



**EARTH SCIENCE CLUB OF NORTHERN ILLINOIS 2008**

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<b>Junior</b>	Open			

John Good & Karen Nordquist are delegates to Chicagoland Gems & Minerals Association.  
Betsy and Floyd Rogers were Show Chair for 2008

The aim of the **Earth Science Club of Northern Illinois** is to promote an interest in the Earth Sciences. In addition to the regular General Meeting, study group meetings are held monthly. They are held by groups of **ESCONI** members interested in the studies of Archaeology, Mineralogy, Micromounts, Paleontology, and the Lapidary Arts. There are also study sessions for Junior members to help them learn more about the earth sciences. From time to time field trips are arranged. **ESCONI** has a fine library of books on the earth sciences that are available to members.

We welcome the attendance of all interested persons at any or all sessions. The schedule is printed on the back page (date, time and place of meeting). Specific information is published in this bulletin.

Membership is \$20.00 (which includes the Bulletin) for family membership. Dues are payable either at the monthly meetings or by mailing to the **Membership Chair** listed above.

Deadline for Bulletin articles to the editor is the 2<sup>nd</sup> weekend of each month.

Articles in this publication may be reprinted if full credit is given the author and **The Earth Science News**. Exchange bulletins may be mailed directly to the Editor.

**ESCONI** website is [www.esconi.org](http://www.esconi.org)  
Webmaster is John Good

**July/August 2008****President's Message**

"Home on the range where... seldom is heard a discouraging word and the skies are not cloudy all day....." *Paleo Prospectors* fossil excavation in Wyoming was memorable, as predicted. <http://www.paleoprospectors.org/> . We'll be sure to "show off" our goods at the September general meeting. I'm looking forward to checking out what you all have been getting into this summer, too, so don't forget to "show and tell" us about it then. There will be no general meeting in August... I'll see you in September!



**MASTODON EXCAVATION:** Friday, August 1, 2008 from 11:30 a.m. until approximately 2:00 p.m. as we help Forest Preserve District of DuPage County experts uncover a local mastodon. We will meet in the day use parking lot (by the shelter) at James "Pate" Phillip State Park off Sterns Road just east of Illinois 25, Bartlett, Illinois for a unique opportunity. For further information or to make your reservation, please contact Joe Kubal, ESCONI, 30W600 Sunrise Road, Naperville, IL 60563, 630-983-6159, [SMKubal0712@aol.com](mailto:SMKubal0712@aol.com)

**ISHPEMING ROCK AND MINERAL CLUB Show August 1-3, 2008.** Location: Ishpeming Elks Club Hall, 597 Lake Shore Drive, Ishpeming, Michigan. Free Admission. Field trips scheduled: August 1- Field Trips to Local Quarries for micromount.; August 2 - Show with demonstrations, display, dealers and silent auction 9:30 a.m. to 4:30 p.m. (All times are Eastern Daylight Savings Time); August 3- Field Trip to Lindberg Quarry for Kona Dolomite. <http://www.amfed.org/mwf/Calendar/August.htm>

**SALT THE SANDBOX:** Don't forget to see what's happening around the area for the 'whole family' at Eric Gyllenhaal's web site. He covers just about everything your family to have a rock'n good time: <http://www.saltthesandbox.org/ESCONI/> .

Be sure to visit our ESCONI WEBSITE [www.esconi.org](http://www.esconi.org) for the latest in updates. Also, if you have not already done so, remember to send in your annual dues for 2008 (\$20) to our Membership Chairman.

Jim Fairchild, President  
[jimfairchild@comcast.net](mailto:jimfairchild@comcast.net)

**JULY/AUGUST 2008 ESCONI EVENTS**

<b>General Meeting (No July or August meetings)</b>	No meeting due to Summer Break
<b>Mineral-Micromount (No July or August meetings)</b>	No meeting due to Summer Break
<b>Paleontology (No July or August meetings)</b>	No meeting due to Summer Break
<b>Archaeology (No July or August meetings)</b>	No meeting due to Summer Break
<b>Junior</b>	Subject to reorganization.
<b>ESCONI Field Trips</b>	See Web Site, <a href="http://www.esconi.org">www.esconi.org</a> , for more details. Contact John Good for reservations at 630-483-2363 or <a href="mailto:ESCONI@hotmail.com">ESCONI@hotmail.com</a>
<b>BOARD MEETING 7:30 PM, August 22 College of DuPage K-131</b>	Next Board Meeting is August 22, 2008

**SUMMER SHOWS**

July 10-13, 2008, Agate Show 2008, University of Wisconsin – Fox Valley in Menasha, Wisconsin

