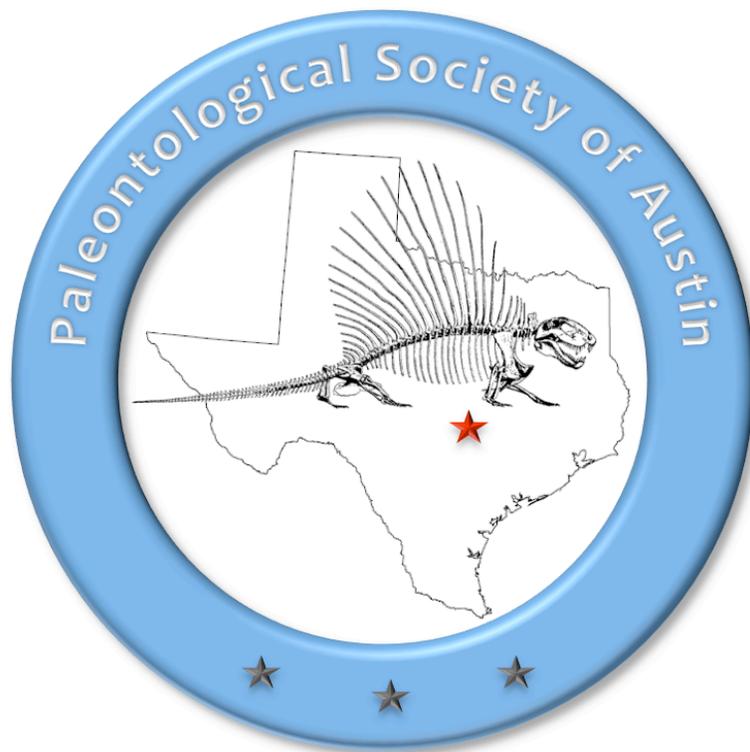


# Paleo Footnotes

Newsletter of the  
Paleontological Society of Austin

Austin and Central Texas



Volume 8, Number 11  
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## President's Note

Cool weather has returned and with it hopefully much more fossil hunting. In addition some of these record rainfalls pounded the earth quite thoroughly and good fossils were exposed.

Election time is just about upon us. We are looking for members who would like to try their hand at running the club. Doesn't take much skill and, depending on the position, a minimal amount of time. Most of us are willing to continue in our current positions but there are two that we already know will need to be filled next year: Treasurer and Program Chair. If you know how to balance a checkbook and manage a spread sheet (and ours are fairly simple) or you would be willing to help set up our monthly speakers (you would have help) please let us know and come to the next meeting. And feel free to contact me, or any of the other board members if you have questions.

I heard that Gem Capers was a little slow this year and if we are lucky it will not be the same for Fossil Fest. Either way many thanks to those who volunteered. As always Suzanne must be congratulated on her organizational skills and willingness to make these things happen. If we can keep up the pace we will have a great Fossil Fest once again this year. And remember this year's theme is "Dinosaurs of Texas" and we are encouraging anyone with dinosaur material from anywhere, not just Texas, to consider putting together a display case for the show.

We are looking to do a local field trip this month. Those pounding rains of a week or two back have done a nice job on some of our local road cuts

Take care and stay cool,

-- Erich



PSA at AGMS Gem Capers (photo by Suzanne Galigher)

## Next Meeting

**Tuesday November 19**  
**7:00 p.m. at the Austin Gem and Mineral Society building**  
**6719 Burnet Lane, Austin, TX**

### **The Lost Continent of Laramidia: Biogeography of Cretaceous Vertebrates from Western North America** by Joshua Ryan Lively

During the Late Cretaceous, North America was bisected by a seaway that occasionally connected the Arctic Ocean with the Gulf of Mexico. The landmass to the west of this seaway is known to earth scientists as Laramidia. Despite the narrow east-west width of this subcontinent, it was home to a diverse assemblage of vertebrates, many of which appear to have been latitudinally restricted in their ranges. I will discuss the biogeographic patterns that my colleagues and I have observed while studying dinosaurs and turtles from the Cretaceous western interior, and how a relatively new fossil assemblage in southern Utah has contributed to our knowledge of the Cretaceous ecosystem.

I am a second-year PhD student in the Jackson School of Geosciences at the University of Texas, focusing on the vertebrate paleontology and oceanography of the Cretaceous Western Interior Seaway. I received my BS in geology from Auburn University in 2010 and my MS from the University of Utah in 2012. I grew up collecting fossils in the Pennsylvanian and Cretaceous of Alabama, where my passion for paleontology evolved from a hobby into a career.

