



Fossil Footnotes

Central Texas Paleontological Society
April 2004

President's Message

Spring is here! It is a perfect time for the annual CTPS picnic and auction. Join us on April 17 at West Cave Preserve. Thanks again to John Ahrns for making us welcome. Directions below. The picnic and auction will be from 12:00 to 3:00. If you haven't been down to the springs before, you will want to check it out. Tours leave approximately hourly. There is a fee for the tour; I think it is \$5.00 for an adult. Well worth it and the money helps to keep this beautiful place going.

But, the real reason to come is so that you can participate in the furious bidding on a variety of donated fossils. Last year I was able to pick up a terrific piece of Texas wood. Note that we are looking for donations! Fossils, books, hand-crafted collecting tools, you never know what you will find, so come and get the bidding going.

Kids are welcome; they are great at goading their parents into continued bidding!

The club provides the barbeque; you need to bring a side dish or desert and your preferred libation.

I regret missing the field trip this month, but I understand a dozen or so stalwarts made it out to east Texas to pick up tree trunks. See the trip report elsewhere in the newsletter.

See you at the meeting. Remember, this month the meeting is on Thursday, April 8.

PICNIC LOCATION.

Go north on 12 from Dripping Springs. At the T intersection with Hamilton Pool Road (3238) go left. West Cave Preserve is about 7 miles on the right, just after the hairpin curve and one lane bridge over the Pedernales.

- Mike

The Meetings For This Year.....

Are not always on the second Tuesday of each month.

We will always meet in the Board Room at the LCRA Building but the dates and days are as follows:

April meeting	Thursday April 8th
May meeting	Tuesday May 11th
June meeting	Wednesday June 2 nd
July meeting	Tuesday July 13
August meeting	Monday August 2
September meeting	Wednesday Sept 8
October meeting	Wednesday Oct 13
November meeting	Tuesday Nov 9

Mark your calendars.....

April Meeting Program

The program for April has been changed. Our own Mike Smith will give us a talk on the fossils of Lyme Regis. See you on there on THURSDAY, April 8.

CTPS March 2004 Minutes

by Eric Seaberg

Mike passed out wallet size schedules of the upcoming meetings this year. The meetings are not regularly occurring due to booking issues with our normal room.

This week we had a nice speaker from the University of Texas, Brian Wilbur. He studies helicoplacoids from the early Cambrian, which he characterized as spiral plated echinoderms having three-rayed ambulacra and a calcite shell/plates. He spends part of his summer in and around Yoho National Park in Canada. Here he took several photographs of the mountains and formations of the Burgess shale. He used these as a backdrop for his presentation nicely combining the beautiful scenery, intriguing history of the formation's discovery, the people who have worked it, and the fascinating critters entombed within it.

Brian brought several books on the Burgess shale, but singled out two of them:

Wonderful Life: The Burgess Shale and the Nature of History; Stephen Jay Gould

The Crucible of Creation: The Burgess Shale and the Rise of Animals; Simon Conway Morris

I did a quick search on the web and came up with some interesting supplemental material:

This link has a nice discussion and presentation on the Burgess shale with several other interesting links

<http://www.ucmp.berkeley.edu/cambrian/burgess.html>

This link is a nice presentation on Cambrian fossils with nice diagrams. The helicoplacoids are on page 14.
<http://courses.geo.ucalgary.ca/glgy307/docs/Lec08.pdf>

This link has a nice picture and descriptions of Helicoplacus Guthi.

<http://www.earth.rochester.edu/ees207/Echinodermata/echblind3.html>

This link has a nice picture of Helicoplacus Gilberti

<http://www-personal.umich.edu/~wstoddar/helicoplacus.html>

This link has another picture of a Helicoplacoid

<http://www.ucmp.berkeley.edu/historyoflife/mysteries/mystery41/mystery41.html>

Another good picture and description of habitat

<http://www.ngdc.noaa.gov/mgg/sepm/palaios/0106/dornbos.html>

Here is our presenter's web site where you can find his email address.

http://www.geo.utexas.edu/courses/302P/BCW/b_c_w.htm

Field Trip to Jasper, Texas March 13

Saturday morning, 8am, at the Stump, near Sam Rayburn's dam. Eighteen people pull out for the short drive along Hwy 255 to the Temple-Inland gate.

