

# PALEO FOOTNOTES

NEWSLETTER OF THE PALEONTOLOGICAL SOCIETY OF AUSTIN

VOLUME 19 | NUMBER 06

JUNE 2024



## President's Note

**I hope everyone is combating the increased temperatures associated with the Texas summer. Remember: Now is also a time for staying hydrated!**

Thus far, our fossil-loving community has raised just over \$5,000.00 in honor of Erich, truly a testament to how much love and respect we all hold for him. We will be collecting additional donations until June 15th. If you intend on contributing but have not done so yet, please do so soon. As a reminder contributions can be made on our website. From the drop-down menu select "membership" and then, on the (continued on page 2)

## This Month's Speaker

**An amateur fossil hunter in the Badlands of South Dakota**

Speaker: **Heather Aziz**

Within the Badlands of South Dakota, you can find the fossilized remains of life during the Late Cretaceous. Since 2019 I have worked a multitaxic bone bed with PaleoAdventures, a commercial paleontology company owned and operated by Walter and Heather Stein. I will share with you the history, stratigraphy, and taphonomy of this bone bed in addition to sharing my personal finds (Adam's also) and experiences in both the field and prep (continued on page 2)

June 2024

**PSoA Regular Meeting**  
Tuesday June 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**  
June 22nd  
**Loop 360 Sites**  
(see details page 2)

## President's Note

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right-hand side of the page, the button that says "contribute". When completing the form please indicate in the "notes" section that your contribution is for Erich.

I will be heading back to South Dakota at the end of this month and will not be present at the July meeting or on the July field trip. I am attending the June field trip to 360 and I hope to see you all there!

See you all at the May meeting,

**Heather Aziz**  
PSoA President

## Outreach Report

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### Science Olympiad

During the months of March and April Mike Smith and I helped two students study for the Fossil portion of the Science Olympiad. As Mike can attest, the bandwidth of knowledge that these students needed to obtain to be competitive was extensive. Mike spent 3 hours with the students in person and I corresponded via email and constructed 2 video recordings to help answer all their questions. It is with great pleasure that I can share with you that the BASIS Cedar Park School, who competed in a total of 23 separate events, won the State Championship. The two students that competed in the Fossil portion of the State Science Olympiad scored 4th place and received a medal for their performance! The fossil team went on to finish 11th out of 61 teams in the National Science Olympiad! **PSoA extends our congratulations to Iniya and Vibha!**

**Heather Aziz**  
PSoA President

## This Month's Speaker

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lab. I will also try to share some insight as to how amateurs can get involved in fieldwork as this seems to be a constant question many have.

### About our Speaker:

Heather Aziz is a staff neuroscientist in the College of Pharmacy at the University of Texas at Austin. She holds a BSc in Animal Science from the University of Maryland and a MSc in Laboratory Animal Science from Eastern Virginia Medical School. Heather is also the President of our Club.

## June 2023 Field Trip:

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### Loop 360 - Austin

**DATE: Saturday June 22nd**  
Cretaceous - Walnut Formation

We will stay close to home this month, and start at 8am because it's going to be quite warm! We'll meet at the Austin Loop 360 road cut which is Walnut Formation. We will park on the Northbound side of Loop 360 directly across from Pascal Lane. Make sure you pull completely off the shoulder when you park. The road cut is easily accessible but it is fairly high up, so be safety conscious at all times! The area we hunt can be steep so wear good shoes. Fossils will include gastropods, echinoids, corals, bivalves and sometimes crab material. Small collection boxes are a good idea as well as small digging implements. This is primarily surface collecting, so no major digging.

**Jamie Shelton**  
Field Trip Co-Chair

**Hometown hunting!**  
see Field Trip instructions this page





Fig. 1 Floating Crinoid Calyx (Ricky Paxton)

## May Field Trip Report - Day 1: Yellow Bluff - Oklahoma

As we traveled to Oklahoma I was a little excited about the recent rains there increasing the possibility of exposed fossils. But I also had some anxiety and trepidation about bad storms in tornado alley. As we drove up through Sulfur, we saw many buildings that were torn up by tornadoes. Thankfully Saturday morning when we got up, there were sunny blue sky's with a cool wonderful breeze that made great weather for collecting. Edward Elliott, Gary and Cathy Rylander, Wayne Mandrell and his two sons Trae and Brandon, Anna Stanley, Cindy Horn, Ricky Paxton, Jason Mitchell, Leslie Ridell, Kevin Bills, Brian Bedrosian and son Emerson, Doctor Jim Sprinkle and his wife, and me Melvin Noble all showed up to collect at Yellow Bluff Saturday morning. After taking a group picture at the 419 million year old Devonian Callixylon Whiteaunum tree stump, we headed out. When we got there, we set a rope system up to help everybody get up on the hill. A few people were already looking in the stream bed and had found trilobites



