

EARTH SCIENCE CLUB OF NORTHERN ILLINOIS 2009

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Min/Micromt.	Kathy Dedina	11 N. Cumnor Road	Westmont, 60559	630-969-2522
Paleontology	John Good	1891 Windward Lane	Hanover Park, 60133	630-483-2363
Junior	Open			

John Good & Karen Nordquist are delegates to Chicagoland Gems & Minerals Association. Mark Kuntz served as the March Show Chairman.

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 annual family membership, or \$50.00 for three years. 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 2nd weekend of each month.

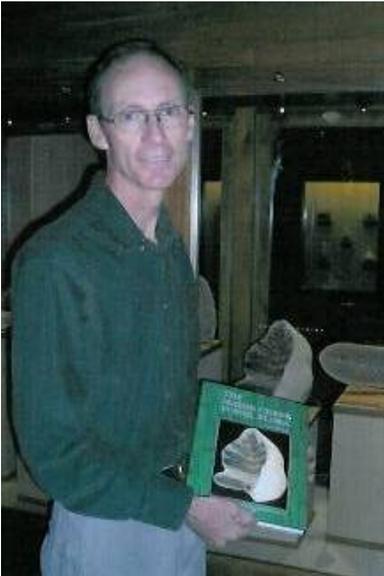
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ESCONI website is www.esconi.org
Web Administrator is Diana Lord

July/August 2009**President's Message**

Hope that everyone is having a great summer and is ready to start another year of ESCONI fun! Meetings will start soon and we will all look forward to hearing what everyone was up to over the summer. Bring all your new treasures to share at the meetings.

It was good to see so many of you at the June General Meeting and it was a great one. Bob Martin's talk on primates was very well received by all attendees and he also had comments on two controversial issues. He has been involved on the bones discovered on the island of Flores in the Pacific and they are still being discussed today. He still feels that they are not a separate species, but additional fossils are needed to answer some of the questions that are still being studied. The other new fossil that has caused a stir is "The Link" that Bob said is not a link but is a very nice primate fossil. It is a Messel fossil that will add to the story of primates but is not the ape-human link that has been advertised in the press. It was really nice to have an expert opinion on this recent issue speaking at our meeting. We do want to try to keep up with what is going on out there.



And come to our first meeting of the year to join one of our own who will share his expertise on the Mazon Creek plants. Jack Wittry will be the presenter and will be autographing his famous book. It's always special when we have our own presenting. Bring your best fossils to show off and Jack will be happy to identify them. Maybe you will have some new ones too. That would be exciting. Many folks have some new fossils from their collecting at Cinder Ridge that are big and interesting. Bring them in!

And remember that we are starting work this fall on our new Mazon Creek animal book in the Paleontology Study Group. Start going through your fossils to find the best and representative examples of your fauna to share with the club at future meetings. It all starts September with jellyfish and October with worms. Get them ready and bring them in.

Enjoy the rest of the summer and we'll see you in the fall.

Karen Nordquist, President

SEPTEMBER 2009 ESCONI EVENTS

College of DuPage (COD) Building K, Room #131 for most meetings, but note that the room number is subject to change – there will be a note posted on the entrance door.

General Meeting: Jack Wittry will give a presentation on Mazon Creek fossils
8:00pm Friday, Sept 11

Mineral-Micromount Video with a Show and Tell
7:30 PM, Sept 11

Paleontology Show and Tell and bring your Mazon Creek jellyfish
7:30 PM Sept 19

Archaeology “When did the alphabet first appear?” by Brian Nugent and John Good
7:30 PM Sept 26

Junior Subject to reorganization.

ESCONI Field Trips See Web Site, www.esconi.org, for details about future field trips in 2009. Contact John Good for comments at 630-483-2363 or ESCONI@hotmail.com

BOARD MEETING The next Board Meeting is scheduled for August 28th

GROUP	GENERAL	MICRO	PALEO	ARCH	BOARD	JUNIOR
September	11	12	19	26	25	
October	9	10	17	24	23	
November	13	14	21	X	Dec 4	
December	TBD	12	X	X	X	
DAY	2 nd FRI	2 nd SAT	3 rd SAT	4 th SAT	4 th FRI	2 nd FRI
TIME	8:00	7:30	7:30	7:30	7:30	7:00

**BOARD MEETING****March 27, 2009**

President Karen Nordquist called the meeting to order. 2nd Vice President Irene Broede announced that all meetings through June 12 will be in Room K-131. The room for the June 13th meeting has not been booked. Irene mentioned that K Commons could not yet be reserved for the March 2010 show.

The minutes from the February 27, 2009 Board Meeting were reviewed and approved, as amended. Treasurer John Good stated that he will present an ESCONI Profit and Loss Statement at the April 24 Board Meeting. He handed out a preliminary report on the ESCONI 2009 Show income totals. A brief discussion of the show followed. The live auction was down from the previous year, but the silent auction went well. There were also a lot of book table sales. It was mentioned that future shows should have an area designated for lost and found items. Overall, the 2009 Show made a profit, but not as much as the 2008 Show. The unofficial 2009 Show report was accepted. It was recommended that we do not have a flea market this year as there is not enough live auction material or a room in which to hold the event.

