

M.A.P.S *Digest*

Official Pub
Mid-America Paleontology Society

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A LOVE OF FOSSILS BRINGS US TOGETHER

MARK YOUR CALENDARS

Apr 8-10, 2005: MAPS NATIONAL FOSSIL EXPOSITION XXVII – Bivalves

Western Illinois University, Western Hall, Macomb, IL

Fri., Apr 8 8 am - 5 pm—Keynote Speaker, Dr. Jack Bailey
@ 7:30

Sat., Mar 27 8 am - 5 pm—Meeting & Live Auction @ 7:00

Sun., Mar 28 8 am - 12 noon

Information will be in the December issue.

Jan. 8, 2005 MAPS Meeting

Norton Geology Center, Cornell College, Mt. Vernon, Iowa.

The regular business meeting will run from 1-2 p.m followed by a program presented by Dr. Ben Greenstein, Associate Professor at Cornell College, on his recent studies of coral reefs in Western Australia. Please note that this meeting is at Cornell College, not at the University of Iowa.

February 12, 2005 MAPS Meeting

Room 125, Trowbridge Hall, University of Iowa

The regular business meeting will run from 1-2 p.m followed by a program presented by James Huber, an adjunct Associate Professor in the U of I Department of Geoscience and owner of James K. Huber Consulting in Vinton, IA. The title of his presentation will be "Palynology: an overview of 25 years in the field".

James has done some work on the giant ground sloth recently found in western Iowa.

February 19-20 Burpee Dinoblast

The Burpee Museum of Natural History, Rockford, IL, will host its 7th annual PaleoFest February 19 and 20, 2005. There will be Children DinoBlast Activities, Family Workshops and Adult Lectures Series. The highlight of this year's event is the unveiling of the reconstructed skull of JANE, Burpee's celebrated tyrannosaurid discovered during a Burpee expedition in the summer of 2001 to the Montana Badlands. PaleoFest dinner Saturday evening at the Clock Tower Resort & Conference Center features guest speaker, Paul Sereno, Ph.D., University of Chicago.

May 7-8 Sioux Empire Gem and mineral Society Show

Includes but not exclusively fossils.
1309 West St.
Bollinger Center, Sioux Falls, SD

Contact Janine Heifner, PO Box 91301, Sioux Falls, SD
57109

segams@sio.midco.net 605-332-8733

2004/12 to 2005/01 DUES ARE DUE

Are your dues due? You can tell by checking your mailing label. It reflects dues received by Jan. 5, 2005. The top line gives the expiration date in the form of "year" followed by "month" – 2005/01 means 2005/January. Dues cover the issue of the Digest for the month in which they expire. We do not send notices but will let you know if you are overdue by highlighting your mailing label and stamping your Digest. We carry overdues for two issues before dropping them from our mailing list.

Please include on your check your due date and name exactly as it appears on your mailing label - or include a label.

Dues are \$20 per U.S./Canadian household per year. Overseas members may choose the \$20 fee to receive the Digest by surface mail or a \$30 fee to receive it by air mail. (Please send a check drawn on a United States bank in US funds; US currency; a money order; or a check drawn on an International bank in your currency.) Library/Institution fee is \$25.

Make check payable to MAPS and mail to:

Sharon Sonnleitner, Treas.

4800 Sunset Dr. SW

Cedar Rapids, IA 52404

MAPS member LaVeta Hodges Passes Away

MAPS member LaVeta L. Lakin Hodges, 88, Mission, K.S., passed away Nov. 29, 2004, at Overland Park Manor. LaVeta, with her husband Lee, was a long time member of MAPS. She and Lee were also regulars at EXPO. Our deepest sympathy is extended to Lee and the rest of her family.

DIGEST CONTRIBUTIONS WANTED

Articles and other materials of paleontological interest are needed for future issues of the Digest. Soft copy in Microsoft Word is preferred. Please email materials if possible to either: fossilnautiloid@aol.com or cdeozart@aol.com

Hard copy may be mailed to:

John Catalani
3405 High Trail
Woodridge, IL 60517

ABOUT THE COVER

Photo submitted by John Moffitt

This month's cover photo is of a new Pennsylvanian crinoid discovered by George Wolf, Jr. at the Lake Brownwood, Texas spillway site. The specimen is being donated to a repository.

