Paleo Footnotes

Newsletter of the Paleontological Society of Austin

Austin and Central Texas

Volume 7, Number 8
August 2012

President's Note

So now the weather is finally acting like it is supposed to. HOT. You all can tell I'm from the mid west by my tendency to talk about the weather. Still a Buckeye at heart. But maybe some rain and cool 90's coming up this weekend, or so they say. Got those fingers crossed. The good part is I have been using this indoor time to catch up on the cataloging of specimens. The bad part is it just makes me that much itchier to get out and find more. But the fall collecting season is almost upon us. Summer seemed to just fly by this year.

Our meeting this month is going to be an opportunity for you to give a little back to the club. No we don't want your fossils (well actually we do, but more on that later) we want your tales of adventure. You don't have to have gone on safari, a trip to the local creek will do. We want to hear about your own collecting adventures. The format will be Show and Tell. Bring some specimens, images we can project via the computer, maps, whatever you want or need to explain what you have been up to. And you can be as brief as you like. Think 5-15 minutes. You also don't need to be an expert. In fact if you could make it more of a "Where was I, and what did I find?" presentation asking the experienced members for advice or direction. Either way it should be no-pressure fun. So far I know Linda McCall will be taking one of the slots and giving us a preview of the new paper she has written "An un-described fauna from the Upper Cretaceous "Pyroclastic Zone" of the Austin Group at Pilot Knob, central Texas".

And about those fossils...we have a request from Professor Leon Long of UT for ammonites. He is looking for some specimens he can use in his classes. He doesn't need museum quality, just good enough to identify as an ammonite. So if you have a specimen or two that you wouldn't mind parting with in the name of education please bring them to the next meeting.

See you at the next meeting.

-- Erich

Next Meeting
Tuesday August 21, 2012

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

Show and Tell

By members of the society

Bring your latest (or best) finds and tell us about your collecting adventures. This is a chance to share your own enthusiasm for paleontology with the rest of the club. Take 5 to 15 minutes to present some interesting specimens, a special site, a vacation trip, etc. Tell us what you know or use the time to ask us questions about what you found or where you visited. We will have the club's computer and projector on hand so you can bring images on a disc or flash drive.

Please RSVP Erich Rose: 512-626-9930; president@austinpaleo.org if you would like to take part.

August Field Trip (Tentative)

Pleistocene Fossils along the Brazos River

Saturday August 25, 2012

NOTE: as of the writing of the newsletter there was a question about the water level on the Brazos. If it is too high the gravel bars are underwater. Rain is forecast throughout the week before. For this reason the trip may need to be either called off or changed. Please keep an eye on your e-mails for updates. If you are one of the members who do not use e-mail please contact Ed Elliot (512-657-7581) and let him know he needs to call you back when he makes the final decision.

Meet at the Stephen F. Austin statue parking lot in the S.F.A. State Park in San Felipe, at 8:00AM. Traveling east on I-10, just east of Sealy, take 1458 north (left) to the park. Bring whatever you would need for a day on the water. Food, lots of water, a canoe or kayak, hat, collecting materials-some finds are fragile, etc. Wear clothing that you won't mind getting in the red water. This trip is always a lot of fun

July 2012 Meeting Minutes

Minutes 7/17/2012

The meeting was called to order and guests were introduced.

Next month's meeting will be a "Show and Tell". Bring an interesting fossil to show the club!!! Five to fifteen minutes will be allotted for each presenter. The projector will be available for those that want it.

A presentation, "Paleovirology the Study of Ancient Viruses", was given by club member David Lindbergh. Viruses out number other forms of life 10^{30} to 1. They are the most diverse form of life we know.

All forms of life have viruses that infect them. The "arms race" between virus and host shapes the evolution of both. It is very rare that viruses leave fossil traces.

Viruses only reproduce inside of a host living cell. They take over the cell to create a virus factory.

A retrovirus inserts its RNA into the host cell's DNA becoming a permanent part of the hosts DNA. HIV is a form of retrovirus. Not all retroviruses are fatal. Rarely the viral DNA is passed on to the next generation of the host. It is estimated that 8% for human DNA is from retroviruses. We can date these retrovirus DNA using a molecular clock.

