



# Paleo Footnotes

Volume 15, Number 6

June 2020

## President's Note

### Erich Rose

PSoA President

Welcome to summer. I'm writing this Tuesday June 9th and although the thermometer never broke triple digits the heat index certainly did. I guess we got off lucky until now. And with summer comes new developments for PSA.

First, we are about to hold our first virtual meeting\*. The meeting will be at the normal date and time. Third Tuesday at 7PM. The place will be your living room, kitchen, office or maybe out on the patio. All you need is an internet connection a computer, tablet or smart phone. Mike Smith will be presenting on the subject of georeferencing. See Mike's bio and a description of the talk below.

Second, we are going to have a field trip! As discussed before, we are keeping them closer to home and places where we can easily all spread out and be safe. Whiskey Bridge is always a great place to collect. Directions and info are included here in the newsletter.

\*We will be using Zoom for meetings. It is easy and for the rest of you free. It works on various devices, but a computer is the easiest. See the meeting notice for how to join. I will open the meeting a half hour early so newbies to Zoom can get oriented before the presentation. See you then.

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### Next Meeting (ONLINE)

6/16 – 7 p.m.

Austin Gem and Mineral Society Building  
6719 Burnet Lane Austin, Texas

### Next Field Trip

Saturday, June 20 – 8 a.m.

Whiskey Bridge – Eocene

See directions in Upcoming Field Trip Report section.

## Upcoming Meeting Program

### Paul Hammerschmidt

Programs Chair

'Georeferencing' - Michael Smith

*Speaker Bio:* Mike came to Austin in 1972 for grad school and never left. After completing a PhD in Computer Science, he worked at UT, Computational Logic (a small company that he was one of the founders of), Electronic Data Systems, and Hewlett-Packard, from which he retired in 2012.

Mike has been a member of amateur paleontology clubs in Austin for over 30 years, serving variously as President, Show Chair, Editor, Secretary, Web Master, and Treasurer.

For many years he has volunteered at the UT Non-vertebrate Paleontology lab on a variety of projects including mass inventory, the new cabinet layout and installation, and georeferencing.

*Synopsis:* The Non-vertebrate Paleontology Lab has been updating collecting location data in its Specify database, converting verbal descriptions of locations into GPS latitude & longitude.

When I began working on this project over 3 years ago, the lab had funding to georeference all specimens from the Western Interior Seaway during the Cretaceous. This was part of a multi-institution effort, with the resulting cleaned data uploaded into the iDigBio repository. That project is complete and I continue working on other time periods and states.

This presentation will provide an overview of georeferencing at the lab, with a focus on the tools and other resources we use, especially for Texas.

Why would this ever matter to you?

1. These resources will help you with your collection. In particular, if you are reading old publications trying to locate likely collecting spots, it could be vital.

2. You may want to add GPS coordinates to your locations that don't already have them.

3. And you can use known GPS coordinates to confirm the identity of the formations at a given location.

The slides will have links to a large number of resources and will be made available on the club website.

# PSoA Virtual June Meeting Information

Topic: **PSoA June Meeting**

Time: **Jun 16, 2020 06:30 PM Central Time (US and Canada)**

Note: the actual meeting begins at **7PM**. I will open up Zoom at 6:30 so that new users of Zoom have time to download the app and get set up.

Joining the Zoom Meeting

<https://us02web.zoom.us/j/84016815612?pwd=VWpaRXpidzVyYSs1TEJEdExXQ1dkZz09>

Meeting ID: 840 1681 5612

Password: PSA6162020

Dialing by your location

+1 346 248 7799 US (Houston)

Find your local number: <https://us02web.zoom.us/u/kbs5ab5BZm>

Meeting ID: 840 1681 5612

Password: 564084

How the Virtual Meeting will proceed:

6:30PM Early log in for new Zoom users. Click on the hyperlinks or cut and paste the URLs above and follow the directions for getting the Zoom app\*. From there it is fairly easy.

7:00-7:45 Mike Smith on Georeferencing

7:45 - 8:00 QA with Mike

8:00-8:15 Break for refreshments & a stretch, Sorry Nordric & Miriam will not be making home deliveries. You know where your own fridge is.

