



Fossil Footnotes

Central Texas Paleontological Society
September 2005

President's Message

By Danny Harlow

Summer is on the down-slide and Fall is just around the corner. School is back in session and Football season is here for you sports enthusiasts. This year is flying by. The cooler weather coming will make collecting and prep work a lot more enjoyable.

We recently had a show committee meeting to start nailing down final preparations for "Fossil Fest" 2005. Be prepared, it is just around the corner. We are in excellent shape dealer wise and are already getting school kids committed for Friday.

At the last meeting we had an excellent presentation on the big cats of Texas by Dr. Pamela Owens. This month's speaker will be club member Bill Thompson. Look for the details in the newsletter.

I also announced that Nancy and I will be Grand Parents soon. Our daughter Julie is due with a little girl around the end of September. That's the good news. The bad news is, we recently had a fire at our house doing severe damage to the upstairs section. Everyone is OK, no injuries, but we will be relocated in temporary housing for 4-6 months. It is a major disruption but could have been a lot worse. Overall we were very fortunate. When I feel down on my luck, I just look around and realize how very fortunate I and all of us are. Keep the people of Louisiana

etc. and the troops overseas in our thoughts and prayers and have a safe and wonderful Labor Day Holiday!

See all of you at the next meeting.

Danny

September Field Trip

CTPS Field Trip to Ash Grove Quarry:
Saturday September 17

Be there at the very latest by 7:45 am. (I would shoot for 7:30 myself.) They will escort us in at 8:00 and there is no guarantee that you will be able to get in if you are late. Don't be surprised if you see strangers present, I believe they have merged our visit and the Dallas clubs.

No one under 18 is permitted. You will need to sign a release. I have provided a map on the website of the vicinity of Midlothian showing the exit off 67.

To get to Midlothian you have two options. Go north on I35. After Hillsboro you can take 35 E to Waxahachie and then take 287 through Midlothian to 67. Or, you can take I35 W after Hillsboro and at Alvarado, take STATE 67 to Midlothian.

In either case, past Midlothian on 67, take the **Gifco Exit**, cross over the freeway going west and stay on Gifco until you get to the Ash Grove

plant. Entrance is on your right. Meet in the parking lot.

Cell phone contacts: Ed Elliott 512 657-7581
Mike Smith 512 789-4477

For information about CTPS and our meetings and Fossil Fest: **Visit our Web Site**

<http://www.texaspaleo.com/ctps/index.html>

August Field Trip

By Ed Elliott

We had talked of having a trip to the Non-Vertebrate lab for this month. When I called to make those arrangements, I found out that Dr. Molineux was out of town until the 23rd. Since our next trips are a little more long distance, I decided to have a local trip to some places the club hadn't been to in a while.

The first locality was Smith's Branch in Georgetown. We made three stops along this Georgetown Formation creek. It has always been my feeling that this location is near the top of the Georgetown, nearly to the Del Rio Formation. Though some of my books back this up, there are several fossils, such as Plesioturrilites brazoensis, that typically occur during the Del Rio/Mainstreet time period. The first two stops were south of the Highway 29 Bridge on either side of CR 110. With the water being up a bit and the wet spring and early summer we have had, a lot of outcrop was either under water or under dense vegetation. Still, nice fossils were found and the newer members learned of the location.

In attendance were David Lindberg, Ron and Janet Root, Jimmy Hendricks, Eric Seaberg, Roger Myers, Greg Setz, Mark Clark, Paul Hammerschmidt, John Hinte, Wade and Travis Mullin and yours truly. Several fossils were found at all three stops: Kingena wacoensis, Ceratostreon texanum, Texigryphea mucronata, Illymatogyra arietina, Neithea texana and N. Georgetownensis. Mark Clark picked up a Drakeoceras sp., Eric found a very nice Lopha subovata. I picked up a small nautiloid, Cymatoceras hilli and a small, unknown brachiopod, possibly a Terebratulina sp. The third stop was at the low water crossing and north, down the creek. Janet ruled the day with an excellent Globator whitneyae. A very nice echinoid cleaned by nature. (I found one also, the bottom gone and the top under an inch of rock. I need to go back and look for the twin of hers!) We