We can also date viral DNA that is found in multiple species by dating when these species last had a common ancestor.

Paleovirology is a recent science, approximately 10 years old.

Thanks David for a very interesting presentation!!!

Break:

Business:

Minutes
There was a correction to the prior minutes. The Fossil Fest theme will be Volcanoes not Volcanoes and Dinosaurs. Prior minutes were approved as amended.

Treasurers Report
Checking $6,149.41
Savings $17,891.21
Total $24,040.62

Scholarship donations to-date is $386.00 from 5 donations. The budget is $500.00.

Treasurer's report was approved.

Fossil Fest -

One more vendor was added. We need donations of

small fossils for the Dig Pit and Wheel of Fossils.

Field trip -

The field trip will be a trip to The Houston Museum of Natural History. The trilobite section is supposed to be phenomenal! Discount coupons can be found on an email being sent to members. For those that get a hardcopy newsletter the coupon will be mailed to them.

The cost of entry with the coupon is $7.00. Please have exact change.

Additional displays (require a separate payment) include the Terracotta Warriors and a large butterfly display.

Other

Dr. Leon Long (he has presented to our club) is asking for a donation of several ammonites. These will be for demonstrations to his students. If you can donate please bring them next time and give them to Bill Kidd. Bill will get them to Dr. Long.

Door prizes were awarded.

Meeting was adjourned.

Identification Day
Texas Natural Science Center (Texas Memorial Museum)
Sunday August 26th, 1-4:45PM

Have you ever wondered about a fossil you've found? Then bring it with you to Identification Day. Scientists and experts from all over Central Texas are on hand to look at and identify natural objects (fossils, bones, rocks, etc.) and archaeological materials (arrowheads, points, scrapers, etc.).

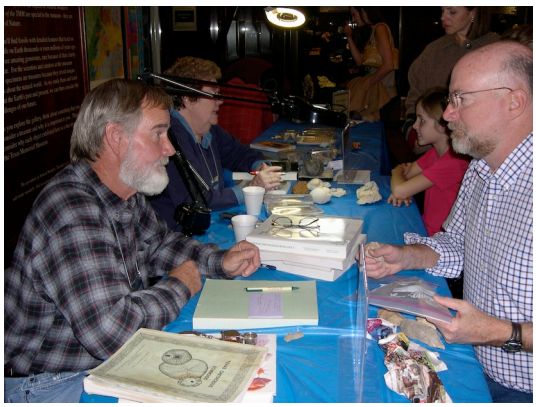
As always admission is FREE and it can be a great way to spend a hot August afternoon.

PSoA will be helping out at the invertebrate fossil table.

Identifications are for educational purposes only. Participating scientists and experts do not provide authentications or appraisals for monetary (market) value or for legal purposes.

The museum is located at 2400 Trinity St. Austin, Texas 78712 on the University of Texas campus. Parking is available on the street (read signs carefully!) and there is an adjacent garage.

http://www.utexas.edu/tmm/



Photos from last January's Identification Day at Texas Memorial Museum.

FOSSIL FEST UPDATE

The 22nd Annual Fossil Fest in December 2012 is shaping up. We've selected an explosive theme to this year's Fossil Fest: What's under the dirt in your backyard? Volcanoes! This theme coincides with a research paper on Pilot Knob and its dwarf reef fauna that will be presented to the Gulf Coast Association of Geological Societies by Linda McCall, James Sprinkle, Ann Molineux, and Christopher Garvie. Linda McCall will be presenting a condensed version of this research both days at Fossil Fest as our Keynote Speaker. Several interactive mini-workshops will be offered each day of the show teaching kids key earth science concepts. For hands-on fun, kids will create their own fossil imprint or trace fossil to take home with them. We are trying a new “Paleo Passport” program this year which will encourage kids to fully explore the displays, exhibits, activities and dealers at the show by answering questions in order to receive stamps for their passport. Learning is effortless when it’s fun! Speaking of learning, we have mapped the Texas Essential Knowledge and Skills criteria to all areas of Fossil Fest. This will enable us to show teachers specifically which TEKS components are being taught at Fossil Fest and encourage show attendance by students and teachers.

