

PALEO FOOTNOTES

NEWSLETTER OF THE PALEONTOLOGICAL SOCIETY OF AUSTIN

VOLUME 17 | NUMBER 03

MARCH 2022



President's Note

Spring time in Texas..

Well...sort of... The weather is still a bit of a roller coaster. Warm and then cold and then warm again. Round and around it goes, wherever it stops nobody knows. But the Mexican Plum in my backyard is blooming so these cold snaps cannot continue too much longer. The trip to east Texas will not be delayed.

Our lecture by William Reyes this month looks like a good one. Evolution of Late Triassic Aetosaurs: To what extent did a changing climate drive their evolution? (continued on page 2)

This Month's Speaker

Evolution of Late Triassic Aetosaurs: To what extent did a changing climate drive their evolution?

Presented by: William A Reyes

The Triassic Period was a critical time in earth history both in terms of tectonic activity and biological evolution. Marked by the accretion and initial rifting of Pangea, the Triassic Period allows us to explore the evolution of saurian reptiles, which includes modern day Tuataras (Lepidosauromorpha), Crocodylians & Birds (Archosaurs), Turtles (Testudines), and their extinct (continued on page 2)

MARCH 2022

PSoA Regular March Meeting

Tuesday March 15th - 7pm

Join Zoom Meeting

<https://us02web.zoom.us/j/81387530078?pwd=SnpKTGdJK2c0MHV4b2RUMTQzcXFJZz09>

[78?pwd=SnpKTGdJK2c0MHV4b2RUMTQzcXFJZz09](https://us02web.zoom.us/j/81387530078?pwd=SnpKTGdJK2c0MHV4b2RUMTQzcXFJZz09)

[UMTQzcXFJZz09](https://us02web.zoom.us/j/81387530078?pwd=SnpKTGdJK2c0MHV4b2RUMTQzcXFJZz09)

Meeting ID: 813 8753 0078

Passcode: 302518

PSoA March Field Trip - Dual Trips!

Saturday March 19th

9:00am @ Whiskey Bridge

8:00am in Nacogdoches

(see page 2)

Fossil Fest Planning Meeting

Tuesday March 22nd at 7pm on Zoom

President's Note

(continued from page 1)

Not much else to announce other than the return of the annual Auction/Potluck Picnic. We are looking forward to finally getting folks back together for an event. Save the date: Saturday April 23rd. Details to come. Take care and hope to see you all next Tuesday!

Erich Rose

PSoA President

This Month's Talk

(continued from page 1)

relatives, during a time of environmental flux. Pseudosuchians (crocodilian-like archosaurs) dominated the continental landscapes and exhibited their highest diversity during the Late Triassic until the end-Triassic mass extinction which paved the way for dinosaurs to rule the continents for the remainder of the Mesozoic era. The American Southwest used to be home to an extensive array of pseudosuchian taxa, including Aetosaurs, which are the subject of my research. These pangolin/armadillo-like creatures can provide insight into how evolution can be driven by environmental fluctuation as a result of changing climate. By focusing on taxa from the Chinle Formation and Dockum Group I seek to explore how the latitudinal transition of the American southwest from moist subequatorial to dry-arid latitudes impacted the evolution of aetosaurs, and other related taxa.

This Month's Speaker: **William A Reyes:**

I'm a 2nd-year Phd student working with Dr. Chris Bell at UT-Austin. In short I study the morphological evolution, ontogeny (skeletal growth, maturity), and neuroanatomy of Late Triassic Archosaurs particularly pseudosuchians (crocodilian-relatives). In addition, I'm interested in the stratigraphical relationships of Upper Triassic strata across the American southwest through the use of U-Pb geochronology and biostratigraphy.



Fossil Fest 2022 Update

We are hopeful that the COVID climate will improve before November and allow us to hold Fossil Fest on 11/5 & 11/6 of this year. The success of Fossil Fest largely depends on members volunteering to help with the event. **We will be hosting our first planning meeting Tuesday March 22nd at 7pm on Zoom.** All members are invited to join in on the planning and partake in making Fossil Fest a success!

Heather Radford

Show Chair

March 2022 Dual Field Trips!:

Eocene Sites

This month there will be dual trips. One to some old collecting sites in East Texas in search of a wide variety of Eocene fossils led by Melvin Noble, the other to Whiskey Bridge led by Jamie Shelton. Both trips will begin Saturday AM.