had to wade the creek at this point but that and the shade from overhanging trees made the heat a little more bearable. Jimmy found a nice, small Drakeoceras in the gravels. Paul, John and I found some nice-sized Macrasters in soft matrix. The ones I picked up I believe to be M. elegans. There were quite a few Amphidonte walkeri oysters found. I also picked up a couple of Pleurotomaria austinensis gastropods, much the worse for their contact with the rest of the gravel. There were several Rastellum carinatum found. John and Eric picked up large complete ones. Just before the water got too deep to wade in, I found a Neithea wrighti.

After lunch, we went to the spillway at Lake Georgetown. This is a Walnut outcrop that's badly in need of rain. A few Heteraster texanus were found and Paul found a small Phymosoma texanum. This can be a good producing exposure, just not this day.

Four of us made it to the next stop at the Balcones Country Club. The outcrop there is Edwards Formation and is somewhat crystalline. It was a rudist reef with corals, a few bivalves and Goniopygus echinoids. We were all "cooked" and didn't stay long. John picked up a small Goniopygus texanus and a nice colonial coral.

It was a hot, humid August day in Texas but the chances to hunt for fossils made it a good day. I look forward to seeing everyone in Midlothian on the 17th of September.

Remaining 2005 Field Trips

Schedule for this year's field trips but subject to change

Sept 17 th	Midlothian
Oct 15th-16 th	Sulfur/Red River
Nov	Kerrville

September Field Trip

From Ed Elliott

The location: Ash Grove Cement Quarry
Date: September 17, 2005
Meet at the plant entrance at 7:45 A.M.

Do not be late. We all need to fill out releases and will be escorted in. Our escort may only want to make one trip.

Directions: North of Hillsboro take either IH35 west or IH35 East, I am not sure which is quicker.

From Austin Take IH35 North. IH35 West to Alvarado. Turn east (right) on Highway 67. Stay on 67 to Midlothian. North of Midlothian, take the Gifco Road exit. Take Gifco west (over the highway) until you hit the AGCQ entrance on the right. Drive to the parking lot by the gate and wait. Or....

From Austin Take IH35 north. IH35 East to Waxahachie. Turn west (left) on Highway 287. Go through Midlothian until you hit 67. Take 67 North to the Gifco Road exit. Take Gifco west (over the highway) until you hit the AGCQ entrance on the right. Drive to the parking lot by the gate and wait

From Discovery Magazine January 2005

Meet Mei long, The Sleeping Dragon

Paleontologists have found their sleeping beauty: the first dinosaur fossil discovered in a birdlike sleeping pose. Given the species name Mei long, Chinese for “soundly sleeping dragon”, the duck sized dinosaur apparently died while it napped. Its face is nestled behind one forelimb, which resembles a wing except for the long, clawed fingers at the end. The whole arrangement looks amazingly like the tucked-in nighttime repose of modern birds.

Mei long’s slumber provides rare evidence of a behavior linking dinosaurs to their living bird relatives. “It’s not the kind of thing I would expect to see in a fossil,” says Mark Norell of the American Museum of Natural History, who described the bones in conjunction with Xing Xu from the Chinese Academy of Science in Beijing. The researchers were able to study Mei long’s pose precisely because the fossil beds of the Liaoning Province in southeastern China preserved the dinosaur in exquisite three-dimensional detail. The region has yielded several other specimens that similarly show signs of rapid burial. Norell suspects that poisonous gases from a volcanic eruption asphyxiated the dinosaur, then, quickly buried it under a blanket of fine ash.

By Jessa Forte Netting

Are Tiny Fossils A Missing Branch In Our Evolution? Anne Sasso

Paleontology-The fossils of tiny marine animals found in Canada this year, may hold the key to how life evolved from microbes to humans.

In July Guy Narbonne of Queen’s University in Ontario, reported a new population of fossil, called rangeomorphs. The extinct animals are, he says, the most ancient complex organisms ever found on Earth. They look more like plants than animals, with branches, stems and leaf like structures. “Those things are a failed experiment. They are either right at the base of animal evolution or even a little bit further back behind, maybe on a link between a fungi and the animals,” says Narbonne. “And they are unrelated to anything on Earth today.”