August 1-3 2008 33rd Upper Peninsula Gem & Mineral Show, Ishpeming, Michigan

August 3-10, 2008 Copper Country Mineral Retreat, Houghton, Michigan

August 23-24, 2008 Michiana Show, South Bend, Indiana

Check the ESCONI web site for details, [www.esconi.org](http://www.esconi.org)

**SELF-GUIDED FIELD TRIPS**

August 2, 2008 Clement Mineral Museum, Marion, Kentucky— Fluorite and Fluorescent Mineral Collecting

August 3, 2008 Field Trip to Lindberg Quarry for Kona Dolomite. Hard Hat and Goggles required

## Mastodon Excavation Field Trip

Join us on Friday, August 1, 2008 from 11:30 a.m. until approximately 2:00 p.m. as we help Forest Preserve District of DuPage County experts uncover a local mastodon. We will meet in the day use parking lot (by the shelter) at James "Pate" Phillip State Park off Stearns Road just east of Illinois 25, Bartlett, Illinois for a unique opportunity.

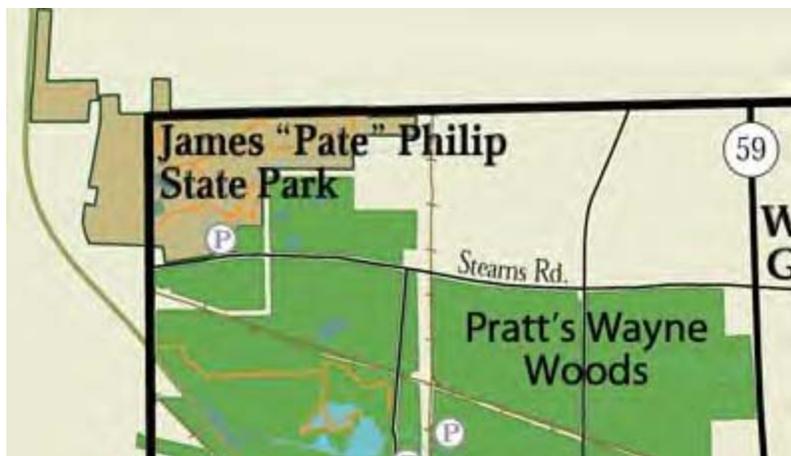
In 2005, several molars and a rib fragment of an 11,500-year old mastodon were discovered in DuPage County at Pratts Wayne Woods Forest Preserve near James "Pate" Phillip State Park. Standing nearly 10 feet tall and weighing up to six tons, the American mastodon (*Mammut americanum*) was one of the greatest mammals to ever thunder across the Midwest. But by 10,000 years ago, the great mastodon, as well as many other Ice Age mammals, fell into extinction.

Typically, a team of specialists would excavate the remaining mastodon fossils. However, last year, in cooperation with the Field Museum's Education Department and the Forest Preserve District of DuPage County, a group of 12 teachers and 22 high school students participated in the dig as part of *Mastodon Camp!* Although complete bones proved elusive, the group uncovered dozens of bone, tusk, and wood fragments. Every participant found something.

This year ESCONI members will get an opportunity to participate in the excavation as well. We will be prepped in proper scientific procedures prior to working the excavation site. However, being a scientific excavation, all artifacts that are found will remain the property of the Forest Preserve District of DuPage County.

There is no cost for this field trip. However, please remember that field trips are only open to current ESCONI members. Participation is encouraged for Junior members, but the field trip is open **all** ESCONI members. Note that a parent is required to be present with a Junior member (s). This field trip also is limited to 25 participants. Reservations are being taken until July 15th. First-come, first served. Also, everyone will be required to sign a liability waiver which will be provided at the site. Restrooms are available nearby. Do bring water and sunscreen.

For further information or to make your reservation, please contact Joe Kubal, ESCONI, 30W600 Sunrise Road, Naperville, IL 60563, 630-983-6159, SMKubal0712@aol.com.





# Board Meeting

April 25, 2008

President Jim Fairchild called the meeting to order. The minutes for the March 28, 2008 Board Meeting were reviewed. They were approved as amended. Karen Nordquist presented the report for 2<sup>nd</sup> Vice President Irene Broede. Room K-131 has been reserved for the June 13 and 14, 2008 meetings and for the August 22 Board meeting. She informed Lisa Sago about the problem accessing K-131 for the Paleo Meeting on April 19 when materials were left on the tables and we had to move to another classroom. Lisa explained that the Coast Guard Training group did not realize that someone else was using the room Saturday night and had left their materials out. They apologized and so did Lisa. Corresponding Secretary Bill Vinikour had nothing to report.