John then reported that the April issue of the Bulletin was finished. He mentioned that a minimum of 200 labels would be needed and that last year's members that have not paid their 2009 dues need to be purged. Karen added that a lot of members renewed their memberships at the 2009 Show. The deadline for contributions to the May Newsletter will be the second weekend in April. John said that the next issue will include the Chicagoland Show flier, a Braidwood article, and some photos. Howard Svoboda (Circulation) stated that the April Newsletter was mailed on March 17. Membership Chair Eileen Mizerk said there were 235 labels printed for the April mailing. She will cull non-paying members by the May 8 General Meeting. Eileen mentioned that there have been more members taking advantage of the three-year membership deal than she expected.

It was mentioned that the ESCONI Board should consider adding the Show Chairman and Web Site Master as board member positions. However, the ESCONI By-laws may need to be altered in order to allow new board positions to be added. The by-laws will be brought to the next board meeting for review. There was also a discussion on whether the ESCONI By-laws should be added to the web site. No decision on this matter was reached.

Show Chairman Mark Kuntz stated that the main issues associated with the 2009 Show were storage and set-up problems. He mentioned that we should also try and get eight dealers for the next show. Several contributions towards covering room rental costs were received in the donation can set out at the March Show. Joe Kubal mentioned that he will be displaying specimens at the Morton Arboretum over the weekend. Dave Carlson established a Yahoo group for ESCONI. He will monitor the group to see how things work out.

Under old business, Irene Broede reported on ESCONI Associates. The May 16 field trip to Braceville has not been finalized. The May 17 field trip to Braidwood is set. There may be a field trip to the quarry in St. Paul, Indiana on the 3rd Saturday in June.

The meeting was adjourned.

Respectfully submitted, William S. Vinikour, Recording Secretary

**BOARD MEETING****April 24, 2009**

President Karen Nordquist called the meeting to order. 1st Vice President Rob Sula announced that Lindsay Zanno will be the speaker for the May General Meeting. She will give a presentation on resurrecting dinosaurs. Her talk will focus on how scientists are reconstructing dinosaurs based on biological characteristics. In June, Bob Martin from the Field Museum will give a presentation on paleoanthropology. On our return from summer break, Jack Wittry will be giving the General Meeting presentation on September 11. 2nd Vice President Irene Broede announced that contracts have been made with the college for our May and June meetings. All meetings through June 12 will be in Room K-131. The Mineral-Micromount meeting on June 13 will be held in Room K-161. Irene mentioned that the August Board Meeting room cannot be reserved yet and that K Commons could not yet be reserved for the March 2010 show. Treasurer John Good sent in the payment for the recent ESCONI Show and Irene sent in payment for the room rentals.

The minutes from the March 27, 2009 Board Meeting were reviewed and approved, as amended. Librarian Andy Jansen mentioned that he is going through all the books and videos donated to the club by Don Brazda to see which items we want to keep for the library (the rest will be sold at our next ESCONI Show). A letter will be sent to Don thanking him for his much-appreciated donation. Holly Woodward (a speaker at the recent Paleofest) sent a letter thanking ESCONI for the copy of Jack Wittry's fossil flora book. Dr. Robert H. Wagner (who resides in Spain) will be sent an autographed copy of Jack's book.

John Good presented the ESCONI Profit and Loss Statement. He stated that it did not contain the bill for the March Show. The treasurer's report was accepted. A discussion was then held on possible ways to raise funds for the club. Club t-shirts and pins were mentioned. This issue will be discussed further at the May General Meeting in order to get input from club members. John stated that a lot of people have signed up for the field trip to Braceville to be held May 16. There will also be a Braidwood field trip on May 17. There is going to be an unofficial field trip to the Thornton Quarry on June 6. All openings for this trip have been filled via the ESCONI Yahoo group. John mentioned that a lot of quarries are no longer opened on Saturdays and that others are shut down (e.g., Dixon), which limits our ability to have field trips. Possible field trips to the Lake County and Kenosha museums were suggested. The web site will be updated regarding field trips.

John then reported that 203 copies of the May Bulletin were produced. He and Don Cronauer are looking at ways to improve the ESCONI Bulletin. Guidelines are needed regarding the preparation of articles and other contributions to the Bulletin. The deadline for the June issue will be the 2nd weekend in May. Howard Svoboda (Circulation) mentioned that the May Bulletin was mailed. He reported that 200 copies are needed for the bulk mail rate from the post office. Therefore, some ESCONI Board members are being sent multiple copies of the Bulletin so that we can get this rate. Membership Chair Eileen Mizerk said that there were 167 labels printed for the May mailing. Extra copies of the Bulletin will be used as give-aways at shows. Eileen stated that 70 past members have been dropped from the mailing list due to non-payment of dues. On a positive note, the club has attained 15 new members. Forty-one members have taken advantage of the three-year membership deal. ESCONI currently has 159 family memberships. Six copies of the Bulletin are sent to various museums and libraries.