Ron Ducote and his wife Donna tell us to double up into high clearance pick-ups, etc. for the ride down to Beef Creek. The long leaf pines along the forest road invite us into the piney woods stand. (Can you tell I love East Texas?) Gary Rylander takes off at a brisk clip to zoom straight through the woods to his palm wood spot from last spring. Amy, a math teacher in Lufkin, on her first foray into fossildom, already has her head spinning, trying to decide what to pick up.

"How about this one?" she asks Rich about a hundred times. (The next day, Amy competes, and completes a marathon!) She makes several trips out of the creek bottom to the pick up. Ron Root spots a large piece with about a 4 inch knot in the side. His first trip here, he HAS to take it, up and out of the creek, roped to his backpack.

Mark Lindberg, looking cool in his hip waders, lugged out a log that looked nearly half his size. Melvin and I go off looking for Gary and to say goodbye to a shovel-length round I had dug out earlier, only to find Gary's jacket covering a huge, solid round. Later, Melvin helps Gary and Cathy R. carry that hunk through the trees. Speaking of huge, the "mule" Rich, with his newly patched and soldered backpack from Hal Hopkins, straps on a brute of a round. I pass the remnants of the pack on some shoal, split in two.

What fine service it had already done that day. I mostly picked up druzied pieces, and some wood rotted pieces with Chalceodney replacement. Tom Bowers has already cut my pieces, easily identified as white oak by their rays, and the golden Chalceodey is beautiful. (Tom missed this trip because his grandson, Aden, turned two that day.)

After lunch at the Stump, off we went to Nacogdoches to collect in the Weches formation. I heard Melvin found three shark teeth. We collected there until dark set in.

Sunday, everyone was scattered, and the rain set in during the early afternoon. The only thing I found canoeing around Sam Rayburn lake was some kid's plastic dinosaur...Rich and I decided to drive to Livingston to Johnson's Rock Shop. Melvin was signed in earlier that day. How many of you have seen a 29,000-pound, palm wood tree? What a nice couple, the Johnsons, although they were skeptical of Rich from previous dealings... I was fascinated by his methods of moving big rocks. Mr. Johnson also shared a lot of information on collecting around East-Texas.

John

Some Local Dealers

We thought we would mention a couple of local fossil and mineral dealers.

Bob Freymueller has just opened a shop at:
Natural Treasures
2704 Rio Grande, Suite 7
Austin, Texas 78705
512-473-2256

And Rebecca found this one while looking for office furniture.

Nature's Treasures
1100 East 5th Street
Austin, Texas 78702
www.naturestreasurestx.com
512-472-5015

If you have a chance, go by and visit them both.

April 17- Club Picnic and Auction

That time is here again. The CTPS Annual Picnic and Auction, held again this year at West Cave Preserve.

As our President mentioned in his message, we need donations from all of us to make the selection of things to be auctioned the best it can be. Fossils, hobby related books, and hand-crafted collecting tools, are all excellent items to include. And of course, bring your checkbook.

The club will provide Barbeque, but each member is asked to bring a covered dish or dessert, enough to share with several others, and your preferred beverage.

Come to have fun and add to your collection!!

Texas Gem & Mineral Shows

April 10-11, Abilene, TX-Central Texas Gem and Mineral Society. Abilene Civic Center, North 6th and Pine Streets. 10th from 10-6; 11th from 10-5. Sallie Lightfoot, 325-692-4642; slightfoot@aol.com

April 16-18, Alpine, TX-Chihuahuan Desert Gem & Mineral Club. 14th Annual Gem Show. Alpine Recreation Center, 16th and 17th from 9-6; 18th from 10-5. Donna Trammel, 432-426-2924, 432-426-9027, paradiseranch5@hotmail.com

May 1-2, Waco, TX-Waco Gem & Mineral Club, 44th Annual Show. Waco Convention Center, Chisholm Hall. 1st from 10-5:30; 2nd from 10-5. John Simonson, 254-756-2537, jsimonson@hotmail.com

May 29-30, Fort Worth, TX-Fort Worth Gem & Mineral Club. 53rd Annual Show-"Crazy for Crystals" featuring crystals of the earth. 29th from 10-6; 30th 10-5. Elsie Kennedy/Terry Biegler; 817-246-1403, 817-626-6383; elsiegeorg@aol.com, terry@rockingbird.com

August 14-15, Arlington, TX-Arlington Gem & Mineral Club, 47th Annual Show; Bluebonnet Ballroom, Hereford Hall, University of Texas at Arlington. 14th from 10-6; 15th from 10-5. Carl Wells, 817-451-7861; novacar@ev1.net

Words to Live By

Always read stuff that will make you look good if you die in the middle of it.