EAST TEXAS - Melvin Noble

DATE: Saturday March 19th - 8:00am (possible 2 day trip)
Nacogdoches Area Sites: Eocene

The East Texas trip will meet at 8 am on Saturday, March 19 in Nacogdoches, Texas. We will meet at the O'Reilly Auto Parts located at 614 N. University Dr. in Nacogdoches. If you get there early enough, there is collecting behind the store along the cliff wall, but it is hard rock

The caravan will leave from this spot to our first location. Bring lunch, water and the usual collecting materials. Most – but not all – of our finds will be small, so sectional boxes will be useful. A rock hammer might come in handy. Watch the weather and dress accordingly. It should be in seventy's with lows at night in forty's but the occasional cold front has been known to come thru. Note: We have not been here in two years so much of our sites may be overgrown. If we do not have enough for Sunday we will stop at Whiskey Bridge on way back. We have found sand dollars, echinoids, crab material, gastropods, bivalves in several areas. We will be driving around to several sites.

WHISKEY BRIDGE - Jamie Shelton

DATE: Saturday March 19th - 9:00am

Whiskey Bridge - Middle Eocene

The whiskey bridge trip, lead by Jamie, near Bryan TX trip will meet at 9 a.m. on Saturday, March 19 To get there look for the whiskey bridge, an old train bridge crossing the Brazos River at Texas State Highway 21. From Austin, take either US-290 or TX-71 east and turn left onto TX-21 heading north toward Caldwell. Eleven miles past Caldwell, just after FM-50 on the right and County Rd-221 on the left, you will see the rusty railroad bridge. **SLOW DOWN** and prepare to turn left across the highway and onto a small pull-off along the left side of the road just before the bridge. If you miss the turn, cross the bridge, make a U-turn, and come back to the pull off. **DO NOT PARK** near the railroad equipment, but instead park along the small road/grass above the river. We will be collecting along the west bank of the river just below the parking area, so if you get there late just walk down to the river and you will find us. This is a middle Eocene marine site, Gastropods, bivalves, shark teeth, fish ear bones can be found. Most of the finds will be small and only a knife or small screwdriver is required. Sectional boxes can be useful It can be muddy and slippery if it has rained so be prepared.

Melvin Noble + Jamie Shelton

Field Trip Co-Chairs

February 2022 Field Trip: Lake Jacksboro

Great Day, Great Site!

The Lake Jacksboro Spillway is one of those sites that it doesn't matter how many times you go, there is always a plethora of fossils and usually something new! The day was absolutely perfect for fossil hunting, a little cool to start but no wind blowing across the lake... which can make the ½ mile crossing a little unpleasant! But before we made the short trek, we were all gifted a fabulous surprise by Ed Elliot – ammonites! Ed generously donated “door prizes” to those attending the field trip. We did it proper with each “car” getting a number and we were gifted some of Ed’s talents at preparation! So from Alan Keith, The Gamezes, Bob Cassell, the Rylanders, Sean Caradine, Eric and Jack Jones, Brian Bedrosian and boys, and the Garrison clan, a big huge thank you to him from us all!

Everyone headed over to the site and spread out to start their hunting. I checked in on the Gamezes first and they were finding some nice gastropods and straight cephalopods. Eric Jones found a lovely *Brachycycloceras* nautiloid (which for the life of me I couldn't remember the name of... until I was headed back to the car at the end of the day. Of course.) I was super happy to find my first full *Rostroconch*- I had found only halves and pieces before, so was thrilled to find not just one, but TWO that day! And while I was focused on the rostroconchs, Sean Caradine walks up and looks RIGHT IN THE SPOT I WAS JUST AT... and finds a great nautiloid... and a good sized one too! I was just looking in that exact spot! It was apparently meant for Sean!

Bob Cassell found the most *Conularids* of the day. A nice momento for his trip to Texas and of course, Gary Rylander skunked us all by finding the coveted *Tainoceras* nautiloid!



It's a bit scrappy, but It's a whole one!! The Kendrick kids found some good stuff including a nice *Brachiopod* and lots of crinoid pieces.

I know a few were sticking around and going to Mineral Wells and other spots around that area. It's amazing how each of the different Pennsylvanian spots are so similar and yet yield their own unique fauna at each site. I can't wait to go back and see what other fossils Lake Jacksboro has to offer!