John (one of our delegates to the Chicagoland Gems & Minerals Association) mentioned that a Chicagoland meeting will be held soon. Letters will be sent to clubs that have not been active in the Chicagoland show that they may be dropped from the association. He also mentioned that letters will be sent to dealers for that show to let them know that the DuPage County Fairgrounds will be charging those that want to camp there. There will be a lot of dealers and demonstrators at the Chicagoland show. Help will be needed during the show, especially during setup and teardown.

Mention was made on upcoming study group meetings. Under old business, Irene Broede reported on ESCONI Associates. A 60th anniversary celebration for ESCONI is planned as the theme for this year's Holiday party in December. Historical slides of ESCONI members and events will be converted to a power point presentation and will be featured at the party.

The meeting was adjourned.

Respectfully submitted, William S. Vinikour, Recording Secretary

General Meeting

May 8, 2009

President Karen Nordquist called the meeting to order and welcomed everyone. After that, 1st Vice President Rob Sula stated that Dr. Robert Martin of The Field Museum will give a presentation on paleoanthropologist at the June General Meeting. At the September General Meeting, ESCONI's own Jack Wittry will give a presentation, possibly on ferns of the Pennsylvanian Period. John Good, in his role as delegate to the Chicagoland Gems & Minerals Association, then discussed the upcoming Chicagoland Show to be held Memorial Day weekend. (May 23 and 24). He stated that help is needed for Friday setup, the Kids Corner, silent auction, and for Sunday teardown. Cases are available for anyone that wants to display their collections at the show. In addition to over 20 dealers, there will be a number of demonstrators at the show. John then reported that there will be field trips to Braceville on May 16 and to Braidwood on May 17 (that trip is filled). Rob Sula mentioned that there were plenty of concretions when he went to Braceville last week. Check the web site (www.esconi.org) for updates and information on field trips.

A discussion was held about the North American Paleontological Convention to be held June 21-26 on the campus of the University of Cincinnati. There will be many professional presentations and field trips planned for that convention (the Cincinnati area is world renowned for its Upper Ordovician fossils and strata). The convention web site is www.napc2009.org. Information was then provided on the ESCONI study groups. Both the ESCONI Newsletter and web site provide updated information on study groups' activities.

Eileen Mizerk (Membership) said that 77 family memberships have been dropped for non-payment of dues. Several new memberships have been added since last month. Andy Jansen (Librarian) updated members on the library. He named several of the books that we have in the library that are available for checkout by active members. There are many books on dinosaurs available that should be of interest to members of all ages. He also mentioned that Don Brazda donated his library to ESCONI. A list of books and videos in the ESCONI library can be found on the web site (www.esconi.org). By the way, anyone interested in posting items on the web site should contact our webmaster Dianna Lord at dianna120@yahoo.com.

General Meeting of May, 2009, Continued

Jim Fairchild discussed the ESCONI books that are for sale. Discounts on Jack Wittry's "The Mason Creek Fossil Flora" are available to members at the General Meeting. Jim then led a discussion on the planned Mazon Creek fauna book that will be started in September. Members are requested to bring their specimens to either the General or Paleontology Study Group meetings to be photographed for the book. Jellyfish will be the first group to be addressed and will be followed by worms.

Rob Sula then introduced our speaker the evening – Dr. Lindsay Zanno a John Meeker-Caldwell Postdoctoral Fellow at The Field Museum. Lindsay has worked with lots of prehistoric animals and she did her graduate work on the therizinosaurs. Her presentation emphasized dinosaur paleobiology.

Resurrecting Dinosaurs: How New Science Is Bringing Ancient Beasts to Life

Lindsay began her talk by asking several questions related to whether real dinosaurs were anything like those we see portrayed in the movies. Determining this requires a three step process:

- Step 1 – establish a frame of reference;
 - Step 2 – look at fossils for evidence; and
- Step 3 – use new techniques for answering questions on dinosaur biology.

Establishing a frame of reference (Step 1) requires one to make a family tree that includes the most current living relatives and goes down to the archosaurs. For example, *Tyrannosaurus rex* can be bracketed by crocodiles and emus. Lindsay used *Microraptor gai*, the "four-winged" dinosaur, as an example of looking at fossils for evidence (Step 2). This dinosaur had fully developed feathers on both its forelimbs and hind limbs. This species provides evidence that birds evolved from dinosaurs and may help answer the question on how ground-dwelling, flightless dinosaurs evolved into feathered animals that could fly. The feathers on *Microraptor* probably assisted the species in gliding from tree to tree. While this may support the theory that flight evolved from gliding, inferences from the fossil evidence need to be interpreted with caution.