## Next Field Trip

### **Saturday November 23** **Walnut Formation, Austin**

This month we will keep things close to home. We have had many requests from new members asking "where to collect". The truth is there are many places to find fossils within the city limits of Austin and surrounding metropolitan area. We will concentrate our efforts Saturday morning on at least one very well known locality.

The Walnut Formation is Lower Cretaceous, about 105 million years old, and it is loaded with fossils. Oysters, clams, gastropods, corals, crustaceans and a nice variety of sea urchins are abundant and often well-preserved.

We will start at a site frequented by geology classes for its exposure of not just the Walnut but the rocks above and below. From there we may venture a short distance to one or two similar exposures. The heavy rains have done their work and a quick reconnaissance suggests we could do very well despite the popularity of these spots.

You will need the typical collecting tools: rock pick, small chisel, containers, zip-lock bags, labels, sturdy shoes for climbing on loose talus and of course clothing to match the weather as well as water and a lunch if you want to concentrate on collecting.

Meet at 8:00 am Saturday morning at 807 The Living End. My (E Rose) home address. Take Bee Cave Road (FM2244) out thru Westlake Hills and just after you pass under Loop 360 (Capital of Texas Hwy) turn left onto Castle Ridge, Then take the first right onto Forest Trail, the second left will be The Living End. Park in the circle at the top of the hill. I will have some of the fossils we may find on display before we drive the five minutes to the first site. If you need more info contact Erich Rose (president @austinpaleo.org, 512-626-9930)

## October Field Trip Report Lake Texoma

Waiting for possible stragglers at Eisenhower State Park, I was pleased with the beautiful weather and excited about the prospects of the day. Waiting with me were Virginia and Howard Friedman, Frederick and Melinda Falk, Cathy and Gary Rylander, Melvin Noble, Joe Watkins and Beki Pool, and (arriving later) John Hinte. We caravanned to the first site and there the story starts.



Preparing to collect (phot by Ed Elliott)

I'm going to take a moment to apologize....this first site is one of my favorites, and the first time I was taken there over a decade ago I was told that it was Weno/ Pawpaw. I have parroted that dogma ever since. I don't know how many times I have sat down at midnight the day before the report was due at the editors' (as always) and written about this "Weno/ Pawpaw" site. I was speaking to Virginia and said something about "going on ahead to look for some nice echinoids in the Duck Creek". After taking a dozen steps something slapped me in the face and I was looking at the herd of elephants in my driveway for the first time. If I had the Weno right behind me, that one ahead of me cannot be Duck Creek. By the time we left that day I was positive that, from the point where we walk down to the shore, two coves to the right begins the Ft Worth Formation. A good portion in between is the Denton Formation. The Weno, from the fauna, is certainly in there as well, but I'm not sure exactly how to separate them without going back with books in hand. If we hunt Pawpaw, it should be well to the left of where we walk in. I'm not that unquestioning and I can't believe that I've never given thought to this before. I will solve the question before I write one of these again.

As to the fun we had there, I remember that right off the bat Gary found a nice jellyfish (*Kirklandia texana*) imprint. Later, as he and I walked the Ft Worth, I watched as he picked up several really nice ammonites that were nature cleaned. We were also picking up a variety of *Macrasters* as well as *Holaster simplex* echinoids. Frederick was happy with the shark tooth (*Cretolamna* ?) he found. Melinda and I both picked up nice examples of razor clam (*Gervilliopsis invaginata*). Virginia was hunting the Weno/ Denton gravels and showed me a

very nice button coral. Melvin was doing the same and came up with a *Salenia volana*. Many more wonderful things were carried away from this great site.

On Sunday, it was just Joe, Beki, Melvin and I. We started near the dam hunting the Duck Creek. We picked up a number of *Macrasters* and small ammonites. I was lucky enough to pick up a nice heteromorph ammonite, *Idiohamites fremonti*. Our second stop was Loes Highport marina, which is Ft Worth Formation. In the past, I've called this Duck Creek – again, sorry! We had a great time picking up small ammonites (probably inner whorls) bivalves and lots of echinoids, mostly *Holaster*. What a great trip! Nice weather both days, more fossils than I could carry both days, great scenery and good folks to hunt with – sounds like a great trip to me.



