



Fossil Footnotes

Central Texas Paleontological Society

June 2006

President's Message

We live at what was the bottom of the sea 100 million or so years ago. For that reason we find mostly non-vertebrate fossils. Our fossil knowledge and interest is mostly with these ancient creatures. Over the years, we have been introduced to fossils less common to Texas by speakers both from within and outside the club.

This will continue when David Lindberg will discuss marine reptiles of the Mesozoic at our Wednesday, June 14 meeting.

A few of us have specimens of these creatures. Please bring any ichthyosaur/plesiosaur/mosasauro/etc. fossils so that we can have a display of marine reptile material at the meeting. It will make for a much more interesting and educational session.

We will be able to collect fossils infrequently found in Texas on this month's field trip. Come to the meeting for details about the June 17 & 18 visit to the Ada, Oklahoma area.

Ron Root

June 14th Meeting Wednesday night

The June meeting will be at the LCRA Building on **Wednesday night June 14th** starting at 7:00 PM.

David Lindberg will be our speaker

Meeting Calendar

June 14 (Wed)	CTPS Meeting
July 11	CTPS Meeting
August 8	CTPS Meeting
September 12	CTPS Meeting
October 10	CTPS Meeting
November 3-5	Fossil Fest, CTPS Fossil Show at Old Settlers Heritage Association, Round Rock, Texas
December	Christmas Party (no meeting)

An apology from your editor: Guys, Greg and I have been moving for what seems an eternity. We closed on the new house on May 15th, started painting that same day and then began moving on Saturday May 20th. We were completely out of the duplex by the 24th but have yet to get truly moved in. I know what you are thinking; it takes years to get moved in.

The computer is set up and running, but I have yet to be able to get our Road Runner set up the way we want. Hopefully before the next

newsletter is to be done, I will be more operational.

Thanks for your patience.

Visit our web site

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

Membership Information

- \$18 per Family
- \$15 per Individual.
- Individual and Family memberships include a newsletter subscription, membership in the South Central Federation, and liability insurance coverage for club activities.
- Associate membership is \$10 per year and includes a newsletter subscription.



See you at the meetin' partner !!

2006 Field Trips

June 17 th -18 th	Ada, Oklahoma
July 15 th	Canoe trip Brazos River
August 12 or 19 th	Vertebrate or Invertebrate Lab at UT
September 16	Brazos River for Eocene fossils
October 14-15	Lake Texoma
November 18 th	Waco Pit
December	Christmas Party

From: CNN.com
SCIENCE AND SPACE

Wednesday, June 7, 2006 (thanks to David L)

WASHINGTON (AP) -- Odd-shaped mounds of dirt in Australia turn out to be fossils of the

oldest life on Earth, created by billions of microbes more than 3 billion years ago, scientists say in a new report.

And these mounds are exactly the type of life astrobiologists are looking for on Mars and elsewhere.

A study published Thursday in the journal Nature gives the strongest evidence yet that the mounds dotting a large swath of western Australia are Earth's oldest fossils. The theory is that these are not merely dirt piles that formed randomly into odd shapes, but that ancient microbes burrowed in and built them.

Check out the story at:

<http://www.cnn.com/2006/TECH/science/06/07/oldest.life.ap/index.html>

Thanks to Greg T for the following

Russell County, Montana

<http://russell.visitmt.com/dinosaurs/dinotrail.htm>

Egg Mountain

In the mid-1970s Jack Horner, a Montana paleontologist, along with fellow paleontologist Bob Makela discovered what appeared to be a large number of dinosaur nests containing the fossils of a duckbilled dinosaur in north-Central Montana.

Egg Mountain and the area surrounding it were filled with fossilized eggs, babies and adult dinosaurs from approximately 80 million years ago.

Horner and Makela named the new dinosaur Maiasaura, which means "good mother lizards," after examining the nests and the remains of eggs they found inside. It was the first proof that some dinosaurs took care of their young in much the same way birds do now.

Horner observed a number of interesting characteristics about the nests. The even spacing

between the nests and trampled eggshells within suggested that the nests were part of a colony, not the result of nesting in a different spot each year. He also determined that there would have been a lack of vegetation in the area of the nests. Using this clue, Horner theorized that the mother dinosaurs found food elsewhere and brought it back to their young while they cared for them in the nest, also that they may have left enough room to lie down next to the eggs to protect and shelter them - the first evidence of parental care by dinosaurs.