Never buy a car you can't push.

Some mistakes are too much fun to only make once.

It may be that your sole purpose in life is simply to serve as a warning to others.

When everything is coming your way, you're in the wrong lane.

We could learn a lot from crayons; some are sharp, some are pretty, some are dull, some have weird names, and all are different colors, but they all have to learn to live in the same box.

FOR IMMEDIATE RELEASE

Provided to editor by Bill Kidd

*Secretary Connor to lead mission to Ethiopia
Focus on securing Lucy archeological exhibit,
open dialogue on economic development
opportunities.*

AUSTIN-Secretary of State Geoff Connor will lead a delegation from the public and private sector to Ethiopia for an 8-day mission. The mission departs for Addis Ababa on Saturday and returns to Texas on April 12.

"At the top of our agenda is finalizing details for the Lucy archeological exhibit in North America. The Houston Museum of Natural Science would be the host museum and first North American stop for Lucy, the most complete australopithecine skeleton yet discovered and one of the most significant exhibits of the century," Secretary Connor said.

"While the cultural importance of this exhibit cannot be overstated, there's a real economic benefit to bringing Lucy to Texas. The positive impact on the Houston and Texas economies by conservative estimates is \$5 million to \$7 million," Secretary Connor noted.

In 2003, Secretary Connor hosted Ethiopian and Houston museum officials in Austin to lay the groundwork for discussions about the Lucy exhibit.

The mission to Ethiopia will also provide state and business leaders with an opportunity to explore future business opportunities. In 2003, Texas exports to Ethiopia totaled \$73,483,082. Major products included crop production and

processed foods, printing and related products, machinery and transportation equipment.

Scheduled events include meetings with the President, Prime Minister, Foreign Minister, Commissioner for Tourism, and members of the Addis Ababa Chamber of Commerce.

In addition to Secretary Connor, the Texas delegation includes State Senator Rodney Ellis (D-Senate District 13) and Laurie Morian (Chairman of the Board, Houston Museum of Natural Science) and several other museums Representatives, business leaders and Houston area university and city officials.

Secretary Connor's travel expenses will be paid for using funds from his officeholder account.

Secretary Connor is Texas' 104th Secretary of State. He previously served with the Agriculture Department, the Texas Commission on Environmental Quality, as well as Deputy General Counsel to Governor William P. Clements, Jr. Before coming to the Secretary of State's office, Connor was an attorney with the firm of Akin Gump.

Contact: Jennifer Waisath
April 2, 2004
Phone: 512/463-9981

A Note of Interest

Patrick N. Hatten shared this tidbit with Mike our Prez.....

Mike, I recently hooked up with some folks from The Paleontological Assn. of South Texas to do a little digging at a road cut on 281 & 46. They are very interested in sharing newsletters with us. Their site is www.past1.net. Anyway they say that Sue will be at the Institute of Texan Cultures in S.A. Aug 15 to Nov 7 if anyone in the CTPS is interested. - Pat H.

From March 'Science Roundup' email

Dental Evolution in Early Hominids

The last common ancestor of chimpanzees and humans is thought to have lived about 6 million years ago. Sparse fossil evidence has pointed to the existence of three genera of early hominids -- Sahelanthropus, Orrorin, and Ardipithecus -- but anthropologists continue to debate the number of proto-human taxa that lived following human-ape divergence. In a report in the 5 March 2004 Science, Haile-Selassie et al.

<http://www.sciencemag.org/cgi/content/short/303/5663/1503>

Described six early hominid teeth from the Middle Awash region of Ethiopia and dating to 5.2 to 5.8 million years ago that they ascribe to a distinct species of Ardipithecus. The teeth have distinctly primitive features -- such as inter-locking upper and lower canines -- that are conspicuously apelike. Comparison with canine teeth from the other two hominid groups revealed differences in wearing, but a high similarity in shape and thickness of the tooth enamel. The researchers contend that the natural variation among modern-day humans is nearly as large as the variation among the canines of these three proto-human species, and suggest that all three may belong in the same genus. But not everyone agrees. In an accompanying Perspective, D. R. Begun,

<http://www.sciencemag.org/cgi/content/short/303/5663/1478>

notes that differences in enamel thickness and canine shape are the standard features used for classification, and argues that the new find suggests that there may have been more diversity among the first humans than previously thought.