1<sup>st</sup> Vice President Rob Sula reported that our May General Meeting speaker will be Dan Behnke on micromounts. Our June speaker will be Dr. Virginia Naples. He also has a list of possible speakers for the fall thanks to Irene Broede. Treasurer John Good presented the Treasurer's Report and it was approved as amended. Librarian Andy Jansen suggested we send a copy of our plant book to the curator of the Illinois State Museum to encourage them to sell it at the Museum. He also suggested we give one to the Braidwood Ranger Station so that people would see it so that it would generate interest. He said that he will be adding more books to the library listing on the web.

John Good said that the Bulletin went out. Membership Chair Eileen Mizerk said that the annual culling had taken place and 38 people had been dropped. Mineralogy will be doing Morocco in May. Paleontology will be doing Illinois Stratigraphy in May with Tom Williams.

Under Old Business Karen Nordquist presented an update on ESCONI Associates for Irene Broede. 31 ESCONI plant books were sold at MAPS. John Good is still looking at a redesign of the web site. Rob Sula is asking for ideas for the Christmas party this year. After some discussion, it was thought we might try dinner at a restaurant before the December Meeting this year. More discussion will follow. There was discussion about where the Show should be located. Some preference was indicated for K Commons. We need to talk to COD about availability of sites.

The meeting was adjourned.

Respectfully submitted, Karen Nordquist, Recording Secretary



## General Meeting

May 9, 2008

President Jim Fairchild called the meeting to order and welcomed everyone. John Good announced the Chicagoland Show on Memorial Day weekend and said that help was needed on set up Friday May 23 and during the show on Saturday and Sunday May 24 and 25. Karen Nordquist said that cases were available for members who wished to display their collections. There is a field trip tomorrow to Lone Star Quarry. John Catalani said he is not sure if it will be to the North or South quarry but it should be fun. Next weekend is the field trip to Braceville to the spoil pile at Coal City. There has been a lot of rain so collecting should be good. There is a trip to Braidwood a week from Sunday with Rich Rock. On June 21 there is a trip to St. Paul, Indiana according to John Catalani. This is Silurian Waldron Shale. There is an Indiana state law saying you must be 18 to collect in this quarry.

The Mineral Study Group will be covering Moroccan minerals this week. The Paleontology Study Group will be studying Illinois Stratigraphy with Tom Williams next week. Archaeology will have its next meeting in September and will cover horses with Sheila Bergmann. Librarian Andy Jensen said that he has the Witty plant book for sale. There is also a list of ESCONI library books on the web available for members to borrow. The next General Meeting in June will be Dr. Virginia Naples on Sabertooth Cats.

Our guest for the evening was a returning one, **Dan Behnke** who has shared his expertise with microminerals before. He has been collecting since 1973 and has been an ESCONI member since 1974.

### A Selection of My Favorites



He has some 15,000 specimens of 750 species. He was recently elected to the micromounting Hall of Fame in Baltimore. In his presentation he selected some of the most photogenic, colorful, best formed samples of both his and others micromounts over the years. There were 120 slides from adamite to wulfenite with some award winners in between. There were some familiar forms and some unusual and rare forms and mixtures. Some of them he had mined himself and others he had received from friends and associates over the years. But all of them were lovely visions of natural beauty that he had captured on film. As a few examples I found the **Rocks & Minerals** journal of March/April 1991 where he had a cover and an

GENERAL MEETING—CONTINUED

interview and included his cover photo and a page of photos, most of which were among his favorites in his presentation. They are below.



The left photo is his silver cover photo. On the right are his photos of annabergite, adamite, vivianite, labuntsovite, diopside, erythrite, kyanite.

Everyone enjoyed Dan's presentation and his beautiful slides. The meeting was adjourned for more discussion and refreshments.

Respectfully submitted, Karen Nordquist, Recording Secretary



## General Meeting

June 13, 2008

2<sup>nd</sup> Vice President Irene Broede called the meeting to order in the absence of President Jim Fairchild and 1<sup>st</sup> Vice President Rob Sula, both of whom were out in Wyoming digging dinosaurs. John Good reported that Chicagoland had a good show over Memorial Day weekend and he thanked the many ESCONI helpers. Even more help will be needed for next year, especially for clean up. Mineralogy will meet tomorrow night on Cripple Creek Colorado gold. Joe Kubal reported that there will be an event Friday, August 1 from 11:30 to 2:00 that starts at James Phillips State Park and goes to Wayne Woods. It is a Mastodon dig where you can't keep any bones but can have a lot of fun helping to dig them up. It is limited to 25 people. Joe recently did outreach to the Schwartz School in Oak Brook Terrace as Indiana Joe with many artifacts. He also went to the Illinois Coal Education Conference for coal training for a week. Irene thanked him for all he is doing for the club.

