

# PALEO FOOTNOTES

NEWSLETTER OF THE PALEONTOLOGICAL SOCIETY OF AUSTIN

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MAY 2021



## President's Note

Howdy everyone. Hope you all are doing well!

I've been limited in how much time I have to go collecting by annoying things like a full-time job and a home to keep up, jeesh! The weather has been quite nice and I certainly hope YOU find time to go collecting.

Our online auction went quite well. We raised some money, actually it would equate to a "good year" for the auction since we had no expenses to pay. Great big thanks to Heather and Jamie for organizing it and Mike for his help with our online payment set up.  
(continued on page 2)

## This Month's Talk

**For a while, crocodile:  
crocodylomorph survivorship and  
success**

Presented by Dr. Keegan Melstrom

Crocodylomorphs, the group that includes living crocodiles, alligators, and their extinct relatives, are an incredibly successful clade. Although often viewed as relics of the Age of Dinosaurs, the fossil record reveals an incredibly rich history of evolution and adaptation. This group initially appears as small terrestrial carnivores during the Triassic Period, but quickly radiates into new habitats and ecological roles through the Mesozoic. During this  
(continued on page 2)

MAY 2021

### PSoA Regular May Meeting

Tuesday May 18 - 7pm

Meeting will be held on Zoom

Join Zoom Meeting

<https://us02web.zoom.us/j/84513843331?pwd=MHpRN1Q4bE96VVNvOGVVL3hIT1Ezdz09>

Meeting ID: 845 1384 3331

Passcode: 292691

### PSoA May Field Trip

**NEW DATE:** Saturday May 29th

8am in the Canyon Lake Area

(see page 2)

### Show Committe Meeting

Tuesday May 25th - 7pm

on Zoom (see page 2)

## President's Note

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(continued from page 1)

And that brings me to a point of business we must attend to. Annual dues are no longer being put on hold. We need to start bringing in money again for the club. No one will be asked to pay back dues from last year. So expect to see notices with future newsletters letting you know when it is time to renew. The best part is we now have a secure online payment portal available on the club web site - see page 4 for more details.

Looks like we have an interesting speaker lined up this month as well. All about crocodiles! I know I am looking forward to it.

So hope to see you this month attending the meeting and maybe on the field trip the following Saturday.

'till then,

**Erich Rose**

PSoA President

## This Month's Talk

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(continued from page 1)

time, crocodylomorphs survive two mass extinction events, the end-Triassic and end-Cretaceous, but their responses to these events differed dramatically. Using a combination of skull and tooth shape to better characterize their ecology, I seek to understand why this group radiated after one mass extinction and seemed relatively unaffected by a second, even while their close relatives went extinct. Ultimately, understanding the traits that make crocodylomorphs so successful has important implications for our current biodiversity crisis and better predicting what groups may be especially susceptible to extinction.

This month's speaker: **Dr. Keegan Melstrom**

Keegan Melstrom is currently a postdoctoral researcher in the Dinosaur Institute at the Natural History Museum of Los Angeles County. He is investigating if the evolution and radiation of flowering plants impacted the teeth of dinosaurs and their diets. Prior to this, he received his MS and PhD from the University of Utah, where he studied crocodylomorph evolution and success since the Mesozoic, with a focus on reconstructing their diet. Keegan received his undergraduate degree from the University of Michigan. There, he began his paleontological research by investigating the skeletal changes

## PSoA Online Auction Results!

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The club would like to extend our thanks to Jamie and Heather for skillfully conducting our first online auction! Also thanks to all who donated and those who got into bidding wars! Your generous efforts netted the club \$759.

**Mike Smith**

Treasurer

## Minutes from April's Meeting

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The April meeting was well attended, we look forward to seeing you at the next meeting.

**Emelia Rose**

PSoA Secretary

## Fossil Fest Update

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The next Show Committee Meeting will be held on Tuesday May 25th at 7:00 pm on Zoom.

Please email me at [showchair@austinpaleo.org](mailto:showchair@austinpaleo.org) for the Zoom link.

**Heather Radford**

Show Chair



## May 2021 Field Trip POSTPONED: Canyon Lake Area

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**NEW DATE: Saturday May 29th - 8am!**

Canyon Lake various sites - Glen Rose Formation

Our Field trip this month will be to the Canyon Lake area. There are a variety of sites that we can go to. The main one we usually visit may not be accessible, so we may have to do some alternative plans. I will be doing some scouting the week before to see if we can get there. So instead of meeting at the Dairy Queen in Starzville as we usually do, we are instead going to meet at the Ay Chiwawa Mexican Restaurant in Bulverde. It is on Highway 281 JUST before the exit for Highway 46. Turn Right onto Melody Hills Rd. (If you miss it, take the Highway 46 Exit and turn R onto Singing Oaks Drive and it will take you right back up to it). There is a Walmart just south of it. From there we will decide which of the various sites to start at! Most of the sites are surface collect, but there are some areas that a small hammer and screwdriver would be beneficial. Small collecting boxes or tackle boxes are a good idea as much of this will be small fossils. As always, bring lots of water, a sack lunch and good shoes!