Fig. 2 Crinoid Calyx (Brian Bedrosian)



Fig. 3 Crinoid Calyx (Gary Rylander)



Fig. 4 Crinoid Holdfast (Gary Rylander)

in the matrix. I have to say it is a beautiful area to collect, lots of wild flowers, flora and fauna. As the day went on the collecting turned out to be excellent. I believe just about everybody found at least one trilobite. From my research, the trilobite species that are the most common here are Calymene Clavicula and Fragsictum Glebalis, but I am not an expert and other may have been found. We were hoping to possibly find another starfish like John Henti did on a trip several years back, but alas, no luck. With Dr Sprinkle in the mix, many folks were focused on finding interesting crinoid material like those found in the past.

Gary Rylander headed up the slope where he found a nice crinoid hold fast (fig. 4) and several interesting crinoid cups (fig. 3). Rickey Paxton found several trilobites (fig.5) in a little wash out and has already cleaned one that it is turning out quite nice. He also had the find of the day with a beautiful free floating crinoid calyx that has parts of the arms still on it - truly spectacular (fig. 1). Emerson Bedrosian found a couple really nice trilobites early on and confirmed that he really liked collecting at Yellow Bluff (fig. 6). Its good to see a younger generation getting interested in paleontology. I know several people found corals, brachiopods and other interesting crinoid material.

Later on the owner of the land came down and spent some time talking with us. Then he left and came back and brought us a nice pork roast for lunch. He also showed us an area down the creek where you could find trilobites in the matrix and I found a nice one in that area. We stayed till late in the afternoon enjoying the warm weather and great hunting. Later that evening we all met at the Santa Fe Steakhouse to have a good meal and enjoy the camaraderie of fellow collectors.



Fig. 5 Trilobite (Ricky Paxton)



Fig. 6 Trilobite in situ (Emerson Bedrosian)



Fig. 7 Hunters in the Quarry

## May Field Trip Report - Day 2: Black Cat Mountain

The next day several of us headed out to Bob Carroll's Black Cat Mountain Quarry. I was a little nervous of the rains that came through Saturday night and brought along a bunch of tornadoes, including the one that so devastatingly hit in North Texas. In the end it turned out that one just grazed Black Cat Mountain, but thankfully was not as destructive and did not upset our plans. Bob was not feeling well and had some stuff to do so we went down by ourselves. We were told not to collect up on the hill or in the back area. I explained this to everybody and everybody understood. The the collecting turned out to be nice and the rain that threatened did not end up coming in. There are several species of trilobite at Black Cat and Bob some times finds new species. One that seems to be common is the *Huntoniatonia* sp. and Large *Huntonia* Pygidium (bottoms) are common. Sam Horton found several (fig. 11). I found some unrolled trilobites in the flat area, probably *Kainops* sp. Though famous for trilobites, there were also a lot of fantastic brachiopods, including the common *Orthostrophia* *Anastrophia*, the cute *Meristella* shaped like a little heart, and many others. I found several and some ringed with bryozoan colonies. As the day wore on Anna was still on the hunt for a good trilobite and happily found one at the last minute, just as she was about to leave (fig.8).



Fig. 8 Trilobite (Anna Stanley)



Fig. 9 *Actinoptera textilis* pectenid pelecypod (Ed Elliot)



Fig. 10 *Huntonia trilobite* - prepped (Bob Carroll)

Most of us collected till about 3 o'clock. Afterwards, I headed off with Ed and Cindy Horn to Bob's shop in Clarita and looked at some of the trilobites he was prepping (fig.10). They were very beautiful and it was interested to see some of his work. He even gave us some crinoid hold fast material to give to Dr. Sprinkle. We headed back to Texas, about 4 o'clock to get home at a decent hour. I think everybody had a good time hunting in OK! Some people ran into the ticks that are always plentiful in this part of Oklahoma, but we thankfully did not see any rattlesnakes this year. It was a successful collecting trip and I hope we get to do it again next year - maybe earlier to beat the heat and avoid the twisters. Its always exciting to collect in the Silurian and Devonian fossil sites closer to the beginning of life on planet Earth. If you would like to learn more about the fossils that Bob is pulling out of the quarry, check out [Trilobites of Black Cat Mountain](#) by George P. Hansen. For more information on the locations and fossils we found on the trip, [Oklahoma Fossil Localities](#) by Mark G. McKinzie is a great resource (see the Tailings page for more information).