**PROCEEDINGS OF THE BOARD
November 20, 2004**

Present: Karl Stuekerjuergen, Gil Norris, Dale Stout, Sharon Sonnleitner

EXPO (April 8-10): Gil has reserved 30 rooms at Days Inn. Rooms are \$55 for 2 people. Identify with MAPS to get the special rate. Rooms are also reserved for MAPS at the Union. To reserve a Union room, contact the Union directly at 309-298-1941 and identify with MAPS.

Keynote speaker will be Dr. Jack Bailey, Western Illinois Geology Department, who will speak on Bivalves.

Ray Garton will be invited to bring the large Stegodon skeleton he has offered. Steve Holley will be asked to bring his educational display.

Members were selected to receive the President's and Don Good awards. They will be announced at Expo.

Wanda Aldred and Randy Faerber will be asked to handle the silent and live auctions.

Dale will check on signs, including a magnetic sign for the outside gym entrance

Rolls and coffee will be ordered and \$1 donation will be asked to cover their cost.

FROM THE PRI

December 3, 2004

Dear Sharon (Sonnleitner),

We are pleased to announce a major milestone in the Paleontological Research Institution's history. On November 20, 2004, PRI signed an agreement of formal affiliation with Cornell University. This affiliation strengthens the many informal connections that have been established over the past decade while creating a foundation for important new opportunities for both institutions in the future.

Why, after so many years, have we taken this final, important step? For one simple reason: because it strengthens our ability to carry our mission to increase and disseminate knowledge about the history of life on Earth. This exciting relationship will offer new collaborations, new resources, and new opportunities. It will offer PRI and the Museum of the Earth greater exposure to a wider public and therefore adding to our alient foundation of constituents.

Cornell will benefit by gaining a new avenue for educational outreach by the University to the general public in the life and Earth sciences. PRI already cares for the University's collections of non-botanical fossils and modern shells, and provides research, teaching, and volunteer opportunities for Cornell undergraduates and graduate students. The affiliation will develop new opportunities, build upon these ongoing connections, and make PRI and the Museum of the Earth better known to the Cornell community.

This new collaboration will be through Cornell's Department of Earth and Atmospheric Sciences (EAS), which is located in the University's College of Engineering. EAS is enthusiastic about the prospects offered by this new relationship and we are excited about expanding our already close connection to the Department.

The agreement leaves PRI a freestanding and independent entity, with no formal financial, legal ties or obligations to the University. It will barely alter our day-to-day functions.

This affiliation is not an end in itself, but the beginning of a greater opportunity of expanding the service that PRI already provides to thousands of people. It is not the end of a separate PRI but the beginning of a new and extremely promising collaboration that will produce real benefits for PRI members, donors, and friends in Ithaca, across the country, and around the world

As ever, your support and encouragement allow us to grow as an organization. We thank you for your continued generosity, and look forward to starting this new chapter together.

Sincerely,

Warren D. Allmon, Director PRI

MILLIE & SAM



Our children's guide to fossil hunting, was developed by Julie Golden and Tiffany Adrian, past and present curators of the University of Iowa Paleontology Repository, and funded with money from the David Jones Grant. It was published in March 2004 in time for Expo. It has since sold well at both the Midwest Federation of Rocks and

Minerals Societies Show in Cedar Rapids, Iowa, and at various outlets around Iowa City. Books can be ordered from Dale Stout (address on back) for \$5 (includes postage and packing). They will be available at Expo for \$3.

FROM THE UNIVERSITY OF IOWA

May 4, 2004

Dear Mr. Stout:

Professor Emeritus Brian Glenister came by my office last week to give me a copy of *Millie and Sam's Fossil Hunt*. He told me of your support and generosity in making this wonderful publication possible.

I wanted to express my gratitude on behalf of the College of Liberal Arts & Sciences for your work in publicizing the joy and intellectual rewards of paleontology. Introducing youngsters, and even those more senior, to the fun and excitement of paleontology right in their own back yard is a great way to open their imaginations to the world of science.

Thank you for your efforts, and my compliments on a great little book.