The fossils were perfectly preserved under a layer of volcanic ash. Just as in Pompeii, every organism died where it lived. Most other fossil sites were caused by more turbulent occurrences, like hurricanes, which yielded a jumbled mess. This difference allows Narbonne to explore how the animals interacted with their environment. “When you walk on a rock surface, it is like walking on a 565-million-year-old seafloor,” he says. “Because of that, we can apply modern techniques in spatial ecology that have never been applied to the fossil record before. If you study the ecosystem, you can see how they fed, how they lived, and that puts constraints on what they were.”

Jurassic Ants

From Earth News April 1997 issue
By Tracy Staedter

A picnic in the park, even Jurassic Park, wouldn’t be complete without ants. The oldest known fossil of an ant dates to the middle of the Cretaceous period, 90 million years ago. But a surprising new fossil suggests that ants have been around at least since the Jurassic, 70 million years earlier, and that the extraordinary social structure of modern ant colonies was in place by then.

November 1996, bio-geologists Stephen Hasiotis, from the University of Colorado at Boulder, reported he had found a fossilized ant nest that is 160 million years old. The nest, discovered in the Morrison Formation in eastern Utah, contains narrow corridors

that widen into chambers, structures similar to those found in today's ant nests.

It is important to understand when ants began to live in groups, Hasiotis says, because nests built by groups of ants may have affected the evolution of flowering plants.

Today's ants, like many bees and wasps, live in groups in which one or a few females produce all offspring. Non-reproductive workers care for the young, gather food and build and maintain the nest. Reproductively active ants usually have wings so they can fly off to find a mate. The oldest evidence for this type of social structure lies in 65- to 80-million year old blobs of amber. In single blobs, scientists have discovered ants both with and without wings, suggesting that a social division of labor had come of age.

Now, intricate patterns in the fossil nest imply a much earlier birth for the ant's social system. "It's possible that their social behavior evolved at the beginning of the Jurassic, possibly even the end of the Triassic," says Hasiotis. Finding evidence of group living is tricky because it is likely that prehistoric ants lived in smaller groups than modern ants do.

The ancient insects, which were probably about the same size as modern harvester ants, may have played a major role in the evolution of new plant life. While building and maintaining group homes, some ant species significantly alter the soil, fertilizing it with their waste and discarded pieces of organic material, churning and aerating it and improving drainage. Some ants carry plant seeds underground, where the ants eat parts of the seeds, leaving the remainder to germinate.

Jurassic ant colonies may have formed similar islands of fertility, creating niches for new plants. "It's possible that social insects such as ants, termites and bees helped facilitate the evolution of primitive angiosperms like magnolias, which date to about 100 million years ago," says Hasiotis

Up Coming Shows

Sept. 16-18, Denver, CO - Colorado Fossil Expo. Held in conjunction with the Denver Gem & Mineral Show. Denver Merchandise Mart/Plaza Annex, 451 E. 58th Ave., I-25 at Exit 215. 16th, 9-6; 17th, 10-6; 18th, 10-5. Martin

Zinn Expositions, 505-867-0425, fax 505-867-0073, mz0955@aol.com, www.mzexpos.com.

Sept. 16-18, Denver, CO - Denver Gem & Mineral Show. Held in conjunction with the Colorado Fossil Expo. Denver Merchandise Mart Expo Hall, 451 E. 58th Ave. 16th, 9-6; 17th, 10-6; 18th, 10-5. Martin Hannu, 303-233-2516, info@denvermineralshow.com, www.denvermineralshow.com.

Oct. 8-9, Austin, TX - Texas Faceters' Guild. Symposium 2005. 6719 Burnet Lane. Hollis or Greg Thompson, dopsticks@sbcglobal.net.

Oct. 8-9, Temple, TX - Tri-City Gem & Mineral Society. 36th Annual Show. Mayborn Civic & Convention Center, 3303 N. 3rd St. 8th, 9-6; 9th, 10-5. Robert L. Coufal, 254-773-9624.