Hope to see you all out there next year!

**Melvin Noble**  
Field Trip Co-chair



Fig. 11 *Huntonia trilobite* pygidium (Sam Horton)



## Tailings...

### In The News

#### Meet the ‘Echidnapus,’ an Extinct Creature That Resembles Both the Echidna and Platypus of Today

The species is among three newly identified monotremes, or egg-laying mammals, discovered from fossils in Australia that are shedding light on the odd animals’ evolution

Sarah Kuta, [Smithsonian Magazine](#), June 16th 2024

#### Do These Fossilized Teeth Belong to the World’s Smallest Great Ape?

Researchers say two teeth and a kneecap belong to a previously unknown species that lived in what is now Germany

Riley Black, [Smithsonian Magazine](#), June 7th 2024

#### Paleontologists Uncover Rare Skull of 500-Pound ‘Thunder Bird’ in Australia

The most complete skull of the extinct, flightless bird ever found has revealed adaptations that might have made the creature well-adapted for a life near water

Will Sullivan, [Smithsonian Magazine](#), June 4th 2024

#### Kids Discover Tyrannosaurus Rex Fossil in North Dakota

The bones belonged to a dinosaur that was likely a teenager when it died. Only a handful of young T. rex skeletons have ever been found

Will Sullivan, [Smithsonian Magazine](#), June 5th 2024

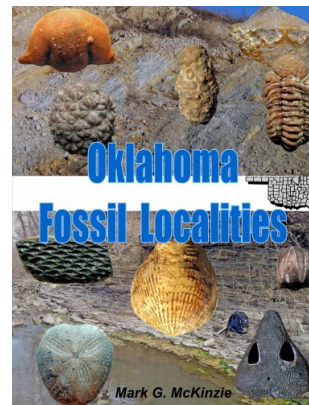
### 2024 Field Trip Schedule

June	<b>Austin Loop 360</b>
July	<b>Johnson City</b>
August	<b>Ross Perot Museum Dallas</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.*

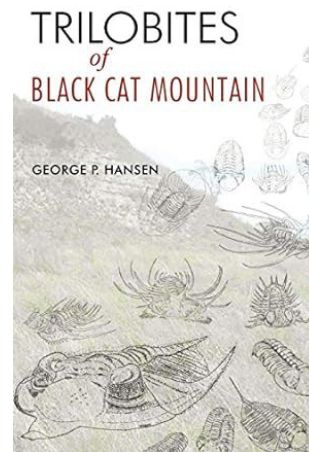
**Important Note:** Please refrain from visiting sites the club is scheduled to access as part of a scheduled field trip. Doing so can clear a site of quality fossils and negatively impact the experience folks will have, especially new members, if the site suddenly feels “picked over”. We do our best 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.

### Oklahoma Resources



#### Oklahoma Fossil Localities

by Mark G. McKinzie . A collector’s guidebook to the fossil riches to be had in the state of Oklahoma. Thirty-nine fossil localities described in detail, ranging in age from the Ordovician to the Cretaceous. Over 500 fossil species illustrated in full color. Revised edition updated in 2022. It is available to order on [Lulu.com](#). This is an online publisher who prints books to order, so expect a week or two for delivery. \$60 and worth every penny.



#### Trilobites of Black Cat

Mountain by George P. Hansen.

A photographic guide to Oklahoma’s Devonian trilobites. The geological history of Coal County, OK. with descriptions of rock formations where trilobites are found. Excavation and restoration of trilobites. A photographic atlas of the Lower Devonian trilobites of Oklahoma, with helpful information to aid in their identification. This is available on the authors’s [website](#) (also a great resource of informatoin). Price ranges from \$6 for digital download to \$36 for the hardcover.

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