Denture clams in-mass (photo by Ed Elliott)



Melvin and Joe (photo by Ed Elliott)

## PSoA BOOTH at AGMS GEM CAPERS SHOW

Thank you to everyone who helped out with the annual stuffing of 1500 ziploc bags with Fossil Fest flyers and small fossil giveaways before last months meeting!! I think we set a speed record this year!

Another year, another successful AGMS Gem Capers show! The show was held Friday through Sunday, October 18 - 20 at the Palmer Events Center . Youth Education Day brought many public, private and homeschool children together for a day of earth science learning. The most popular activity at the Paleo Booth was fossil prep work with the Dremel engravers. There's just something about the loud buzz and finger tingling vibration from the engravers that students just cannot get enough of at all! Many thanks to the volunteers who helped to set-up or work the booth: Jeanne Bowman, Elise Bright, Cathy Brandt, Ed Elliott, Frederick Falk, Melinda Falk, Gordon Galligher, Ryan Galligher, Dax Gonzalez, John Hinte, Melvin Noble, Ron Root, Cathy Rylander, Gary Rylander, Mike Smith, Dale Vargo, Gary Vliet and Jamie Young.

## FOSSIL FEST UPDATE

Fossil Fest is just around the corner! The 23rd Annual Fossil Fest will be **Saturday to Sunday, December 7 - 8, 2013** (with set-up on Friday, December 6). This year's show theme is... Discover Texas Dinosaurs! We are grateful and appreciative of all club members who support our showcase educational outreach. Each and every one of you makes a difference in the quality and success of our annual show. Be sure to **sign-up online as a Fossil Fest Volunteer at [www.mysignup.com/fossilfest](http://www.mysignup.com/fossilfest)** - the passcode is paleo). There are many different jobs to choose from - whether you prefer manning the Admissions Desk, magnifying fossils under the microscope, helping out in the Kitchen, talking to kids about the touch table fossils, spinning the Wheel of Fossils, watching kids dig up fossils or helping with the make & take your own ammonite craft - there's something for everyone! You can even sign-up to donate bottled water to be sold during the show. If you can't donate your time at Fossil Fest as a volunteer, please consider these other valuable options: donate funds to the Kitchen to offset food costs, purchase bottled water as a Kitchen donation, spread the word about Fossil Fest via email or social media (friends, family, co-workers, teachers, Scout/Youth leaders), post to local nature clubs or other related online forums, print the Fossil Fest Show Flyer (attached to this document) and tack to community bulletin boards (at your local coffee shop, restaurant, library, office break room, book store, etc.).

**SHOW COMMITTEE:** Our in-house middle school science teacher, Melinda Falk, has been working with the Show Committee to revamp our educational

quest, the Paleo Passport, with Texas Dinosaur content. The Show Committee is grateful to have the assistance of Frederick Falk who will be doing all the desktop publishing of the Paleo Passport. New this year is a Teacher's Guide correlating each Passport question to the TEKS (Texas Essential Knowledge and Skills) requirements. Erich Rose is designing the show theme display and has drafted an initial design. Dax Gonzalez is sorting all the fossil donations for the Dig Pit & Spinning Wheel. He will also be developing a process to ensure that there is always a good mix of fossils on the Wheel of Fossils board at all times.

Mike Smith is printing and cutting the gazillion Grand Door Prize tickets for this year's show. I hope we don't kill your printer again this year, Mike! Be on the lookout for new Fossil Fest indoor signage which carries through the branding started with last year's outdoor signage. Sign proofs have been submitted by Creative Heads Advertising ([www.creativeheadsadv.com](http://www.creativeheadsadv.com)) and we are just waiting for a final quote before ordering. Melvin Noble has been diligently working on a new club t-shirt design. Be sure to attend the monthly meeting to hear more about the design choice and how to order one for yourself! A series of Fossil Fest emails is being sent out to former attendees, SCFMS officers, Austin area teachers and Scout/Youth groups via our email service provider, Vertical Response. The Show Committee began this digital campaign last year and it has proven to be very effective and provide a significant cost savings to the club (as opposed to sending via snail mail). If the Show Committee members appear a little cross-eyed, it's from the countless teacher email addresses that we have been typing in to populate our email databases!

