

Paleo Footnotes

Newsletter of the
Paleontological Society of Austin

Austin and Central Texas



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President's Note

It's Fossil Fest time again! Fossilmania is now over and reported to have been a great success. Kudos to Frank and Joan Crane and all those who traveled to Glen Rose and helped make that show a success. FF is the last thing this year that the club is doing with the public and the one thing this year that we need so much help with. This show is the main way that we interact with the public, one of our main membership sources and it being a success is totally on the memberships' shoulders. This is your club and everything that gets done for this club is done by a volunteer - one of us. A very few have handled all the work for years - I would really like to see a lot of new faces working all the different positions. There is no job at FF that requires more than a few minutes of OJT for those who think they may not be qualified. Part of being a club member is simple participation in club projects, not just the field trips. This shouldn't be considered as work - FF is a lot of fun and a chance to socialize, both with other club members and the public. Donate what time you can for the show, put up a display case, help with set-up or take-down, just participate in whatever way you can. On the same subject, "THANKS" to all those who helped out with the AGMS show, either at the table or setting up display cases or behind the scenes.

I believe that we will be going to Clifton this month, but I don't yet have the final OK. My own physical problems have kept me somewhat out of the picture for nearly three weeks. For the last two, I've been calling the number of the quarry manager and leaving messages - unfortunately he's been away in Dallas during that time. I've contacted the Assistant Manager and he's going to try to make it happen. I'll know by the meeting. Mea culpa.

See you at the meeting. --- Ed

Next Meeting – Tuesday November 16, 2010

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

"How God designed the earliest life on earth and may end up with vertebrate nannopaleontology."

Dr. Robert L. Folk

Robert L. Folk was born in 1925 in Cleveland Ohio, and got interested in collecting pretty stones around age 5 because his home was on a glacial moraine and there were lots of beautiful rocks from the Canadian Shield. At age 7 he went on a family trip to Kelleys island in Lake Erie where he found a wonderful fossil coral about 8" across. At Penn State 1943-1951 he fell under the overwhelming influence of Paul D. Krynine who inspired his work on sedimentary rocks.

In his words, "I began teaching at Univ. Texas in fall 1952 when Academic Life was fun, easy, and no time-consuming grant proposals required. Taught everything that was then known about all kinds of sedimentary rocks (even cherts and shales), plus Tertiary field geology, freshman physical and (blush) structural geology. No paleo, except for petrographical identification of all sorts of inverts in thin sections. I gave LOTS OF fS.

Research was mainly into sandstones, limestones and shales but included digressions into archeology (Israel, Egypt, Yugoslavia, Italy)...but also into the petrography of avian urine {not feces, good heavens, I am a specialist!}

In 1973 I taught a semester at Universita' degli Studi, Milano, and got italianizzato. Continually searching for reasons to continue work in bell'Italia, because I loved the lifestyle; food, wine, art, music etc. in 1979 I went with Henry Chafetz (U. Houston), to study travertine's in Roma...a type of carbonate rocks that had not been studied petrographically. By dumb luck we discovered it was made largely by little bacteria (not cyanobacteria!!!!). Research shifted focus to the study of bacteria + rocks. In 1990, seeking another excuse to work in Italia, I went to the 13th century city of Viterbo and in the hot (60oC) springs made the first geological discovery of n.nn.b..... . Some of my colleagues thought this was a career-busting fiasco, but I have continued work on these tiny organisms (fossils and living ones) despite objection of 99% of biologists who claim they are "too small to be life." Thank goodness I retired in 1988 so I could do some research for a change."

Dr. Folk is Professor Emeritus At the Department of Geological Sciences University of Texas

TEACHER KIT STUFFING PARTY!

**COME ONE, COME ALL to the Teacher Kit stuffing party of the year!
Tuesday, November 16th at 6:00 pm. We need to stuff LOTS of
specimen bags with a label and/or assemble the kits before the Paleo
Society meeting commences at 7:00pm - so the more bodies the
better!! Come an hour before the regular club meeting and show your
club spirit! Hope to see everybody there!**

November Field Trip

Clifton Chemical Lime Quarry, Clifton, TX 8:00AM, Saturday November 20th, 2010

The quarry mines the Edwards Limestone. If we collect the Edwards you can find rudists, bivalves and other fossils. We may also collect from exposed layers of the overlying blue-gray Kiamichi Clay and the yellow-buff Duck Creek Limestone that the quarry leaves behind. The Duck Creek produces nice large ammonites. The Kiamichi has a larger variety of fossils with ammonites as well. Some of the ammonites can be large and you should bring some of your larger tools with protective eyewear. You will be scrambling over piles of heavy rock so sturdy shoes and boots are suggested. We will be driving into the quarry and parking near where we collect. This means two things: First, there will be no leaving for lunch or restrooms so be prepared and pack everything with you. Second, it will be easy to get those big ol' ammonites home!