Nov. 4-6, Round Rock, TX - Central Texas Paleontological Society. Fossil Fest 2005: 14th Annual Show. Old Settler's Park, off Hwy. 79 East. 4th & 5th, 9-5. 6th, 9-4. Ron Root, 512-345-6718, ron@grassrootstrader.com, www.texaspaleo.com/ctps.

Dec. 2-4, Austin, TX - Austin Gem & Mineral Society. Gem Capers 2005. Palmer Events Center, 900 Barton Springs Rd. 2nd, 9-5; 3rd, 10-6; 4th, 10-5. 512-458-9546, gemcapers@austin.rr.com, www.austingemandmineral.org.

Fossil Fest Is Almost Here !!!

In less than two months, Fossil Fest will be underway. Please remember that we will need everyone who can to volunteer to help out. Be it set up night, or as the guardian of the spinning wheel, or walking around answering questions, or selling tickets to come to the show or selling tickets for the Grand Door Prizes. Every Job Is Important.

Even if you can only come and spend a short time, please come and help us out. Your participation means our success.

Central Club Contacts, 2005

President	Vice President Show Chair	Secretary
Danny Harlow 1140 Elder Circle Austin, TX 78746 (512) 327-4535 dharlow@austin.rr.com	Ron Root 6801 Rustling Oaks Trail Austin, TX 78759 (512) 345-6718 ron_root@bnc.com	Eric Seaberg 9283 Scenic Bluff Drive Austin, Texas 78733 512-402-0433 eseaberg@austin.rr.com

Field Trip Chair,	Treasurer	Program Chair Board Member
Ed Elliott 5502 Roosevelt Austin, TX 78756 (512) 453-5390	David Lindberg 9413 Sherbrooke Street Austin, TX 78729 (512) 401-0812 DLINDBERG@austin.rr.com	Mike Smith 8324 La Plata Loop Austin, TX 78737 (512) 288-6582 msmith17@austin.rr.com michael.smith@eds.com

Newsletter Editor	Board Member	Club Founder
Hollis Thompson 207 Adelfa Drive Round Rock, Texas 78664 (512) 341-0212 dopsticks@sbcglobal.net	Gene and Sheri Siste 5329 Hanging Cliff Cove Austin, TX 78759 (512) 794-0880	Don O'Neill 2600 CR 241 Hondo, TX 78861 (830) 741-3557

Club Information

The Central Texas Paleontological Society is a scientific, non-profit, community-based organization devoted to the study of fossils, advancing the state of the science, educating the public, and collecting fossil specimens. Most of us are amateurs, fascinated by fossils, who love to collect.

Meetings are held on the second Tuesday of each month at the LCRA building, 3700 Lake Austin Blvd. (between Redbud Trail and Enfield Ave.) at 7:00 PM in the LCRA Offices Board Room of the Hancock Bldg. **The public is cordially invited** to attend these meetings as well as our field trips held throughout the year.

Annual dues are: \$15 per person or \$18 per family, which includes a subscription to this newsletter, membership in the South Central Federation of Mineral Societies, and liability insurance coverage for club activities. Associate membership is \$10 per year and includes a subscription to this newsletter.

Central Texas Paleontological Society
P.O. Box 90791
Austin TX 78709-0791

Web page: <http://texaspaleo.com/ctps>

About the Newsletter

Fossil Footnotes is distributed once a month prior to each meeting. Contact the Membership Chair to subscribe or obtain a sample-issue. If your mailing-label has a date marked with a colored pen, it means your membership has or is about to expire. Please send your check to the club Membership officer or bring it to a meeting.

We accept material from club members (and non-members at our discretion) including, but not limited to, information relevant to club activities, fossil collecting, paleontology & geology, and science education. Feel free to reproduce original material contained in this newsletter for educational purposes (including other club newsletters), so long as you credit the newsletter issue and author, if applicable. Send submissions by e-mail or hardcopies to the Editor (see above) at least two weeks before the meeting. Expect some publication delays for exotic formats.

FOSSIL FOOTNOTES
P.O. Box 90791
Austin TX 78709-0791