John Catalani mentioned that the field trip to St. Paul has been postponed until the fall. He mentioned that a hammer had been left at the Lone Star field trip. He also reported some sad news – that member Larry Osterberger had passed away in Georgia after a long and difficult illness. Many members remember him and his wonderful fossils. Irene then introduced our speaker for the evening, a returning speaker, **Dr. Virginia Naples**, professor of Biological Sciences of Northern Illinois University.

### “Building a Sabertooth or is there more than 1 way to reconstruct a fossil cat?”



When you think of a cat you usually think of a house cat or a lion or a tiger. When you think of a sabertooth, then you usually just add long canine teeth to it and is that accurate? Many extinct animals are depicted to look like living animals and its no big deal. Why does this occur? Sabertooths have no modern analogs. Modern cats have conical teeth like the Siberian tiger so are not good models for head shapes or proportions. The post cranial body shapes vary in living cats also so we study anatomy and internals also. Then we look at the fossil bones and add muscles and the rest to it. You start with a cast of the animal like *Xenosmilas hodsonae* (pictured above with the speaker) which is a scimitar tooth

sabertooth and attach the muscles and compare it to the living. This one had sharp canines with serrations and robust jaws and a narrow skull.

## GENERAL MEETING—CONTINUED

A famous old drawing by Cuvier in 1832 is still of value today. It is based on dissection and shows the muscle size, shape, orientation, lines of action, and movement pattern. Comparisons of skull proportions allow predictions of muscle sites of attachments. Relative sizes of muscles differ from one genus to another. For example, comparing the face of *Xenosmilus* to a lion shows the nasals of the lion to be much more vertical.

*Smilodon* from Rancho la Brea has an elongate, finely serrated canine tooth, short legs and tail with a robust body. She has been involved with the development with a mechanical cat called 'Robocat' that was made to test the bite technique of the sabercats that was used to bite game. It would only take 10 seconds if it got a good bite.

The *Xenosmilus* or 'cookie-cutter cat' had scimitar teeth or shorter coarsely serrated teeth, with short legs and tail, robust body. It was probably an ambush predator.



The photo at left shows casts of the Siberian tiger, *Xenosmilus* and *Smilodon* from left to right.

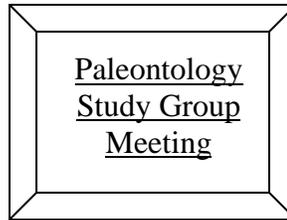
Another one is *Homotherium latidens* which is a scimitar tooth cat with long legs and shorter coarsely serrated teeth. It was probably a pursuit predator. There were all sizes of saber cats from the size of a house cat to the large *Smilodon*. *Thylacosmilus atrox* was a large predatory marsupial.

She is working on a skull reconstruction of *Xenosmilus* and is putting clay on the cast now. She will be happy to return in the future with the completed model using her new methods estimating the functional capabilities and behavior of this sabercat.

After her presentation, she was happy to answer questions. The sabercats went extinct about 10,000 years ago although there was not a lot of evidence of human interaction that caused it. Climate change may have been a big factor. As it became drier with more open grassland, there may have been no place for the ambush predators to hide. The long teeth evolved five times. They seemed to have evolved because they were efficient killers. Another problem for them was if their big prey went extinct, they would have had trouble surviving on small prey.

The meeting was adjourned with thanks to Virginia for another lively and informative meeting. Refreshments were served.

Respectfully Submitted, Karen Nordquist, Recording Secretary



John Good, Chairman

Date: May 17, 2008

Chairman John Good called the meeting to order. He mentioned that the field trip to Braceville today was a good one. He has a signup for the St. Paul field trip in Indiana on June 21. He also mentioned a possible field trip to Kenosha June 14 & 15 to visit the Dinosaur Discovery Museum. The Chicagoland Show is coming up on Memorial Day weekend and help is needed for set up and during the show.

The September Paleontology Program will be "Show and Tell". The program this evening is by **Tom Williams** who is a geologist for the state of Illinois and works with superfund sites.

### Illinois Stratigraphy

The Illinois Basin is deep in the southern part of the state surrounded by several arches, the Kankakee Arch, the Michigan Arch, the Ozark Arch, and the Wisconsin Arch. Geologists have done many drill holes around the state to read the rocks. The Precambrian rocks are 1.4-1.5 MY old and are granite, quartz, feldspar, mica with no quartz. He had some samples to show us.