Two of the new techniques used to answer questions on dinosaur biology (Step 3) include bone histology and reconstructing soft tissue. Bone histology can provide information on how dinosaurs grew and reproduced. *Falcarius utahensis*, an early Cretaceous dinosaur that is among the most primitive of the therizinosaurs, was given as an example (this is the species that Lindsay did her graduate work on). Bone histology indicates that *Falcarius* gained about 20 kilograms per year. It had slow growth during the first one or two years and grew fast during its "teenage" years. Growth leveled off during adulthood. She then showed growth curves for a number of other dinosaur groups. All seemed to have a somewhat similar growth pattern to that of *Falcarius*. However, the amount of growth could vary. For instance, *Apatosaurus* gained an impressive 5,466 kilograms (12,050 pounds) per year.

Histological evidence (e.g., as shown by "growth rings" in cross sections of bones) indicates that small dinosaurs grew slowly like crocodiles, medium-sized dinosaurs grew like medium- to large-sized mammals (e.g., having a period of rapid growth in adolescence), and large dinosaurs grew quickly like birds. However, unlike birds, dinosaurs apparently reached sexual maturity before their adult stage. This is similar to mammals. A high adult mortality rate would make early sexual maturity advantageous for species survival.

General Meeting of May, 2009, Continued

Like birds, females of at least some dinosaurs have medullary bones. These are areas of calcium-rich bone tissue that is deposited in the marrow spaces of long bones just before egg-laying. The medullary bone serves as a readily mobilized source of calcium for egg shell formation. The presence of medullary bones is the only way to positively identify a female dinosaur from fossil bone evidence. Medullary bones have been found in *Tyrannosaurus rex*, *Allosaurus*, and *Tenontosaurus*. This bone tissue does not occur in crocodylians, indicating that they developed in a common ancestor of dinosaurs and birds rather than a more primitive archosaur ancestor from which all dinosaurs, pterosaurs, crocodylians, and birds evolved.

Computerized axial tomography (CAT) scans are used to reconstruct soft tissues. The empty spaces revealed by the CAT scans can be filled in to indicate areas that would contain air, brain matter, inner ears, resonating chambers, and so forth.



Lindsay finished her presentation by stating that her current research activities include trying to discover how *Falcarius* fits in the transition from primitive carnivores to more advanced herbivores and what its sensory abilities were.

Rob presented Dr. Zanno with a well-deserved honorarium. Following a question and answer session, the meeting was adjourned with thanks to Lindsay for an informative presentation. Refreshments were served.

Select papers on *Falcarius utahensis* by Lindsay Zanno:

Kirkland, J.I., L.E. Zanno, S.D. Sampson, J.M. Clark, and D.D. DeBlieux. 2005. "A Primitive Therizinosaurid Dinosaur from the Early Cretaceous of Utah." *Nature* 435:84-87.

Zanno, L.E. 2006. "The Pectoral Girdle and Forelimb of the Primitive Therizinosaurid *Falcarius utahensis* (Theropoda, Maniraptora): Analyzing Evolutionary Trends within Therizinosauridae." *Journal of Vertebrate Paleontology* 26(3):636-650.

Respectively Submitted, William S. Vinikour, Recording Secretary

John Good, Chairman
Date: May 16, 2009

Paleontology Study Group Meeting

Chairman John Good called the meeting to order and introductions of all attendees was done. The Chicagoland Show is this weekend and John mentioned that help is needed for set up and tear down. The speaker for the June General Meeting will be Robert Martin from the Field Museum who will speak on primates. The field trip to Braceville today was a successful one. There is a tentative one scheduled for June 20th. This is our last meeting of the season. The next meeting is September and will be "Show and Tell". We will also start on the rewrite of the Mazon Creek animal book. It is being done by Jim Fairchild, Jack Wittry, John Catalani and Chris Cozart. They will start with the jelly fish and use private collections. They will choose the best examples and "typical" examples to be photographed for the new book. Then in October they will look at worms. Then the meeting was turned over to **Dave Carlson** who has a masters in Biology from Northern Illinois on the mammal fauna of the Hell Creek Formation of Montana.

The Search for Dinosaurs in Illinois

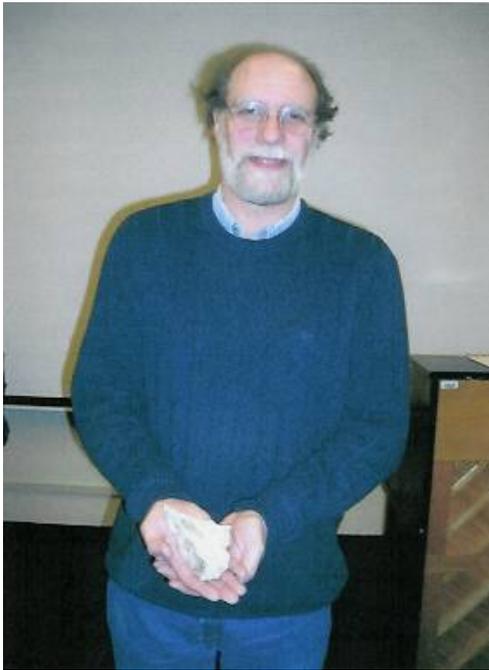
Illinois does have a state bird – it is the cardinal. And we all know that birds are dinosaurs. But non-avian dinosaurs are from the Mesozoic- and does Illinois have rocks from the Mesozoic? There is some Cretaceous rock in southern Illinois and western Illinois. Illinois was partially exposed to the western interior seaway at the time of the Chicxulub event but does not have the iridium, quartz or tsunami seen from the K/T that should be found.