Jamie Shelton
Field Trip Co-Chair



Fig. 1 *Tainoceras* nautiloid
Found by Gary Rylander



Fig. 2 nautiloid
Found by Gary Rylander



Fig. 3 conularids
Found by Bob Cassell



Fig. 4 crinoid cup
Found by Gary Rylander



Fig. 5 *Rostroconch*
Found by Jamie Shelton



Fig. 6 *Rostroconch*
Found by Jamie Shelton



Fig. 7 *Prouddenites grafordensis*
Found by Ed Elliot
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Fig. 8 *Eoasianites* sp ammonoids
Found by Ed Elliot



Tailings...

In The News

Asteroid That Decimated the Dinosaurs Struck in Spring
Clues from fossil fish help scientists pinpoint the season when Earth's fifth mass extinction began.

Riley Black, [Smithsonian Magazine](#), February 23rd 2022

Fossils Help Scientists Identify a 'Lost' Continent
Millions of years ago, a giant island called Balkanatolia shifted and connected Asia to Europe, allowing animals to migrate

Margaret Osborne, [Smithsonian Magazine](#), March 4rd 2022

Ancient Ten-Armed Octopus Relative Named for Joe Biden

The discovery of 'Syllipsimopodi bideni' pushes back the fossil record of the vampyropods by over 82 million years
Corryn Wetzel, [Smithsonian Magazine](#), March 9th 2022

The Biggest Megalodons Likely Lived in Cold Waters
The common idea that the giant sharks could reach over 60 feet in length should be applied mostly to populations that lived in frigid environments

Margaret Osborne, [Smithsonian Magazine](#), March 9th 2022

This Cliff Face Is Packed With Fossilized Whale Remains
An exposed prehistoric seafloor is a hotspot for relics, and now an international team is helping unravel their mysteries
Devon Bidal, [Hakai Magazine / Smithsonian Magazine](#), February 18 2022

2022 Field Trip Schedule

March:	East Texas / Whisky Bridge
April:	Oklahoma Trip (Spring Branch as backup)
May:	Johnson City
June:	Brazos Float Trip (Bandera as backup)
July:	Austin Loop 360 (or Brazos backup)
August:	Houston Museum of Natural Sciences
September:	Brady / Santa Ana Sites
October:	Texoma (Moody/Evant as backup)
November:	Brownwood
December:	Christmas Party!

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.

February Meeting Minutes

The meeting was opened by Erich Rose at 7:05 pm on Zoom - attendance varied from 20 to 21.

1. We had a great presentation by member Janie Lynn Shelton, whose topic was 'The Jurassic Coast of Southern England'. The sources for her presentation were largely from a trip Mike Smith had taken to the area in 2005 and her own trip there in 2019. In their trips Mike stayed in Lime Regis and Jamie stayed in Weymouth. The materials found there are mainly from the Jurassic, but also some from the Triassic, Cretaceous and Mesozoic. The first person to recognize the importance of the area was Mary Anning, an uneducated local who at the time and for years later got little credit for her discoveries, but in recent years her work has been widely recognized.

2. The Board Officers and others taking assignments for the coming year:

Erich Rose – President

Heather Radford – Vice President

Mike Smith – Treasurer, Webmaster, Membership Chair

Gary Vliet – Secretary

Paul Hammerschmidt – Program Chair

Brian Bedrosian - Editor

Heather Radford – Show Chair

Jamie Shelton and Melvin Noble – Field Trip Co-Chairs

All were approved by a show of hands.

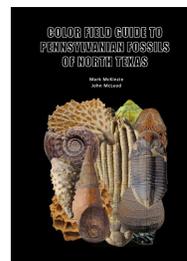
2. Mike Smith reported our PSA bank balance is \$23,427.38. He also reminded us to update our membership.

3. The Field Trip for the coming weekend (Sat, Feb 20) was to Jacksboro, which has Pennsylvanian era fossils. Attendees are to meet at the Jacksboro Courthouse.

4. The November date for our 'Fossil Fest' has been confirmed by Show Chair Heather Radford.

Gary Vliet
Secretary

New Publication!



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.

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 plo down next to them.

10. Be safe. If someone is working an area on a slope do you 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.

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, due to COVID 19, in person meetings have been temporarily paused, and monthly meetings are instead being held on Zoom. Please see instructions above to attend the meetings virtually. 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 Societie'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

Webmaster: **Gordon Galligher, webmaster@austinpaleo.org**

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

Twitter: **@Austin_Paleo**

2021 Officers

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