600 MYA the continents pulled apart into Gondwana and Laurentia and the New Madrid fault began. The rift began like an ocean trench. In Late Cambrian the deposition was thick sandstone with 15,000 feet of basal conglomerate. He had a sample from a core. Then came the Ozark Dome. Illinois was submerged at the time so there were depressions. During the Lower Ordovician there was rapid deposition. There are carbonates in Southern Illinois 700 feet deep. They are 100 feet deep in Northern Illinois. There was dolomite in Northern Illinois and it kills fossils, so there are no fossils. Here you get internal molds instead of the sea shells themselves. You get the brachiopods in the Paleozoic but not in the Mesozoic because they don't preserve as well. The aragonite is destroyed.

In the Ordovician the Kankakee Arch develops separating the Illinois Basin from the Michigan Basin. The Illinois Basin does not have evaporates like the Michigan Basin with its gypsum and salt. The St. Peters sandstone is white and pretty. The quartz is mined in Illinois commercially. The Platteville Formation is loaded with fossils. The Galena Group dolomite is Ordovician. The Maquoketa Group green slate is 300 feet deep here and 1,000 feet deep in Ohio.

Then there was the Ozark Plateau uplift and the Wisconsin Arch Uplift and the LaSalle Anticlinorium at the northeast boundary of the basin at the north of the state. During the Silurian there was erosion, exposing in the north. Then there was a quiet tectonic period with the marine sea transgressing and regressing causing erosion. The reefs here had some oil but not as much as other reefs have. The north was dry in the Devonian. The south had thick deposits in the Devonian. The glaciers took off the Devonian from the north. He had some samples of the New Albany shale which has high levels of oil – you can actually light it on fire. It is from Hardin County in the south of Illinois.

### Paleontology Study Group Meeting, Continued

With the collision of North America and Africa it gets hotter and the Appalachian mountains and the Illinois faults get active. All this explains why northern Illinois is the way it is now.

The Pennsylvanian was the era of mud with sand and silt deposit in the shallow sea. He had a sample of the sandstone that is used for buildings today. There is no Permian in Illinois. That time was a worldwide desert without much deposition. There is in southern Illinois the Omaha Dome which is a cryptovolcanic structure which is the biggest concentration of oil in Illinois. It was discovered by coring under a farm and is of unknown origin though some believe it originated from activity on the other side of the Earth. Hardin County is like the iron furnace of the state with many interesting materials including fluorite, iron rock galena and cryptovolcanic material (samples of which Tom had to show us).

In the Mesozoic, the reversal of compression grabens formed as land pulled apart. There are Cretaceous fossils in the far south and mid west but not a lot of fossils in Illinois during the Mesozoic. In the Tertiary there are sharks teeth in the southern part of the state. Glaciation was in three phases in the state with the Wisconsin being the greatest. He had a sample from the Precambrian tillite from Lee County.



Some of the rock samples that Tom brought to show are pictured above. Everyone appreciated the overview of the geology of Illinois and the discussion continued. Refreshments were served.

#### References:

"Handbook of Illinois Stratigraphy: Bulletin 9": ISGSurvey 1975

"Structural Features in Illinois" by John Nelson

"North-Central Section of the Geological Survey of Avery Centennial Field Guide Volume 3"  
Edited by Donald L. Biggs

Respectfully Submitted, Karen Nordquist, Secretary

### CGMA Pictures

E.S.C.O.N.I. Participated in the 32nd Annual CGMA show at the Dupage County Fairgrounds over the 2008 Memorial Day weekend. We will also be demonstrating at the Dupage County Fair from July 23 thru July 27.



**CGMA VENDORS and DEMONSTRATORS**

**Don Cronauer Demonstrating Silversmithing**



**Karen Nordquist and Rich Holm at the Kiddie Korner**



**See Us at the Dupage County Fair July 23-27**

### ESCONI Field Trip Pictures



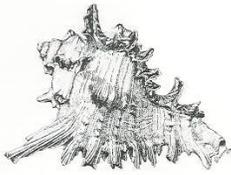
**Collecting Mazon Creek Fossils at Private Property**