8:15 Business meeting: Field Trip and any odd announcements

8:45 Door Prizes....just kidding....

*\* highly suggest getting Zoom app set up well in advance of the meeting. You may also want to view some of the helpful tips that they offer on using the app.*

## **A bit about Zoom and how we would like the meetings to proceed:**

First off you have several options for joining the meeting. You can do it from a smart phone or tablet but it will be best on a larger screen such as a computer. Mike will be presenting a slide show, so a larger screen will be an advantage. Also you will see that there are options for what you have on your screen. You can fill a window or the whole screen and you can pick how you view the other participants, as a gallery, just the speaker, or not at all.

You have the option of turning on your camera, or not, and the same goes for your microphone. You only need a camera if you want us to see your lovely face or are actually presenting. Otherwise you can sit thru the whole meeting in your bathrobe if you choose. In general it is best to keep microphones off until the Q&A &/or the business meeting. But feel free to use it to ask questions before the meeting and later after the speaker. You also talk with the group during the break.

Zoom also has a Chat function that allows you to type messages or questions. If you have questions for Mike that come up during his talk the best thing is to type them as you think of them and then I will read them to him to start the Q&A. From there we will open mics and you can ask him directly. PS the chat function also means if you don't have a device with a working microphone you can still interact.

This will be a new one for us. But other clubs are using Zoom and similar software and it is time for us to join the party. At the end if you found it easy or hard or it just didn't work PLEASE let us know. We will make every effort to answer questions and solve problems so that you will be all set for the July meeting.

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# Upcoming Field Trip

**Ed Elliott**

PSoA Field Trip Chair

June 20, 2020

Whiskey Bridge near Bryan TX. Middle Eocene - Stone City Bluffs

## Directions:

Meet at the Bridge at 8am.

Whiskey Bridge is an extremely productive collecting spot with beautifully preserved mollusc shells, bryozoans, corals and many other things. They are fragile, so small containers with tissue or cotton packing is suggested. Small hand tools, screwdriver or pick is good for extracting...rock hammers are not really necessary but always a good idea to have on hand. Tweezers and a magnifying glass are a good idea too! Please note, the cliffs can be steep and sometimes muddy, so proper footwear is important! Also, poison ivy is found along the upper banks, so beware.

There are a couple of gas stations on the Bryan side of the river and both Caldwell and Bryan are about 15 minutes away, so facilities are close. Bring a lunch, bring water and enjoy a full day of hunting!

Whiskey Bridge is 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.

## SPECIAL REMINDER

We ask that people please maintain social distancing procedures and please respect others and wear a mask if getting close to others.

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## Special Notices

### We received this from email; follow up if interested.

Hello from Holland, I am a fossil collector in the netherlands (cretaceous) and looking for a person to trade some echinoids with. If somebody is interested please let me know at trimbol@hotmail.com, thanks Peter

### New PBS Series PREHISTORIC ROAD TRIP Premieres June 17

Get ready for an epic adventure through dinosaur country to discover the mysterious creatures and bizarre ecosystems that have shaped Earth as we know it. With popular YouTube personality Emily Graslie as host and guide, the new PBS series PREHISTORIC ROAD TRIP, produced by Chicago's PBS station WTTW, takes viewers on a journey to some of the world's most active and dynamic fossil sites for an unforgettable expedition through hundreds of millions of years.

Watch on PBS stations nationwide on Wednesdays, June 17 - July 1, 2020 at 10/9c, and stream on [wtw.com/prehistoricroadtrip](http://wtw.com/prehistoricroadtrip), on PBS member station websites, and on the PBS app.

Extend the PREHISTORIC ROAD TRIP experience on the companion website, [wtw.com/prehistoricroadtrip](http://wtw.com/prehistoricroadtrip), featuring original digital content, behind-the-scenes travel journals, an interactive road trip map and more.

PREHISTORIC ROAD TRIP:

<https://interactive.wttw.com/prehistoric-road-trip-coming-soon>

#PrehistoricRoadTripPBS

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## **Odds and Ends**

### **Texas Geology Online**

USGS interactive Texas geology map.

