tiny Penguins Discovered in New Zealand

Scientists identified the diminutive birds after finding two of their fossilized skulls

Sarah Kuta, <u>Smithsonian Magazine</u>, July 10th 2023

Rare 'Terror Bird' Fossil Found in Colombia Reveals the Enormous Size of a Prehistoric Predator

The bone, described two decades after its discovery, suggests the species might have grown up to 20 percent bigger than other terror birds

Alexa Robles-Gil, Smithsonian Magazine, November 9th 2024

Scientists Unearth the Oldest Tadpole Fossil Ever Found, and It's a 161-Million-Year-Old 'Giant'

Found in a rock in Argentina, the six-inch-long tadpole sheds light on the history of frog metamorphosis Alexa Robles-Gil, <u>Smithsonian Magazine</u>, October 31st 2024

Scientists Reveal Rare 450-Million-Year-Old Arthropod Fossil Preserved in Glittering Fool's Gold

The critter found in New York represents a new, extinct species of arthropod that could shed light on the evolution of today's insects, crustaceans and spiders

Margherita Bassi, Smithsonian Magazine, October 31st 2024

The story behind Cal Orck'o, Bolivia's 300-foot, dinosaur footprint-covered rock wall

The limestone slab features more than 400 distinct dino trails Jennifer Foden, <u>G Adventure</u>, April 25th 2017

2024 Field Trip Schedule

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.

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 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.

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 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		Current Club Officers		
Annual Dues:	\$18/individual	President	Heather Aziz	president@austinpaleo.org
	\$24/family	President Emeritus	Erich Rose	
	\$12/associate (non-voting, receiving newsletter)	Vice President	Eric Jones	vicepresident@austinpaleo.org
		Treasurer	Mike Smith	treasurer@austinpaleo.org
Pay on-line at:	https://www.austinpaleo.org/newMembership.html	Secretary	Gary Vliet	secretary@austinpaleo.org
Send payment to:	Treasurer, Paleontological Society of Austin,	Field Trip Co-Chairs	Melvin Noble & Jamie Shelton	fieldtripchair@austinpaleo.org
	P.O. Box 90791, Austin, TX 78749-0791	Programs	Jamie Shelton	programchair@austinpaleo.org
		Editor	Brian Bedrosian	editor@austinpaleo.org
PSoA Web Site:	www.austinpaleo.org	Webmaster	Randy Whited	webmaster@austinpaleo.org
Facebook:	https://www.facebook.com/austinpaleo	Show Chair	Eric Jones	showchair@austinpaleo.org
Twitter:	@Austin_Paleo	Science Advisors:	Pamela R. Owen, PhD.	powen @mail.utexas.edu
			James T. Sprinkle, PhD.	echino @mail.utexas.edu

Permission to copy material printed herein is granted provided proper credit is given to the author and source. The Paleontological Society of Austin is a member of and affiliated with:

South Central Federation of Mineral Societies & American Federation of Mineralogical Societies





page 8