**Looking For Concretions**



**Richard Rock leading a boat trip to Braidwood for collecting Mazon Creek Concretions**

**Collecting concretions at the spoil piles of Braidwood**



## Karen's Kommentare



### World's Oldest Mother and Baby are Placoderm Fish at 380 MYA

A new Australian fossil shows an embryo attached to the mother fish by an umbilical cord and is the oldest known example of a creature giving birth to live young. The specimen is 25 cm long and was found at the Gogo fossil site near Fitzroy Crossing in the Kimberley which was once an ancient barrier reef teeming with fish. It has been named *Materpiscic attenboroughi* after Sir David Attenborough who talked about the Gogo fish sites on the Life on Earth series on TV. The fossil shows a single embryo inside the mother attached by a permineralized umbilical cord proving internal fertilization among these early jawed fishes. Another permineralized mass near it may represent the recrystallized yolk sac. Previously it was thought that they laid eggs. Another placodont from the Gogo Formation, *Austroptyctodus gardineri*, also has three small embryos inside it in about the same position. This confirms that the placodonts did not lay eggs, but did have live birth. Artwork above is reconstruction after birth. (Long et al in **Nature** Vol. 453)



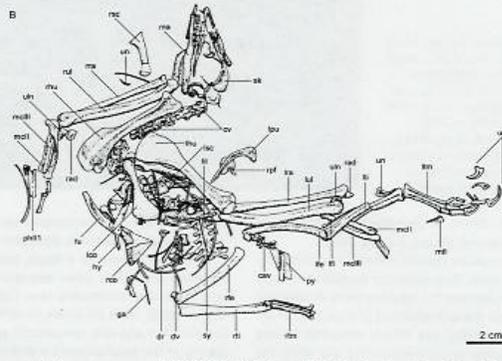
### New Amphibian from Early Permian of Texas – *Gerobatrachus*



This new fossil amphibamid temnospondyl was found in the Early Permian of Texas and has been named *Gerobatrachus hottoni*. It is from the Greek "geros" meaning aged and "batrachus" meaning frog and in honor of the late N. Hotton, vertebrate paleontologist of the Smithsonian. It is 110 mm (4.5 in.) long and is fully articulated in ventral view, but is missing some parts of the skull and shoulder. It has a very broad skull a shortened vertebral column and tail and has a mix of features. Some features indicate that this was a juvenile. It has 21 small premaxillary teeth which is a large number similar to that of batrachians. It has 17 presacral vertebrae and has a basale commune (combined distal tarsals 1 and 2) similar to salamanders. It shares other characters with frogs and salamanders showing its relationship. When they did a phylogenetic analysis, *Geobatrachus* came up as the sister taxon to Batrachia with amphibamids like *Amphibamus* as more basal taxa. This new stem batrachian in the Early Permian puts a lower limit on the divergence between frogs and salamanders. It must have occurred sometime around the Middle Permian some 270 MYA. The range begins in the Early Permian. (Anderson and Reisz et al in **Nature** Vol. 453 5/22/08)

Karens Komments, Continued

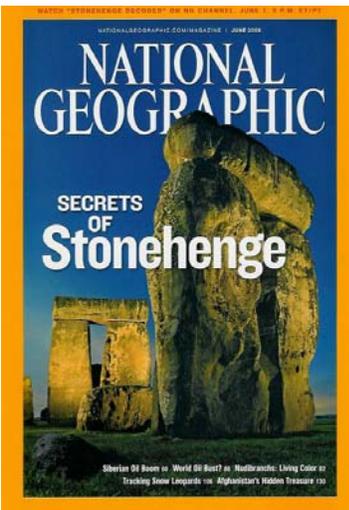
Largest Enantiornithes Bird from China – *Pengornis*



Here we have yet another nearly complete Early Cretaceous bird from China, but this one is a very large one. It has been named *Pengornis houi* referring to a Chinese mythological bird “Peng” and the Greek word “ornis” for bird and to honor Lianhai Hou, a pioneering palaeo-ornithologist. There are 11 alveoli in the maxilla and 13 teeth in the left dentary with small conical teeth like those of *Archaeopteryx*. There are 7 fused sacral vertebrae and six caudal vertebrae are visible. There are gastralia. The unguals are strongly curved. There are no feather impressions. It is about the size of *Confuciornis* based on femur length. *Pengornis* is larger than all previously described Early Cretaceous Enantiornithes including *Longipteryx*. They are finding that these birds share more features with Ornithurae, including living birds, than previously thought. (Zhou, Clarke et al in **J. Anat** Vol. 212 2008)