The following pages have a list of references on the Burgess Shale.....list provided by Greg Thompson

*References and Links for the Burgess Shale of
British Columbia Middle Cambrian 505 Ma*

REFERENCES (* marked references are excellent non-technical introductions into the Burgess Shale; non-marked references are technical reading meant for the most enthusiastic readers)

- Allison, P.A. and Briggs, D.E.G. 1993. Burgess Shale biotas Burrowed away. *Lethaia* **26**, 184-185.
- Allison, P.A. and Brett, C.E. 1995. In-situ benthos and paleo-oxygenation in the Middle Cambrian Burgess Shale, British-Columbia, Canada. *Geology* **23**, 1079-1082.
- Aronson, R.B. 1992. Decline of the Burgess Shale fauna Ecologic or taphonomic restriction. *Lethaia* **25**, 225-229.
- Briggs, D.E.G., Fortey, R.A., and Wills, M.A. 1992. Morphological disparity in the Cambrian. *Science* **256**, 1670-1673.
- *Briggs, D.E.G., Erwin, D.H., and Collier, F.J. 1994. *The Fossils of the Burgess Shale*. Smithsonian Institution Press, Washington, D.C.
- Budd, G.E. and Jensen, S. 2000. A critical reappraisal of the fossil record of the bilaterian phyla. *Biological Reviews* **75**, 253-295.
- Conway Morris, S. 1992. Burgess Shale-type faunas in the context of the Cambrian explosion A Review. *Journal of the Geological Society of London* **149**, 631-636.
- Conway Morris, S. 1993. The fossil record and the early evolution of the Metazoa. *Nature* **361**, 219-225.
- *Conway Morris, S. 1998. [Showdown on the Burgess Shale The Challenge](#). *Natural History* **107**, 48-55.
- Footo, M. 1997. The evolution of morphological diversity. *Annual Review of Ecology and Systematics* **28**, 129-152.
- *Fortey, R.A. 1998. [Shock Lobsters: Book Review: The Crucible of Creation: The Burgess Shale and the Rise of Animals](#). *London Review of Books* **20**(19).
- Fortey, R.A., Briggs, D.E.G., and Wills, M.A. 1996. The Cambrian evolutionary 'explosion': Decoupling cladogenesis from morphological disparity. *Biological Journal of the Linnean Society* **57**, 13-33.
- *Gould, S.J. 1998. [Showdown on the Burgess Shale The Reply](#). *Natural History* **107**, 48-55.
- *Levinton, J.S. 1992. The big bang of animal evolution. *Scientific American* **267**, 84-91.
- McShea, D.W. 1993. Arguments, tests, and the Burgess Shale A commentary on the debate. *Paleobiology* **19**, 399-402.
- McShea, D.W. 1998. Possible largest-scale trends in organismal evolution: Eight "live hypotheses". *Annual Review of Ecology and Systematics*. **29**, 293-318.
- Orr, P.J., Briggs, D.E.G., and Kearns, S.L. 1998. Cambrian Burgess Shale animals replicated in clay minerals. *Science* **281**, 1173-1175.
- Petrovich, R. 2001. Mechanisms of fossilization of the soft-bodied and lightly armored faunas of the Burgess Shale and of some other classical localities. *American Journal of Science* **301**, 683-726.
- Ridley, M. 1993. Analysis of the Burgess Shale. *Paleobiology* **19**, 522-523.
- Thomas, R.D.K., Shearman, R.M., and Stewart, C.W. 2000. Evolutionary exploitation of design options by the first animals with hard skeletons. *Science* **288**, 1239-1242.
- *Whittington, H.B. 1985. *The Burgess Shale*. New Haven, Yale University Press.
- Wills, M.A., Briggs, D.E.G., and Fortey, R.A. 1994. Disparity as an evolutionary index a comparison of Cambrian and Recent arthropods. *Paleobiology* **20**, 93-130.

Central Texas Paleo Club Contacts, 2004

President	Vice President Show Chair	Secretary
Michael Smith 8324 La Plata Loop Austin, TX 78737 (512) 288-6582 msmith17@austin.rr.com michael.smith@eds.com	Ron Root 6801 Rustling Oaks Trail Austin, TX 78759 (512) 345-6718 ron@grassrootstrader.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	Danny Harlow 1140 Elder Circle Austin, TX 78746 (512) 327-4535 dharlow@austin.rr.com

Newsletter Editor	Board Member	Club Founder
Hollis Thompson 207 Adelfa Drive Round Rock, Texas 78664 (512) 341-0212 dopsticks@juno.com	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