The Fossil Fest Show Committee is diligently working to make sure we have a great show again this year, and there's plenty of ways for all members to help out!

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 concepts to the kids. If you're in need of display case ideas, consider:

A display of how fossils form with an example of each (permineralization, carbonization, etc)
Examples of changes to an organism over time
Collection of crinoids and their structures
Type fossils and why they're important to paleontology - to identify geological time / layers
Urchins - characteristics used to identify them with samples and diagrams
Display showing environment of the fossil while living - deep ocean, shallow ocean, temperature, etc

FOSSILS

We need lots and lots of CLEAN cast off **fossils** for the DIG PIT (very small) and SPINNING WHEEL. 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!

All members are welcome to attend the **Fossil Fest Show Committee** meetings. This is a fantastic way to shape Fossil Fest and make a difference on the show. Meetings are held on the 2nd Wednesday of each month at 7pm. Meeting locations will vary, so please check the calendar for more info.

Well, that's all we have for now, but please keep watching this space as the committee continues preparing for the show. We'll give you more updates and more calls for your assistance with this very important show!

Suzanne Galligher
Fossil Fest Show Chair

Frederick Falk, Kathleen Howard, Ron Root and Erich Rose
Fossil Fest Show Committee
Members

PINE COUNTRY GEM & MINERAL SOCIETY
SCFMS* Regional Show & Convention

August 25th & 26th, 2012
Jasper, Texas

*South Central Federation of Mineralogical Societies

The annual show and meeting is being held in Jasper, Texas. This is the regional umbrella group we belong to and for those who are as much an all-around rock hound as you are a fossil collector the show and convention might be a great way to spend a summer weekend.

If you would like more info contact Erich Rose <president@austinpaleo.org> and I will send you the package of information.

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The museum is located at 2400 Trinity St. Austin, Texas 78712 on the University of Texas campus. Parking is available on the street (read signs carefully!) and there is an adjacent garage.

http://www.utexas.edu/tmm/

July Field Trip Report
The Houston Museum of Natural Science

The Houston Museum of Natural Science opened its' doors at nine o'clock and we were there waiting. All eight of us. David Lindberg, Melvin Noble, Suzanne and Gorden Galligher with their three kids: Ryan, Riley and Avery. I had really expected more members to have shown up, even if we weren't allowed to collect. I also want to say that my description of the museum in last month's newsletter was wrong, given to me over the phone by an enthusiastic employee. The paleo part is all on the first floor, not four floors. It is huge, but not as gargantuan as I was let to believe. I would go back again, without hesitation.

When we went through, there were still a few things “under construction” a few large display tables were being put together, the front room of the Paleo. Hall (for those of you who've been there before) is being broken up and its' parts moved elsewhere. For the most part, they were

open for business. Where before you had an exhibit room full of fossils, very nice stuff of all kinds – you now have a trip through time while moving from large room to large room. The walk starts in the Cambrian and you walk on through the Paleozoic, through the Mesozoic and end in the Holocene. The space is set up, not as rooms but one huge room with a second floor ceiling – walls guide you from one time period to the next – stepping around the corner takes you into the Ordovician. One thing I really liked wasn't even a fossil, but a very large video (30x120?) display. Seeing Cambrian fossils is sometimes tough and understanding what you are seeing even worse. All the Burgess Shale fossils came alive right there on TV in all their weirdness. There were lots of beautiful trilobites, ammonites, echinoderms, a large vertebrate hall and too many things to mention. This is not a place to drop by for a few minutes - we had no problem staying until the place closed down at five. And I didn't even mention the rest of the museum and all of the special exhibits. Those of you who didn't go, should do so when you get a chance. It is orders of magnitude better than it was when we went in 2009.

I hope to see you on the Brazos River soon, but that is to be determined by Mother Nature. We'll go someplace, if not there.

----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. 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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The Paleontological Society of Austin is a member of and affiliated with:

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DATED MATERIAL – MEETING NOTICE

FIRST CLASS MAIL