Mysterious Stonehenge Still Holds Secrets

The latest issue of **National Geographic** reveals recent discoveries about Stonehenge but admits there is still more to learn. From Middle Neolithic times (about 3000 BC) to 1500 BC the reason for the creation of this site has puzzled archaeologists. Was it a site for ceremonies, was it a cemetery, or was it a place for healing? Bluestones from Wales thought by some to have healing powers were floated over sometime around 2500 BC. The giant sarsens followed some how by way of the near by the River Avon. The logistics and the labor that were necessary amaze and overwhelm. And now burials have been found nearby dated to about 2400 BC. One is of a wealthy ‘archer’ aged 35 to 45 found with a badly damaged leg and rich burial goods. He was from the Swiss Alps based on his tooth enamel. Other graves were found a quarter mile away and they also were non-native. Were they workers who helped build Stonehenge? There are other structures that have been found in the area including one 20 times as large called Durrington Walls with a smaller one called Woodhenge next to it. This appears to be where they people lived and where they have found the remains of some 300 wattle and daub houses with wooden beds and plaster floors. Perhaps, they lived here and buried and cremated their dead at Stonehenge. (Alexander in **National Geographic**, June 2008)



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## Local Calendar of Events

### BURPEE MUSEUM EVENTS

**2008 Family Fossil Field Trips:** Join us on a fossil-hunting field trip! Enjoy a day prospecting for fossils in a local quarry with Burpee Museum paleontologists. You get to keep what you find. All ages and skill levels welcome.

All Family Fossil Field Trips (FFFT) are on Saturdays from 1:00-4:00pm

COST: \$8/members \$12/non-members

Pre-payment is required. We will send you directions and site specific information about one week before the FFFT you register for.

Sat, July 12; Sat, Aug 23; Sat, Sept 6; and Sat, Sept 20 are TBA.

### LIZZADRO MUSEUM Events

#### **July 12 “Fossil Discovery”**

This interactive presentation allows children to learn how fossils are formed, where to look for fossils, and how to study fossils. Activities include: a fossil quiz game to win prizes, polishing amber, searching for shark teeth, and breaking casts for dinosaur bones. Children can keep all the fossils they find and win.

Instructor: Don Baumgartner

Interactive Lecture/Activity - Ages 7 yrs. to Adult

2 p.m. to 4 p.m. Fee: \$15.00 per person, Museum members \$10.00

Registration Required: (630) 833-1616

#### **July 26 “Fossil Collecting Field Trip”**

Travel by motor coach and collect fossils at the BuzziUnicem Quarries in LaSalle, Illinois. The quarry contains Pennsylvanian Period (300 million years old) marine fossils in shale and limestone. Collectable fossils include: several types of brachiopods, gastropods, corals, crinoids, and shark teeth.

Field Trip - Ages 8 yrs. to Adult

8:00 a.m. to 3:00 p.m.

Fee: \$38.00 per person, Museum Members: \$32.00,

Reservations Required: (630) 833-1616

#### **August 2 “Soapstone Carving I & II”**

Lorel Abrell, a lapidary, teaches participants how to successfully carve soapstone. Simple tools and techniques are used in carving this soft and inexpensive material. Learn the basics from blocking out a design to final polish. All materials are provided.

Classes I & II are simultaneous -10a.m. to 12 p.m.

I for beginners and suggested for ages 9 to 11 yrs.

II for intermediate level for ages 12 to adult.

Fee: \$15.00 per person, Museum Members \$10.00

Reservations Required: (630) 833-1616

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### LIZZADRO MUSEUM Events

#### **Special Exhibit “ American Lapidary” June 10 to August 31, 2008**

Features hardstone carvings and faceted stones by American artists including lapidary hobbyists and professionals.

#### **Agate Show 2008**

**July 10-13, 2008, University of Wisconsin – Fox Valley in Menasha, Wisconsin**

<http://www.uwfox.uwc.edu/wesm/agate/>

### **33rd Annual Upper Peninsula Gem and Mineral Show Ishpeming Rock and Mineral Club**

Ishpeming Elks Club Hall

597 Lake Shore Drive

Ishpeming, Michigan

Free Admission

August 1 Field Trips to Local Quarries for micromount. Hard Hat and Goggles required.

August 2 - Show with demonstrations, display, dealers and silent auction

9:30 a.m. to 4:30 p.m. (All times are Eastern Daylight Savings Time)

August 3 - Field Trip to Lindberg Quarry for Kona Dolomite. Hard Hat and Goggles required.