Head North on I-35. Just before Waco exit I-35 onto TX Highway 6 and go West. Continue for about 23 miles to Valley Mills. Continue on TX 6 towards Clifton. About 7.5 miles after Valley Mills you will see on the left a cattle facility with pens. Shortly after that you will hit FM 2602. Turn left. Go ~3 miles and enter the quarry on the right. Go to the entry building and park. Try to be there a little before 8:00. Bring tools, water, snacks, hat, all the usual stuff. See you there!

PSA October Meeting Minutes

Minutes: 10/19/2010

Meeting called to order by Marilyn Austin at 7:00 pm.

A presentation "Non-Analog Faunas" was given by Dr. Ernie Lundelius.

Vertebrate fossils have been used to interpret ancient climates. The assumption has been, if a fossil has the same tolerances as its living representatives the ancient climate must have been similar to the climate where the living representative now lives. This assumption may not be valid. A chart was shown that identifies the current range of the short tail shrew. The assumption drawn is that parts of what is now Texas where the short tail shrew fossils have been found must have been wetter and cooler than it is now. This is based on the current habitat of the shrew. We are not sure these assumptions can now be made. For one, DNA extracted from fossils and their extant counterparts do not match suggesting the possibility of characteristic differences. Another argument against the use of modern animals to predict ancient climates was found in Schultz Cave. The living representatives of the different fossils found in the cave do not have a modern overlapping range with similar climates. Some of the modern representatives live in almost arctic climates while others live in warm climates. A suggested explanation was that the animals did not exist at the same time, allowing for different climates. A researcher Tom Stafford was able to extract collagen from the fossils and radio carbon

date it. Apparently the animals were occupying the cave at approximately the same time. This same situation has been found in at least two other caves, one of which is in Russia.

Break

Old Business

The Gem Capers show will be in the Palmer Event Center on Saturday October 21st. PSoA has a booth and volunteers were requested and a signup sheet was sent around.

New Business

The club account balance is currently \$22,670.46.

Minutes from last meeting were approved.

An officer nominating committee was selected.

Members are Jaime Young, Joan

Crain, Kathleen Howard and Diane Strout.

Mike Smith announced that he has moved the club's data-base. If you notice any anomalies in club information please notify him.

If you need a club roster please contact Mike Smith.

Kathleen Howard has generously donated her complete fossil collection to the club. Thanks Kathleen!!!

Aboard meeting will be scheduled to determine the disposition of the collection.

The board will meet at 6:00pm prior to the next club meeting.

Door prizes were awarded.

Meeting was adjourned.

20th Annual Fossil Fest December 4th & 5th, 2010

Old Settler's Heritage Association (inside)

Next to the Dell Diamond on Highway 79, Round Rock, TX

3 miles east of IH-35

Saturday & Sunday 9AM to 5PM, \$2/adults, \$1 students, children under 6 Free

Hourly door prizes w/ admission each day.

Grand Prize drawing (\$1/ticket) on Sunday

Fossil dealers with specimens from around the world.

Displays, demonstrations, presentations for kids & adults.

Spin the "Wheel of Fossils" for 25 cents and go home with a fossil.

Bring your fossils for identification.

Call for Fossils, Food & Volunteers!

Fossil Fest is just around the corner!! Time to clear out your house and garage of all those fossils you can stand to part with! PSoA will gladly take your purged material for use in the **DIG PIT and SPINNING WHEEL**. Here's what we are currently looking for:

DIG PIT

- **VERY SMALL and SMALL, RECOGNIZABLE FOSSILS** to be "hidden" in sand (very small) and gravel (small) for kids to "dig" up at Fossil Fest.

These just need to be clean and recognizable as a fossil.

We need LOTS and LOTS of these too because the kiddos will do this activity over and over and over... =)

Last year, we ran short on these so please bring all that you can!

SPINNING WHEEL

- **EVERYTHING ELSE that is CLEAN and a NICE SPECIMEN that can be carried out.**

Just think about what you would want to win if you paid to take a spin on the Wheel of Fossils.