How do you find dinos? You must find rocks of the right age. And they should be exposed. And they should be accessible. And they should be legally available. There is a site in southeastern Missouri on private land where dinosaurs have been found – a hadrosaur, tyrannosaurid material and dromaeosaurid material. It is the Chronister site in Bolinger County found in 1941.



In 2004 Dave did some screen washing in southern Illinois with the owner's permission. It was McNairy Formation of the Late Cretaceous river deposits with an upper clay and a lower clay. In the upper clay he found a lot of plant material. He sent some of the pollen samples in for analysis. The lower clay was hard and cemented. It had organic walled microfossils plankton algae in it. They had been described in the shale of the Ordovician of northeastern Missouri and were not found in the upper clay. Some of the plants he found in the upper clay have been tentatively identified from some old publications as *Nectandra*, *Arca-*

dia problematica, *Magnolia* ?, *Liriodendron* ? (tulip tree), *Celtis* sp., *Fagus* ?, and more. A sample is shown in the photo. He also found leaves from an angiosperm, petrified wood, and a flower that may have been a rose. The Cretaceous rocks are the same as those across in Missouri.

Paleontology Study Group Meeting, Continued

Dave finally concluded when he finished with this site that the McNairy Formation was Cretaceous covering reworked Ordovician and over Silurian Moccasin Springs. He concluded that no dinosaurs were found. No Mesozoic vertebrate has been found in Illinois. There is no proof that they are not here. We must keep looking.

Several members had brought fossils for others to look at and identify. There were refreshments to enjoy and there was further discussion. The meeting was adjourned.

Respectfully submitted, Karen Nordquist, Secretary

MINERALOGY/MICROMOUNT**June 13, 2009**

The meeting was called to order at 7:51 PM by Kathy Dedina, after considerable confusion over the room we should be in.

The September meeting will be a continuation of the opening and examination of geodes, and a show-and-tell on summer collecting experiences.

John Good announced a field trip next Saturday to Braceville.

This month's meeting was on geodes. Kathy Dedina described how geodes are formed and some well-known localities for geodes. Jim Daly described the minerals found in Keokuk geodes. Dave Bergmann brought a geode splitter, and after the program we all split geodes that various members had brought, for an "indoor field trip".

Jim Daly had some giveaway micro specimens, and there was a silent auction of micro material owned by the study group.

Kathy Dedina provided refreshments.

Submitted by Jim Daly

July – Ruby
(Alternate gem: Carnelian)

By LaVergne R. Novak



Ruby, a form of corundum, is the second hardest stone after diamond. Its name derives from the Latin *rubeus*, meaning “red.” Its hardness enables the ruby to take a brilliant polish, and sometimes it can be cut to produce a star, called an “asterism.” To give it an iridescent quality, early lapidaries set the ruby over a peacock feather. Although excellent synthetic rubies are available today, in the early days imitations made of colored glass were sometimes offered as rubies. Pliny, that clever 1st Century gemologist, learned to identify and expose imitations by their lighter weight.

Because all deposits yield similar shades of red and because large crystals are very rare, rubies are graded according to their color. The finest rubies are called “pigeon blood” because of their intense color: pure red with a hint of blue. Important deposit sites include

Burma, Thailand, Sri Lanka, and Tanzania.

Rubies were introduced to Europeans by Marco Polo, who saw his first one in Ceylon (Sri Lanka). He said it was nine inches long, as thick as a man’s arm, and flawless. To early Romans the ruby was the stone of Mars, god of war. The deep-colored ruby represented nobility, courage, and the power of command and was, therefore, essentially a masculine stone. In India the ruby possessed caste, the deeper colors having the higher rank. Early Greeks thought rubies were red hot coals suddenly turned into stone. Since rubies are found in colors ranging pale rose to deepest red, the Burmese thought the gems “ripened” in the earth. Rubies were sacred to the Buddhists of Sri Lanka, who called them “tears of Buddha.”

Through the centuries the ruby has been endowed with impressive powers. It could predict illness and death, stop bleeding, and draw out the venom of a snakebite. A ruby worn on the forehead would enhance the mental abilities of the wearer. Inserted into an open wound, the ruby would protect the injured person from infection and death. Placed under the pillow, it warded off evil dreams. To all, the ruby had possessed mystical qualities, perhaps because it glows with the color of blood, the essence of life.

(This is a birthstone series. Text was first printed by Lizzadro Museum.)

August – Peridot
(Alternate gem: Aventurine)

By Lavengne R. Novak

Peridot is a gem known to mineralogist as olivine because of its olive green color. The color may vary, however, from light yellow-green to deep olive. It is an iron silicate, whose color stems from the presence of magnesium.