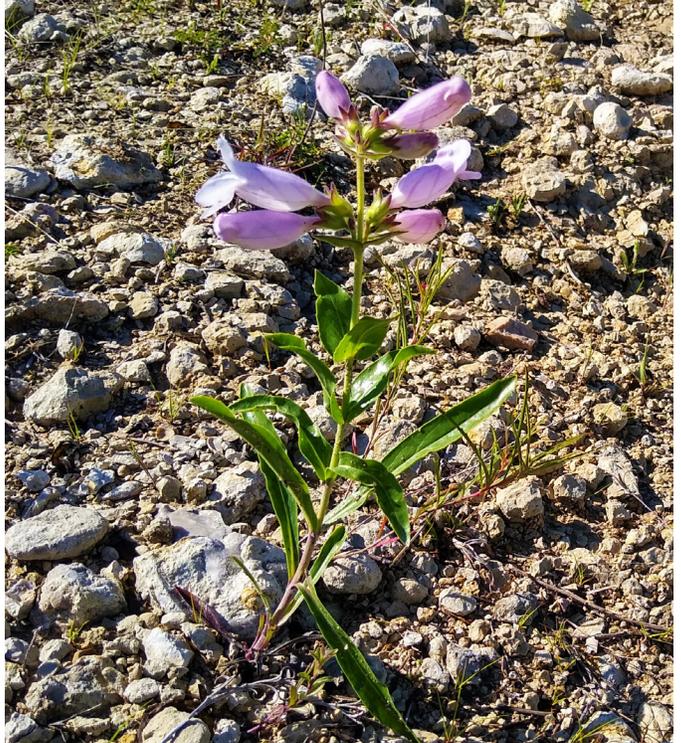
# April 2021 Field Trip Report: Harker Heights Sites

## Spring Blooms and a Pile of Phymosomas

It was a beautiful spring day and right after a rain. The sun was shining and there was a cool breeze that kept us from getting to hot. A few spring flowers had started to bloom and added to the experience. After meeting at the HEB parking lot, Gary and Cathy Rylander, Grady Parks, Guadalupe Ozna Agama, Alan Keith, Brain, Anders, and Emerson Bedrosian, Vaughn Nelson, Gary Vliet, Jamie Shelton, Melvin Nobel, David Lindberg, Yoli and William Lins, all drove over to the first collecting site. They have graded the side of the hill and this has changed the sites character from what it once was, but there is still more to be found! A new area further over had been cleaned off and provided us access to a new exposure, which is always exciting. Though not as productive as it once was, the old area still had fossils to give up. Several people found Phymosoma in various states of wear, including a nice specimen found by David, and one which had nature had cleaned that I lucked upon. Allen found a nice Pina shell that was in good shape and several other Phymosoma. After about 1 pm people started to drift off, some went home, some to take a rest stop or hunt for food. After taking a consensus, the rest of us decided to head over to the truck parking area by the old liquor store. Gary Rylander immediately found a nice Salenia. Several people found horn corals and a few of the nice little gastropods from this area. It turned out to be a nice day to collect and some people came home with new specimens to add to their collections.

## Melvin Noble

Field Trip Co-Chair



Springtime in Harker Heights. Photo by Jamie Shelton



A cache of Phymosomas! Photo by Jamie Shelton



Shark vertebrae found by Jamie Shelton



Phymosoma found by David Lindberg



Large Phymosoma found by Emerson Bedrosian



## Odds and Ends

### In The News

#### **An Ode to the World’s Most Average Dinosaurs**

They lacked the gargantuan size and spikes of the species museums often celebrate, but these species are how paleontologists learn about the Mesozoic<sup>1</sup>

Riley Black, *Smithsonian Magazine*, May 1st 2021

#### **This little bird-like dinosaur hunted at night, study suggests**

Though most dinosaurs are thought to have hunted primarily during the day, a little bird-like dinosaur may have been strictly a night hunter, a new study suggested.<sup>2</sup>

Doyle Rice, *USA Today*, May 6th 2021

#### **What Fossil Plants Reveal About Climate Change**

In a world obsessed with human ingenuity, plants are perhaps the most underappreciated innovators.<sup>3</sup>