Sincerely,

Linda Maxson

Dean of the College

DI Alumni Assoc. Dean's Chair in the Liberal Arts & Sciences

MAGGIE KAHR'S PASSES AWAY

MAPS member and long time Expo Digest Editor Margaret Kahrs passed away Saturday, January 8. Maggie had battled cancer for a couple years and succumbed to pneumonia. She was 78. Besides editing the Expo Digest, Maggie has been a fixture at Expo and began creating books of microfossils a few years ago. She donated the books to the Expo auction, and they were hot items, fetching around \$500 each. Condolences can be sent to her family at 9145W US Hwy 50 East, Seymour IN

SHARK HUNTING IN NORTH CAROLINA

Club member **Donald Baumgartner** recently vacationed in a North Carolina beach house and took advantage of this opportunity to do some fossil collecting as well, despite complaints from the wife. With the help of some North Carolina resident fossil collectors, discovered both through the MAPS directory and through a brief web search, Donald was first advised to visit the Aurora Fossil Museum. Although small, the Museum is probably the ONLY one dedicated to fossil sharks. Very impressive displays of shark teeth, primarily collected from the nearby famous Aurora PCS Phosphate Mine were on display. A life-sized model of the famous extinct great white shark Carcharocles megalodon welcomed each visitor at the entrance doorway. Many other North Carolina fossils were displayed as well, including numerous mammal bones and the only known fossil walrus skull collected off North Carolina shores. Every Memorial Day weekend the Museum hosts a fossil celebration which draws hundreds of families to collect from the quarry piles dumped just outside of the Museum. Of course, I also checked these waste piles and although picked over, I quickly found a couple dozen fossil shark teeth and numerous tiny shells. These phosphate soils are so rich in fossils that literally every handful of dirt contains fossils! Search of a similar nearby quarry waste pile yielded another 4 dozen shark teeth, including one larger 1 ½ inch tooth. The Museum contains a nice gift shop, where patrons can purchase shark teeth cheap, fossil ID books, logo shirts and caps, and more.

Locating a quarry to collect at the next day in North Carolina was easy. One common quarry service (Martin Marietta Materials) has a web site that listed all their satellite facilities. A couple phone calls to local collectors revealed which were fossil bearing and close to my vacation home. A bucket full of echinoids (numerous sea biscuits and a few sand dollars) were collected within a short 2 hour search of the waste hills, and numerous smaller fossil shells (all Eocene). While there I met a small group of devoted fossil hunters from the East Coast Fossil Club, whom I later discovered found two 4 inch shark teeth. My driving force to visit the quarry were visions of large megalodon shark teeth laying all over, among hundreds of other mammal fossils, but such was not the case. I was pleased nevertheless, as I never collected echinoids before in such abundance.

The best fossil collecting, oddly enough, was actually on the beach not far from my rental beach home, where I stumbled upon a large whale vertebra, a shark vertebra, and a dolphin vertebra, all washed up on the sand beach after the passing of the hurricane Alex.

Thus, in the end, this vacation turned out to be even more memorable than expected, with my memories to live on through the fossil specimens which I collected and new fossil friendships made. We all know that fossils are more valuable to collectors if they are personally collected. This vacation adds to my growing list of family vacations turned into fossil collecting memories – collecting shark teeth on Florida's Venice Beach, collecting fossil crabs in Washington State, collecting brachiopods in Door County Wisconsin, and collecting dinosaur tracks in Massachusetts. You too can turn that vacation into a novel fossil collecting expedition by taking advantage of your club memberships, friendly collectors, and the web.

Read More About It:

Aurora Fossil Museum at <http://www.aurorafossilmuseum.com> or <http://www.pamlico.com/aurora/fossils/>

North Carolina Fossil Club at <http://www.ncfossilclub.org/>

Books:

Neogene Fossils of North Carolina (A Field Guide) by Richard Chandler (1997)

Cretaceous and Paleogene Fossils of North Carolina by Richard Chandler (1995).

Paleocene Collecting Sites in Maryland and Virginia**By Harry Zirlin****From Newsletter of the New York Paleontology Society. Donald Phillips, Ed. 11/04 (Vol.11, No. 8)**

Most of the members of our club are familiar with the Cretaceous shark fauna of Big Brook, New Jersey and other nearby sites. These fossils date from approximately 70 million years ago. Most of us are also familiar with a Miocene shark fauna from our trips to Aurora, North Carolina and/or the Calvert Cliffs of Maryland. These fossils are much younger than the Cretaceous fossils and date from a mere 5-15 million years ago. I write here about some sites where you can find fossils younger than the Cretaceous but older than the Miocene. These fossils date from the Paleocene Epoch, approximately 60 million years ago, very soon (geologically speaking) after the great Cretaceous extinction of 65 million years ago.

The Paleocene crops out on a number of beaches along the Potomac River on both the Maryland and Virginia sides. Unfortunately many of these outcrops are on private property and thus inaccessible to collectors. There are, however, at least two sites that are fairly productive and are accessible to the public: Purse State Park in Charles County, Maryland and Fairview Beach in King George County, Virginia.