August Gem Stone: Peridot, Continued



Although common peridot can be found in many places, Burma and the volcanic island of St. Johns in the Red Sea contain the finest gem-quality peridot. The output from St. Johns is tightly controlled to keep the prices steady and the world supply low. Peridots are found in volcanic rock and in meteorites.

When cut, gem-quality peridots are easy to identify by their double refraction. Fine peridots have been called “evening emeralds” because they seem to exhibit their greatest brilliance in artificial light.’

Ancient people called peridot the “gem of the sun” and believed it would dispel “terrors of the night.” The Crusaders brought peridots back to Europe, thinking they were emeralds. They wore the stones on their left arms as protection from evil spirits.

Because of its rarity in early times, the peridot was not used extensively for medical purposes. Held under the tongue, though, it was said to relieve a fever’s thirst, and the yellowish stones could cure liver diseases.

(This is a birthstone series. Text was first printed by Lizzadro Museum. Photo is from bangkokgemmart.com.)

Ferry Farm By Lexico Kiamco

Ferry farm was once George Washington’s boyhood home. He lived there from age 6 to 21. Ferry Farm is in Stafford County Virginia. The farm is also right along the Rappahannock River. George Washington’s father Augustine Washington moved his family there in 1738.

Archaeologists have also saved Ferry Farm from Wal-Mart because Wal-Mart was going to build a Wal-Mart there. In 1996 Ferry Farm was on CNN and CBS because Wal-Mart wanted to build a Wal-Mart there and Ferry Farm would be a Wal-Mart. People were so mad that Wal-Mart turned Ferry Farm over to the Kenmore foundation.

They have a lot of artifacts at Ferry Farm. In fact they have so many artifacts they have to decide which artifacts to keep! They keep pottery; fish scales fish bones and straight pins. But oyster shells and little pieces of brick are not kept.

In the 1800s civil war soldiers used Ferry Farm to prepare for battle.

Left behind things can tell us about how people lived what they ate and it can tell a story about their lives. Because of this, people can find out things that happened in Colonial times.

Ferry Farm is not a well endowed sight. Because of this they rely a lot on field-school students and volunteers to help with the archaeology and research. If you are interested in working at Ferry Farm go to <http://www.kenmore.org/foundation/volunteers.html>. Opportunities abound at Historic Kenmore and Washington's Ferry Farm for volunteers with an interest in helping further the goals of the Foundation.



The Claddagh Ring

by Tess Lynch-Joyce, B.A., LL.B.
with
Notes by Joseph D. Kubal

Preface

I recently went on a short jaunt to Ireland, "The Emerald Isle." Although I did not find any emeralds there, I came across a unique piece of jewelry – The Claddagh Ring - of which I thought our members may have an interest. The following article is reprinted with the permission and courtesy of Ambrose Joyce, Proprietor, Connemara Marble Industries, Ltd., Moycullen County, Galway, Ireland. – J.D.K.

The Story of the Claddagh Ring

The Claddagh Ring is so called because it is believed to have originated in the Claddagh, Galway, and is unique inasmuch as it is probably the only ring in the world of a distinctive design used exclusively by a small community for over 400 years. "Claddagh" means a village situated near the seashore. In Galway, the village was outside the walls and was divided from the city by the River Corrib. It was irregularly built, but very extensive. It was the first residence of the Celtic settlers in this area. They were an exclusive community and strangers were never allowed to settle amongst them. From time immemorial the Claddagh was ruled by one of its inhabitants, periodically elected, who was called the King. He administered their laws and settled all their disputes according to age-old customs. His only distinctive mark was a white sail as his masthead when the fishing fleet put out to sea. The sole occupation of this colony was fishing; in fact, they were not allowed to use spade or hoe. The municipality recompensed them for their fish by giving them sustenance in all their needs.

The Claddagh Ring was used by these people as a marriage ring. Even to the present day the ring has associated with it special customs; for instance, it is not right for a Claddagh person to buy a ring – they must obtain it as a gift. If married, the ring should be worn with the crown nearest the nail; if unmarried, with the crown nearest the knuckle. *(Note: Additionally, it has been cited in Wikipedia that if the wearer wears the ring on the right hand with the heart pointing outward, this indicated that this person is not in a serious relationship, may be single, and looking for a relationship. On the right hand with heart pointing inward indicates this person is in a relationship or that "someone has captured their heart." On the left hand with the heart pointing outward indicates that the wearer is engaged and on the left hand with the heart pointing inward indicated that the person is married. – J.D.K.)*

The ring consists of two hands holding between them, or presenting a heart. Over the heart is a design representing a crown or fleur-de-les. The phrase, or posy, that usually accompanies the ring is: "Let love and friendship reign." *(Note: Again from Wikipedia, it is mentioned that the heart symbolizes love, the hands represent friendship or marriage, and the crown depicts*

The Claddagh Ring, Continued

loyalty. "The expression which was associated with these symbols in the giving of the ring was 'With my hands I give you my heart, and crown it with my love.'"- J.D.K.)