Their round nests were six or seven feet wide and could hold 25 eggs. The hatched babies weighed about as much as a phonebook and were about one foot long. Adult Maiasaurs weighed almost 6,000 pounds and were almost 30 feet long.

Egg Mountain is 12 miles west of Choteau. Today it is the site that has yielded more information about dinosaur biology during the Cretaceous period than any other paleontology dig in the world. Paleontology programs are available for adults and children.

The Montana Dinosaur Trail



Digging near Choteau, Montana

More than 65 million years ago, the Montana landscape was very different than it is today. A large inland sea covered much of the area that is now Montana. It created a semi-tropical flood plain not unlike the Everglades of Florida today.

During the last days of the dinosaurs, large herds of these massive beasts lived, migrated and nested in the upland areas surrounding the shallow sea. Duckbill dinosaurs and horned

dinosaurs known as Triceratops are two of the plant eating varieties that inhabited the area.

Triceratops was a herd animal; it is believed that large groups roamed North America. Their large beaks and long rows of teeth were well designed for chewing tough, low growing plants. It was likely the main predator of these animals was the Tyrannosaurus rex, which means "tyrant lizard". A number of skeletons show bite and chew marks that match the teeth of T. rex.

The Russell Country portion of the Montana Dinosaur Trail includes the following sites at Havre, Harlowton, Choteau and Bynum.

H. Earl Clack Museum - Havre

Many dinosaur discoveries of worldwide significance have been found in Montana and along the Montana/Canadian border. One such find, 75 million year old dinosaur eggs with embryos found in the Judith River Formation, is on display in the H. Earl Clack Museum. Research suggests these eggs were laid by a Lambeosaur, a large duck-billed, plant-eating dinosaur that grew bigger than most of the meat-eaters of its time. It walked on all four legs much of the time, but it could also stand easily on its hind legs, as they were much larger than its front legs.

These specimens are extremely rare and give visitors, and paleontologists alike, a glimpse into dinosaur development. Visitors to the museum also have a chance to touch actual fossils in the hands-on exhibit. This feature is especially attractive to younger visitors who have never touched fossils before.

Upper Musselshell Museum - Harlowton

The Upper Musselshell Museum in Harlowton is also part of the Dinosaur Trail in Russell Country. The museum's centerpiece is a full-size replica of

a skeleton found in the Judith River Formation near Shawmut: an Avaceratops, the first dinosaur found of its kind. The Avaceratops had a short, deep snout with a thick and powerful lower jaw.

The museum also has a Hadrosaur tibia and fibula, a cast of a Gypsonictops jaw, numerous dinosaur leg bone and hipbone fossils, fossilized clam shells, musselshells and snails, and a large ammonite (coiled chamber shell of an extinct mollusk).

Old Trail Museum – Choteau

The last stop on the Dinosaur Trail in Russell Country is located in the Two Medicine Formation. The Old Trail Museum in Choteau offers a new "Dinosaurs of the Two Medicine" paleontology gallery as well as its paleontology field program for adults, children and schools. These are no "Hollywood" dino digs, but professionally staffed, one to five-day educational adventures providing instruction about dinosaurs, geology and archeology along Montana's spectacular Rocky Mountain Front.

Two Medicine Dinosaur Center – Bynum

Montana dinosaurs at the Two Medicine Dinosaur Center include the world's longest dinosaur, a full-size skeletal model of *Seismosaurus halli* (earth-shaker lizard); a Guinness Book of World Records listing at 137 feet long, nearly 23 feet tall at the hips. The Center also features the first baby dinosaur bones found in North America among its displays.

The Center is famous for its public hands-on dinosaur research and education programs. Advance registration required for most programs; some offer College credit.

Activities

History, hiking, dinosaurs, paleontology programs, nature, picnicking, fossils

Services and Amenities

Parking, public restrooms

Directions

The Dinosaur Trail extends from Havre to Bynum to Choteau and south to Harlowton

Hours / Season of Operation

All year

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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.

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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.

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