FOSSILS MAY BE DROPPED OFF AT ANY UPCOMING PSoA MEETING / EVENT

- Tuesday, November 16 at 7pm - PSoA Meeting at AGMS Facility

- Saturday, November 20 - Clifton Quarry Field Trip

- Friday, December 3 from 12noon to 9pm- Fossil Fest Set-up at Old Settler's Park

FOOD DONATIONS

We can use soft drinks or money. Bring anything you have to the next meeting or field trip. If you have other stuff to donate please contact Ron or Janet Root (ron@grassrootstrader.com or janet_root@bmc.com)

VOLUNTEER

Please see the following sign up info and help with set up Friday, the show Saturday and Sunday (It's FUN and an hour or two will help) and the Sunday clean up.

If you are unable to attend an upcoming meeting and you have fossil donations, please feel free to contact me to make alternate arrangements.

Suzanne Galligher - email: suzanbg@gmail.com or phone: (512) 751-1351

THANK YOU! THANK YOU!

Suzanne Galligher

VOLUNTEER AT FOSSIL FEST

He's Back!



That's right PSoA members! It's time to gear up for FOSSIL FEST! Volunteer to work the Admissions, Kitchen, Wheel of Fossils, Dig Pit or Microscope table. We need all hands on deck! Dust off all those fossils you've collected throughout the past year and show them off in a display case at Fossil Fest.

WHEN?

Friday, Dec. 3, 2010: Display Case and Show Set-up, 12noon til ???

Saturday, Dec. 4, 2010: Fossil Fest Day 1, 9am to 5pm

Sunday, Dec. 5, 2010: Fossil Fest Day 2, 9am to 5pm, 5pm til ??? - Display Case and Show Tear Down

WHERE?

Old Settler's Park in Round Rock Hwy. 79, 3.3 miles east of IH 35, next to the Dell Diamond

HOW DO I SIGN UP?

I'm glad you asked! The Sign-Up Sheet is accessible 24/7 ONLINE!!

1) Please visit the web based sign-up page at:
<http://www.mysignup.com/fossilfest>

you would like to volunteer, click on the OPEN button.

2) The link above will direct you to a page titled **Fossil Fest 2010**. There you will see the message, "This signup is private. You will need the passcode to continue. Please enter the passcode:" followed by a white text box. Type the word **paleo** in the text box in all lowercase letters and then click the "Enter Passcode" button. You will now be directed to a page containing the sign-up, information about the show and instructions on how to sign-up.

5) You will be asked to provide your name, email and home/cell phone number. Also, you may provide an optional UNDO code in the event you need to change your volunteer date/time. Write your code down!!

3) Review the Volunteer Schedule. You may volunteer for any spot that is listed as OPEN.

6) Click on the CONFIRM button to select your volunteer time slot.

4) Once you have selected the date and time

7) You will need to enter the passcode again. The passcode is the word **paleo** in all lowercase letters

8) You're done! **THANK YOU!!!!**

FYI - ONLY your name will appear on the website. E-mail and home/cell phone number is only visible to the PSoA Volunteer Scheduler for this event.

September Field Trip Report TXI Quarry Midlothian, TX

We all stood around the TXI parking lot looking at the sky, wondering if our trip would be in vain. Rain was coming and the only question was when. We were quite a crowd. David Lindberg, Melody Barnett, Rosemary Smith, Ron and Janet Root, Erich and Emelia Rose, Frederick and Melinda Falk, David and Bobbie Mell, Ed Slane, Kevin and Chris Bills, John Hinte, Dennis and Morgan Stock, Gary and Cathy Rylander, Bill and Cathy Kidd, and Lyle Graham. It was 8:00 and Gary was telling us the forecast was for it to hit us at 9.

Our chaperone, Roy, drove us back into the quarry and turned us loose. The rain left us alone until we were on the way to the vehicles anyway, at 10:30. I call that a very considerate storm system. The TXI quarry, like all the quarries in that area, it exposes the Eagle Ford Group and much of what we hunt is close to the Eagle Ford/ Austin Chalk boundary. There were two distinct areas to hunt, one older and one that resembled a freshly broken up shale hill. The older held a few *Inoceramus*, lots of pyrite nodules and gypsum with very little in the way of fossils. The shale hill, on the other hand, held what we were looking for. I believe that Gary, Bill and Dennis all had some nice *Ptychodus whipplei*. There were some small vertebrae found as well as a variety of teeth, though not that plentiful. Most of what I found were *Squalicorax sp.* or *Leptostyrax sp.*. I also picked up a nice small *Enchodus sp.* jaw piece. The pickings were a little slim and the time was short but it was still a lot of fun. I was going to apologize for messing up and not getting us permission for two quarries on the same day..... with the rain coming down the way it did, another quarry would have been impossible in any case. (None of us brought knee boots for the mud.)