Purse State Park has much more beach to collect from than does Fairview Beach. To get there, follow Route 301 South to Route 225 West. At the intersection of Route 224 make a left. Stay on 224 for approximately 15 miles. There is a small sign saying "Purse State Park" at a parking area along 224. Cross 224 from the parking lot and take the .25 mile trail to the beach. There are fossils all along the beach that can be found by simply looking carefully or by sifting. Note that many of the teeth are so small that they will pass through any but the finest sieves. Although fossils occur anywhere along the beach, I have found the best collecting by walking south along the beach past an old duck blind. (When you reach the beach make a left and you will be going south.) You can see the types of fossils you are likely to find by going to fossilguy.com and looking at Site 3 on his map.

Most of the shark teeth here are small, but there is one species that can be quite impressive: *Otodus obliquus*. This is a giant mackerel shark and specimens can be 2-4 inches, although specimens in excess of 2" are very rare. According to an email I received from Jayson (the fossilguy) the further south you go at Purse State Park, the more likely you are to find some good size *O. obliquus* teeth. There is a nice diversity of shark species in addition to the prized *Otodus*. Most of these are different species of sand sharks or smaller mackerel-type sharks, including one that is familiar from Big Brook: *Cretolamna appediculata*, which survived the Cretaceous extinction. Many of the smaller teeth can be found in nice condition and are needle sharp.

Because you are collecting from beach sands and gravels, the fossils are not actually considered to be *in situ*. Nonetheless, you can be fairly confident that the fossils here are from the Piscataway Member of the Aquia Formation. In addition to the various shark species, there are also fossils from rays, bony fish and reptiles such as crocodiles and turtles. Invertebrates include *Turritella* steinkerns that are sometimes referred to as "Devil's Corkscrews." *Turritella* fossils with the shelly material intact are common in the rocks and boulders at Fairview Beach. Directions to Fairview Beach in King George, VA, are as follows: take Route 301 South across the Potomac River Bridge and exit at Route 206 towards Fredericksburg. In less than 3 miles, exit at Route 218 West. From there stay on for about 8 miles and watch for a green sign pointing to Fairview Beach. There is a nominal parking fee here. This is a much smaller beach than Purse State Park because there is private property on both sides of this small area. However, the boulders on the beach containing the *Turritella* fossils make the trip worthwhile. You should probably not attempt to chisel out fossils from the boulders, but you can usually find some smaller chunks that have weathered free that contain some nice examples of the fossils. The white shells stand out in good contrast to the dark gray matrix.

There is one problem that I have encountered at these collecting sites (and other collecting sites in the vicinity) or perhaps I should say millions of problems: stable flies. These biting flies are slightly smaller than houseflies but pack a wallop. Bug sprays do not deter them. You have not only my word for it, but all of the literature I have reviewed reports the same thing "insect repellants do not deter stable flies." Therefore, a trip in late winter or early spring (when there are no flies) may be better for collecting than the longer days of summer, because the flies can make collecting unbearable. Consider yourself warned.

The Mid-America Paleontology Society (MAPS) was formed to promote popular interest in the subject of paleontology; to encourage the proper collecting, study, preparation, and display of fossil material; and to assist other individuals, groups, and institutions interested in the various aspects of paleontology. It is a non-profit society incorporated under the laws of the State of Iowa.

Membership in MAPS is open to anyone, anywhere who is sincerely interested in fossils and the aims of the Society.

Membership fee: \$20.00 per household covers one year's issues of DIGESTS. All Canadian and Overseas members receive the DIGEST by air letter post. For new members and those who renew more than 3 issues past their due date, the year begins with the first available issue. Institution or Library fee is \$25.00. (Payments other than those stated will be pro-rated over the 6 yearly issues.)

MAPS meetings are held on the 2nd Saturday of October, November, January, and February and at EXPO in March or April. A picnic is held during the summer. October through February meetings are scheduled for 1 p.m. in Trowbridge Hall, University of Iowa, Iowa City, Iowa. One annual International Fossil Exposition is held in April or late March.

The MAPS official publication, MAPS DIGEST, is published 6 times per year – January, Feb/March, April, May/June/July, August/Sept, Oct/Nov/Dec. View MAPS web page at <http://www.midamericapaleo.org>



CYATHOCHRINITES