Emily Leclerc, *Smithsonian Magazine*, April 29th 2021

#### **New Mexico’s ‘Godzilla’ Shark Fossil Gets an Official Name**

The prehistoric beast’s scientific name is *Dracopristis hoffmanorum*.<sup>4</sup>

Theresa Machermer, *Smithsonian Magazine*, April 26th 2021

#### **How Scientists Resolved the Mystery of the Devil’s Corkscrews**

Smithsonian paleontologist Hans-Dieter Sues tells the tale of a fossil find that bedeviled early 20th-century researchers.<sup>5</sup>

Hans-Dieter Sues, *Smithsonian Magazine*, November 25th 2021

### 2021 Field Trip Schedule

June:	<b>Little Walnut Creek</b> – Austin Chalk
July:	<b>Bandera</b> – Glen Rose
August:	<b>Mammoth Museum</b> <b>Waco Pit</b> - Del Rio
September:	<b>Brady Road Cut</b> - Pennsylvanian <b>Santa Anna</b> - Pennsylvanian
October:	<b>Moody Road Cut</b> - Comanche Peak <b>Evant Road Cut</b> – Comanche Peak
November:	<b>Brownwood or Jacksboro</b> - Pennsylvanian
December:	TBD

1. <https://www.smithsonianmag.com/science-nature/ode-worlds-most-average-dinosaurs-180977614/>

2. <https://www.usatoday.com/story/news/nation/2021/05/06/little-bird-like-dinosaur-hunted-night-study-suggests/4975565001/>

3. <https://www.smithsonianmag.com/blogs/national-museum-of-natural-history/2021/04/29/what-fossil-plants-reveal-about-climate-change/>

4. <https://www.smithsonianmag.com/smart-news/new-mexicos-godzilla-shark-fossil-gets-official-name-180977585/>

5. <https://www.smithsonianmag.com/smithsonian-institution/how-scientists-resolved-mystery-devils-corkscrews-180973487/>

### Paying Dues Online

You can now pay for memberships and renewals on line with a credit card!

The **Membership** tab on the website now has two buttons off to the right: **Membership Form** and **Membership Renewal**

**Membership Renewal** takes you to a simple form, where you just need to enter your name and phone and/or email.

#### **Membership Renewal**

We do not share your information with anyone. We need a phone number or email to make sure we update you uniquely in the database.

Name :   
Phone :   
Email :

**Submit**

<https://www.austinpaleo.org>

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Hitting **Submit** takes you to a page where you can select the membership type you are paying for, or make a donation.

#### **Pay your dues with a Credit Card or make a Donation.**

- Family Membership
- Individual Membership
- Donate

#### **Payment by Check**

Mail your printed membership form with a check in the appropriate amount to:

Treasurer  
Paleontological Society of Austin  
PO Box 98792  
Austin, TX 78749-0792

Selecting one of those takes you to a **Square** page where you can pay by credit card.

Paleontological Society of Austin

Family Membership  
\$24.00

Email:

+1 Phone number:

Full name:

Card number:  MMYY CVV ZIP:

Save my information for a faster checkout

Add a note (optional):

Once you hit the pay button at **Square**, the following will happen:

- you will receive a receipt from Square
- The Treasurer gets an email from **Square** with the name, amount, phone and/or email of the payee
- the Treasurer gets an email with the data from the renewal form you filled out on the website

Hitting the Submit button on the Membership form results in a similar set of steps

Please reach out to [treasurer@austinpaleo.org](mailto:treasurer@austinpaleo.org) with any questions or issues you might have.

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, 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 Society's website or another publically accessible venue as benefits the goals of the club listed above.*

**Membership Information**

**2021 Officers**

Annual Dues:	<b>\$18/individual</b> <b>\$24/family</b> <b>\$12/associate</b> (non-voting, receiving newsletter)	President	<b>Erich Rose</b>	<a href="mailto:president@austinpaleo.org">president@austinpaleo.org</a>
Send payment to:	<b>Treasurer, Paleontological Society of Austin,</b> <b>P.O. Box 90791, Austin, TX 78749-0791</b>	Vice President	<b>Heather Radford</b>	<a href="mailto:vicepresident@austinpaleo.org">vicepresident@austinpaleo.org</a>
PSoA Web Site:	<a href="http://www.austinpaleo.org">www.austinpaleo.org</a>	Treasurer	<b>Mike Smith</b>	<a href="mailto:treasurer@austinpaleo.org">treasurer@austinpaleo.org</a>
Webmaster:	<b>Gordon Galligher, <a href="mailto:webmaster@austinpaleo.org">webmaster@austinpaleo.org</a></b>	Secretary	<b>Emelia Rose</b>	<a href="mailto:secretary@austinpaleo.org">secretary@austinpaleo.org</a>
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