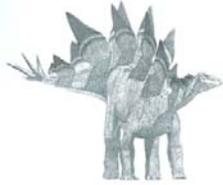
There are two interesting versions of the origin of this distinctive design used in the Claddagh, both of which are associated with the "Joyce" family, one of the famous "Tribes of Galway."

Margaret Joyce, surnamed Margaret of Bridges, from the great number that she built, first married Domingo de Rona, a wealthy Spanish merchant who traded in Galway, where he fell in love with her. Soon after departing for Spain he died there and left her his immense property. She subsequently married Oliver O'G French, who was Mayor of Galway in 1596. During his absence on a voyage she built most of the bridges of Connacht at her own expense. One day, when reviewing this work, an eagle dropped a gold ring into her lap. It was preserved by her family and was considered as a providential reward for her good works and charity. The ring could well have been the original Claddagh ring.

The story behind Richard Joyce is more factual. A native of Galway, he was captured by an Algerian corsair while on his way to the West Indies. At Algiers he was sold to a wealthy Moorish goldsmith, who found him tractable and ingenious in this trade at which he soon became adept. In 1698 William III of England sent an ambassador to Algiers demanding the release of all British subjects detained there in slavery, with which demand they reluctantly complied. The Moor offered Joyce his daughter in marriage and half his wealth as an inducement to remain but his offer was refused and Joyce returned to Galway. Here he set up as a goldsmith and prospered. Some of his work, stamped with his mark, an anchor signifying hope and the initials R.I. is still in existence. To Richard Joyce, or Joyce, is attributed the Claddagh ring design. Some hold that he brought the design from Algiers, but he could also have obtained the unique and original design from his kinswoman, Margaret of Bridges.

This ring became popular outside the Claddagh about the middle of the last century, especially as it is claimed to be the only ring made in Ireland ever to be worn by Queen Victoria and later, King Edward VII. *(Note: From Wikipedia -"The Irish Potato Famine (1845-1849) caused many to emigrate from Ireland, and the Claddagh ring spread along with the emigrants to the United States and elsewhere. Now the design is worn worldwide. These rings are often considered heirlooms, and passed from mother to daughter as well as between friends and lovers."-J.D.K.)* It is daily growing in popularity because of its unique design, its peculiar history, its sentimental appeal, and its close association with the ancient Claddagh of Galway.

(Endnote: The Claddagh Ring I purchased for my wife, Susan, had a heart made of green Connemara marble embedded within it and it made for a very attractive souvenir, gift, and life-long keepsake. - J.D.K.)



Karen's Komments



Ida – A New Primate Fossil

It's all very exciting as a new fossil is unveiled from the famous Messel site in Germany. It is the 47 MY old *Darwinius masillae* – an amazing almost complete skeleton of a new primate. It was found in 1982 by a man in Germany who had it carefully prepared and then he stored it at his home for 25 years. Then in 2006 he sold it through a fossil dealer to the Oslo Museum for a million dollars anonymously. A group of scientists have worked since then to study it intensively in preparation for their announcement of its discovery to the world. They first carefully confirmed that it was not a fake.



Its informal name Ida is from the name of the young daughter of the leader of the group Jorn Harum of the University of Oslo. Its formal name is in honor of the 200th birthday of Darwin and was the name used by the local monastery for the Messel pit site where the fossil was found – “masilla.” The fossil is one foot 10 inches long. She would have grown to about two feet long as an adult. Her tail was about half of her length. As an adult she would probably have weighed about three pounds. It is a female because they did not find a penis bone which would have been present in such a complete fossil if it had been a male. Based on the teeth they determined that she is a juvenile aged at about 6 months old. She has several milk teeth and her first and second molars had developed. The third molar was still in the bone. Her teeth were rounded indicating that she was predominately a fruit eater and stomach contents that were found with her confirmed that. There were no insects found among the stomach contents which included only fruit and plant material.

She has very large eyes and was probably nocturnal like tarsiers. She does not have a grooming claw on her second toe or a grooming toothcomb like lemurs. Her legs were longer than her arms indicating that she was a leaper and climber. She had opposable long fingers and toes allowing her to grip on to tree branches. Her fingers and toes have nails instead of claws. Her long tail could help her balance and steer in the trees as well. She had a broken left leg just below the knee but they determined that that occurred while the fossil was being removed from the pit. They did find a couple of injuries that may have