**VENDORS:** All Fossil Fest booths are SOLD OUT and we have started a waiting list! Vendors/Exhibitors include: AGMS / Sue & Les Postlethwait, Jack Grant, K. Howard, Lonestar Paleontology (Wayne Mandrell), Natural Selection Enterprise (Joe Bone), Nature's Treasures (Karen Richards), Don Painter (FL fossils), Shu's Rocks & Minerals (Chuck Shuler), Teredo's (Doug Vanderford), Chris Garvie, Ellen Taft, Cold Creek Fossils (Danny Harlow) and Twisted by Design (Janet Root).

**DISPLAY CASES:** We encourage you to create a display case for the show this year. We have a lot of display cases to fill! We would love to see those fossils you worked so hard to collect - in searing heat, ankle deep mud, slippery slopes, capsizing canoes or finger numbing cold! So start sorting through your fossils now! Additionally, it would help us teach some key TEKS (Texas Essential Knowledge and Skills) concepts to students. If you're in need of display case ideas, please consider:

A display of how a plant or animal becomes a fossil

Examples and a brief description of changes to an organism over time

Collection of a particular organism and their structures

One organism - characteristics used to identify it with samples and diagrams

A fossil and display showing what we were able to learn about the type of climate / environment the organism would have been in while living - deep ocean/shallow ocean, cold/warm temperature, turbid/calm environment, etc - this may be one for one of our university grad student / researcher / professor

**FOSSILS:** It's time to bring all your fossil donations to this meeting! Dax will need this time between the meeting and Fossil Fest to get them sorted. We need lots and lots of CLEAN cast off fossils for the DIG PIT (very small) and SPINNING WHEEL (bring what you would want to take home). Keep this in mind when you're out collecting: if you come across an outcrop with a lot of a particular fossil, please pick up extras for the fest! Please give thanks to David Lindberg for all his hard work assembling the teacher kits this year. Many thanks to Ed Elliott for all the fossil donations he is bringing to this meeting so that Dax can start sorting them!

Suzanne Galligher  
Fossil Fest Show Chair

Dax Gonzalez, Kathleen Howard, Melvin Noble, Ron Root, Erich Rose and Mike Smith  
Fossil Fest Show Committee Members

### **Meeting Minutes for Austin Paleo Society October 15, 2013**

At 7:05, Erich opened the meeting with a greeting and introduced Adam Marsh, a doctoral candidate, whose subject for us was Jurassic Dinosaurs, an Introduction to the Late Triassic and Early Jurassic Dinosaurs of the American Southwest. Marsh focused his talk on the Southwest and Colorado Plateau field work he did as a grad student and for his Masters at UT. He described what is a dinosaur and what isn't one, by presenting 13 defining characteristics of dinosaurs and noting that pterosaurs, Dimetrodon mosasaurs, and plesiosaurs are actually not classified as dinosaurs, though they are often popularly included as dinosaurs. Adam Marsh's slides showed examples and spoke of the many dinosaurs discovered of the Colorado Plateau region and of the Chinle Formation at the Petrified Forest in Arizona, as well as Ghost Ranch, NM. And Marsh did say that dilophosaurs, a large dinosaur, have been found in Texas. He also discussed his work determining accurate age data for these dinosaurs, whether by relative or radiometric dating, finally providing a reliable method of age analysis by measuring zircons, a component of volcanic ash. Marsh touched on mass extinctions, and the spread of dinosaurs by

colonization and took questions, finishing his lively, humorous presentation.

Break time ensued and coming back, the 2 upcoming shows were up for discussion. The meeting minutes were accepted and Treasurer's report given. Erich emphasized that a nominating committee begin calling for those interested in being paleo society officeholders for next year. Suzanne called for more volunteers at the upcoming AGMS' Gem Capers. Erich also mentioned Dino Day at Brushy Creek Park this Saturday and that tomorrow is officially Fossil Day- maybe TX Memorial Museum may celebrate it in some way. Then the discussion turned to Fossil Fest: Mike Smith is contacting other fossil clubs on the web to update, confirm accurate FFest information for this year. A new fossil wood calendar was announced. Jamie Young called for a strong man to dispose of the tonight's garbage container and after a search, one was found. More fossils were requested for the spinning wheel. The meeting was adjourned at 8:42.

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 the third Tuesday\* of each month, 7:00 p.m. at the Austin Gem and Mineral Society building, 6719 Burnet lane, Austin, TX. The public is cordially invited to attend. See web site for April & December dates.

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

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DATED MATERIAL – MEETING NOTICE

**FIRST CLASS MAIL**