<http://www.amfed.org/mwf/Calendar/August.htm>

#### **Copper Country Mineral Retreat**

**August 3 to 10, 2008**

**Houghton, Michigan**

**A Week of Mineral Collecting and More**

Prepared surface collecting, photography workshop, underground collecting, mineral banquet & auctions, brag session and social speakers

Check here for more details [http://www.museum.mtu.edu/copper\\_country\\_mineral/index.html](http://www.museum.mtu.edu/copper_country_mineral/index.html)

#### **Michiana Gem & Mineral Society Show**

**August 22 to 24, 2008**

**4-H County Fairgrounds**

**South Bend, IN**

#### **Clement Mineral Museum Field Trips**

**July 12, 2008**

**August 2, 2008**

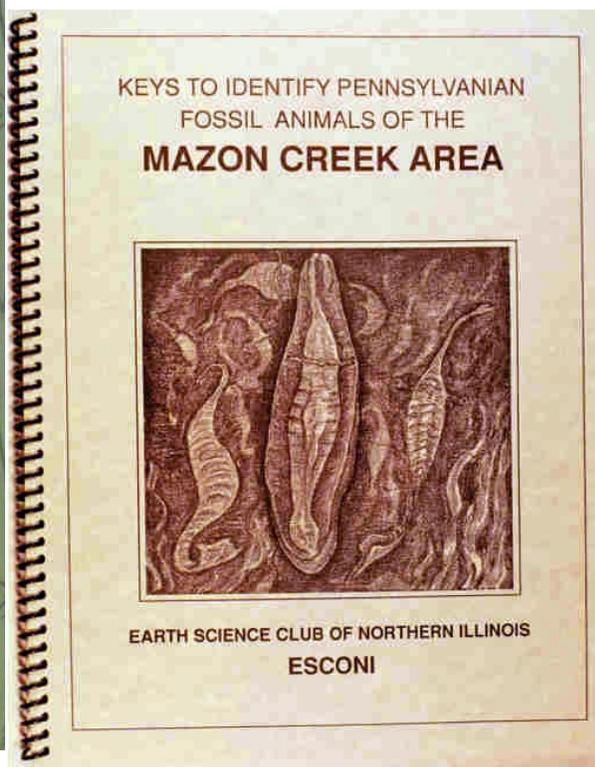
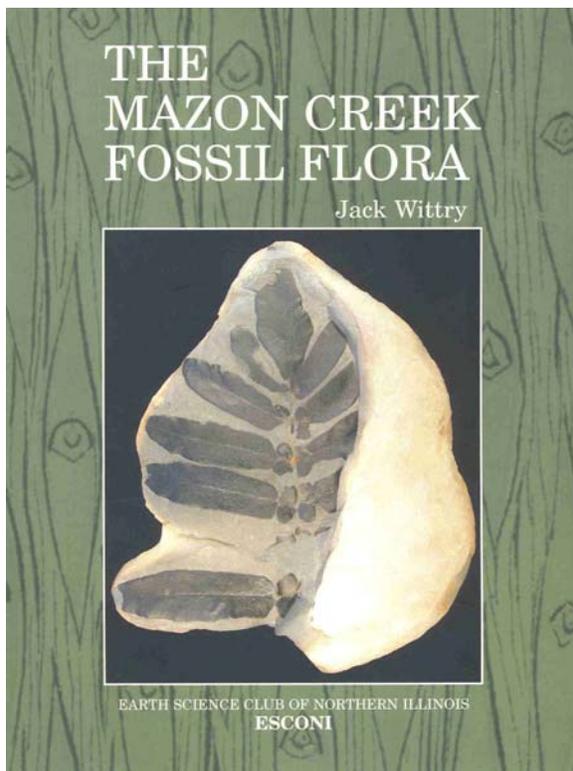
Fluorite and Fluorescent Mineral Collecting

270-965-4263 or toll-free at 877-965-4263

**THE FACETER'S ARE COMING!**

The Midwest Faceter's Guild will be holding their 20th annual Faceters Seminar on August 15, 16 & 17th at Elmhurst College in Elmhurst, Illinois. The WSLC will be assisting the Guild in organizing the classes, with accommodations, and events surrounding the seminar, including the banquet that will be held on Saturday night. Classes will be available for beginner, intermediate and advanced. Those taking the advanced classes will be required to bring their own faceting machine. The classes are very reasonably priced and are a great way to test out the hobby to see if it is for you prior to buying expensive equipment or taking expensive classes. A detailed brochure and more information will be forthcoming. Their website is: [www.midwestfacetersguild.org](http://www.midwestfacetersguild.org)

**ESCONI Books**



**The Mazon Creek Fossil Flora** by Jack Wittry  
 313 color pictures, 113 taxa, 145 drawings  
 \$65 hard covers for ESCONI Members  
 \$35 soft and \$6 to ship  
 Make check out to  
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**Keys to Identify Pennsylvanian Fossil Animal  
 of the Mazon Creek Area**  
 125 Pages, 212 Black and White Drawings  
 \$12.00, \$5 to Ship

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