Our next stop was the Highway 107 site and it rained all the way there. After we got there we sat in our cars for half an hour before we could start collecting. Really, the rain only set us back that one half hour, though a lot of folks gave up and went home. This large slope is Walnut Formation at the bottom, Comanche Peak in the middle and Edwards Formation at the top, all in the Fredericksburg Group. We scattered all over the slopes and I didn't see all that was found. What I can report is that I found a couple of *Salenia mexicana*, several *Heteraster texana*, a bag of nice *Hemiaster whitei*, several little horn corals and a plethora of various bivalves, including a *Lopha subovata*. There were a couple of small ammonites found and (of course) Gary went up on top and came back with three *Goniopygus zitteli*. I'd feel envious of him, except – as anyone knows who has hunted up there – he worked for those. It is slippery up there and I've fallen more than a couple of times.

The rain didn't really bother us: the first site was dry until we left and the second drained almost instantly. The rest of the day was very comfortable and there were good fossils to look for. Another great day fossil hunting in Texas! See you at the next one. Ed

October Field Trip Report Paleozoic of South-central Oklahoma

After meeting at our usual spot in Ada, we caravanned to Fittstown and Jennings' Quarry. We haven't hunted for crinoid bulbs (*Scyphocrinites ulrichi*) in at least three years and I thought it might be fun to try once more. With me were Gary and Cathy Rylander, Linda McCall, Melvin Noble, Kevin and Chris Bills. This narrow outcrop is Haragan Formation, Hunton Group and is Devonian in age. The quarry manager came by to check on us before we even started and suggested a nearby (new) spot would be easier and keep us out of the high weeds. The bulbs weren't far under the surface and the digging wasn't terrible and the bulbs were plentiful. I do think that the better bulbs came from the original site. At the new site the bulbs seem to be a little more weathered – it was rare to find one without part of the surface missing. All of the “holes” exposed the infill of calcite crystals, which, to me, offsets the damage. We took fifty bulbs with us and left at least thirty more. And Gary and Cathy didn't do any digging; they located a good place to look for loose fossils. There are still plenty of bulbs to go around.

After lunch we again caravanned – this time north to Wewoka and Tuckers' Hill. This site is Nellie Bly Formation, Middle Pennsylvanian. We found bivalves, gastropods, bryozoans, brachiopods, corals, shark teeth and crinoids. Linda and Gary came out on top – they both had a handful of crinoid cups but even better, they both found nearly complete crowns. This site is a really beautiful place to hunt and the owner simply couldn't be any nicer. I hate to go clear to Oklahoma to hunt the Pennsylvanian, but this is a very good site and we will be going back.

On Sunday, we met again at the Callixylon tree and drove by the Silurian road cut (P-7) for a brief stop. Some buckets of material were collected and we were off again. Camp Simpson, just west of Bromide, was supposed to be the last stop on the trip. The outcrops here expose from the Ordovician to the Mississippian and I was going to explore the possibilities of a site none of us had been to. Mistake. I almost always go to a site before taking the club there, simply to avoid wasting every one's time looking for what might not be there. If I had had 15 vehicles behind me on some of those roads that we needed to back up.....not good. We did find fossils and we all agreed that further exploration and research was warranted. Just not on a club trip. When one of us has gone again and found some good outcrops, we will return.

Since we were only a few miles away, we decided to visit Dr. Sprinkles' McLish Formation, Middle Ordovician site. We found bryozoans, brachiopods and echinoderm material. The large bryozoans there can be really interesting in appearance and can have other fauna (crinoidal haldfasts, brachs) on their surface. Something I learned just recently about them is that they can be cut and polished and do look attractive, similar to wood. I'm not one to cut up nice fossils, however, there are lots of nice big pieces around to work on. I did two pieces and both look good and have shades of grey, brown and lavender running through them. The polishing also shows off the internal structure, of which I was totally ignorant. I achieved a good luster using only sandpaper and a little buffer – I believe a high gloss could be had with polishing tools.

So ended another Oklahoma trip. Beautiful weather and scenery, good friends and lots of fossils – a really wonderful weekend and I'm sorry for those of you that missed it. See you at the next one.

Ed

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.

Annual Dues: \$15/individual, \$20/family and \$10/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