See <https://txpub.usgs.gov/txgeology/>

### **Paleontologists Find Strange Ball-Like Structures in 80-Million-Year-Old Fossils**

A team of paleontologists from Australia and the UK has found fullerene-like structures in Cretaceous-period crinoids, marine animals related to starfish, sea urchins, and brittle stars. The researchers believe these strange structures might have acted as a buoyancy chamber to allow the animals to float in seawater but also protect them.

Read more at <http://www.sci-news.com/paleontology/crinoid-fullerene-like-structures-08428.html>

### **200-Million-Year-Old Fossil Captures Squid Viciously Entangled With Its Prey**

The specimen may be the earliest known example of a squid-like creature on the attack

Read more at <https://www.smithsonianmag.com/smart-news/fossil-captures-200-million-year-old-squid-relative-taking-down-prey-180974827/>

### **Rare long-necked dinosaur that roamed the polar world unearthed in Australia**

Discovery of a single vertebra of an elaphrosaur in Victoria hugely expands known range of the group, which had teeth as juveniles but beaks as adults.

Read more at <https://www.theguardian.com/science/2020/may/18/rare-long-necked-dinosaur-that-roamed-the-polar-world-unearthed-in-australia>

### **Bite marks provide direct evidence for trophic interactions and competition in the fossil record.**

High frequencies of theropod bite marks provide evidence for feeding, scavenging, and possible cannibalism in a stressed Late Jurassic ecosystem

Read more at <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0233115>

### **Remains of 60 Mammoths Discovered in Mexico**

Archaeologists found the trove of bones just six miles from recently discovered human-made 'mammoth traps'

Read more at <https://www.smithsonianmag.com/smart-news/sixty-mammoths-discovered-mexico-180974993/>

### **Saber-tooth surprise: Fossils redraw picture of the fearsome big cat**

Hundreds of teeth pulled from the La Brea tar pits in California are revising our image of this icon of the Ice Age.

Read more at <https://www.nationalgeographic.com/science/2019/08/saber-tooth-cats-surprise-fossils-redraw-picture-of-big-cat/>

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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 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.

Annual Dues: \$18/individual, \$24/family and \$12/associate (non-voting, receiving newsletter) Send to: Treasurer, Paleontological Society of Austin, P.O. Box 90791, Austin, TX 78749-0791.

PSoA Web Site: [www.austinpaleo.org](http://www.austinpaleo.org)  
Webmaster: Gordon Galligher, [webmaster@austinpaleo.org](mailto:webmaster@austinpaleo.org)  
Facebook: <https://www.facebook.com/austinpaleo> Twitter: @Austin\_Paleo

**2019 Officers:**

President	Erich Rose	<a href="mailto:president@austinpaleo.org">president@austinpaleo.org</a>
Vice President	Lisa Izzi	<a href="mailto:vicepresident@austinpaleo.org">vicepresident@austinpaleo.org</a>
Treasurer	Mike Smith	<a href="mailto:treasurer@austinpaleo.org">treasurer@austinpaleo.org</a>
Secretary	Emelia Rose	<a href="mailto:secretary@austinpaleo.org">secretary@austinpaleo.org</a>
Field Trips	Ed Elliott	<a href="mailto:fieldtripchair@austinpaleo.org">fieldtripchair@austinpaleo.org</a>
Programs	Paul Hammerschmidt	<a href="mailto:programchair@austinpaleo.org">programchair@austinpaleo.org</a>
Editor	Ron DiPronio	<a href="mailto:editor@austinpaleo.org">editor@austinpaleo.org</a>
Webmaster	Gordon Galligher	<a href="mailto:webmaster@austinpaleo.org">webmaster@austinpaleo.org</a>
Show Chair	Lisa Izzi	<a href="mailto:showchair@austinpaleo.org">showchair@austinpaleo.org</a>

**Science Advisors:**

Pamela R. Owen, PhD.	<a href="mailto:powen@mail.utexas.edu">powen@mail.utexas.edu</a>
James T. Sprinkle, PhD.	<a href="mailto:echino@mail.utexas.edu">echino@mail.utexas.edu</a>

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