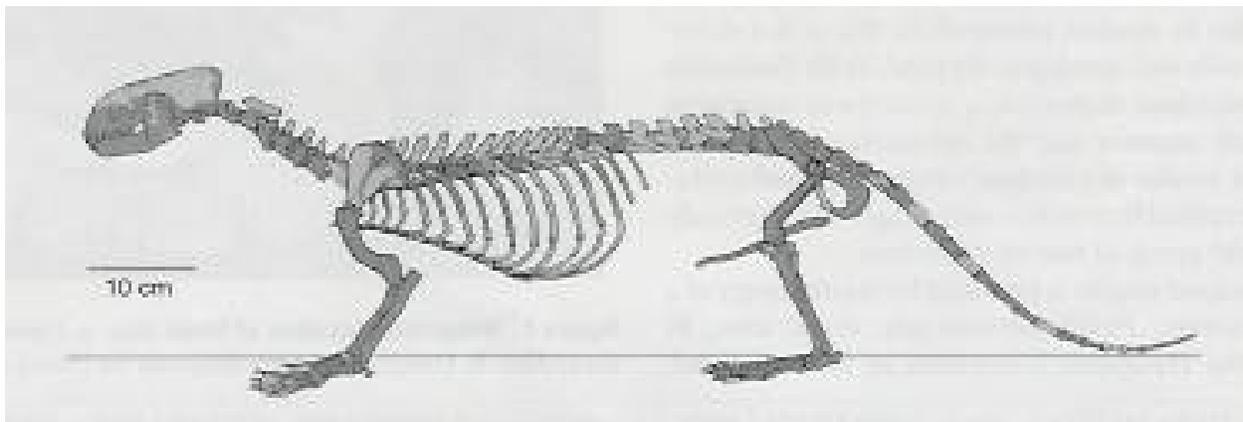
caused Ida some problems however. She had a bump on her right wrist that was a break that had not fully healed. The lower bone on the left arm had been broken at one time and had only partly healed. This would have affected her mobility and may have kept her closer to the ground.



Karens Komments, Continued

The author of the book "The Link", Colin Trudge, speculates that Ida may have died while drinking at a lake in the area and been overcome by a cloud of poisonous carbon dioxide. She would have fallen in the lake and been preserved so well at the bottom. She truly has characteristics that will be studied for a long time to come, some of them primitive and some advanced. Phil Gingerich from the University of Michigan is on the group studying the fossil and feels that Ida confirms his theory that anthropoids descended through a group of adapiforms. They have placed Ida in the adapiform family of Notharctidae and the subfamily of Cercamoninae. However, the primate paleontology community is not in agreement with their conclusions and some feel that Ida is not the missing link that they claim she is. Even though she is missing the lemur features, she is more lemur-like than anthropoid-like to be a link. Much more study will be done on the fossil to determine her true position. In the meantime she should be appreciated as the rare complete Messel primate fossil she is, link or not. (Trudge in "The Link" and Franzen et al in **PLoS ONE** doi/10.1371)

New Miocene Pinniped Relative – *Puijila*



Modern pinnipeds include seals, sea lions and walruses and they evolved from land living carnivores but an early relative, *Enaliarctos*, already has flippers and a short tail. It was found on the northwestern shores of North America in the early Miocene. More fossils were needed to determine where they came from and now a new fairly complete fossil has been found in Nunavut, Canada. This new fossil is otter-like with a long tail and limbs similar to modern terrestrial carnivores. It is pictured above with the bones that were found in darker shades. In addition the phalanges were flattened indicating that they may have been webbed indicating an aquatic life style. It has been named *Puijila darwini* which is the Inuktitut word for a young sea mammal and for Charles Darwin. The holotype is about 65% complete with partial skull and post-cranial skeleton and is dated to the Early Miocene. With its large webbed feet, robust limbs, and unspecialized tail, it probably swam with all four limbs. Thus it would have given rise to both forms of swimming modes used by pinnipeds today – side-to-side pelvic oscillation used by true seals and front flipper oscillation as used by fur seals. This Arctic discovery also strengthens the theory that pinnipeds evolved in this area. (Rybczynski et al in **Nature** Vol. 458 4/23/09)

Karen Nordquist, Paleontology

Local Calendar of Events

LIZZADRO MUSEUM OF LAPIDARY ART

July 25 “Fossil Collecting Field Trip”

Travel by motorcoach to a quarry near Rockford, Illinois. Collect Ordovician Period (450 million years old) marine fossils in limestone. Collectable fossils include: brachiopods, gastropods, corals, crinoids, trilobites and cephalopods.

Field Trip - Ages 8 yrs. to Adult - 8:00 a.m. to 3:00 p.m.

Fee: \$37.00 per person, Museum Member \$32.00 Reservations Required: 833-1616

August 1 “Soapstone Carving”

Lapidary Lorel Abrell 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. Take home a carving of your own creation. All materials are included.

Activity - ages 9 yrs to Adult - 10 a.m. to 12 p.m.

Fee: \$15.00 per person, Museum Members \$10.00 Reservations Required: 630-833-1616

August 16 “A World of Agates”

Agate specialist Doug Moore presents his award winning program on agates. Outstanding pictures explore agates from notable locations in the U.S. and around the world. Learn the general geology and specific characteristics of different varieties, theories of formation and value. An entertaining and educational program for all rockhounds.

Lecture – ages 9 yrs to Adult – 2 p.m. – 60 minutes

Regular Museum Admission, Reservations Recommended.

Special Exhibit “Worldwide Agates” June 9 to August 31, 2009

Features over 40 agates of rare and more common origins found around the world. Many agates from the United States and Mexico are represented as well as South America, Africa, Europe, Asia and Australia. Agate is a popular choice in current jewelry trends. Learn more about this unique gemstone at the lecture “A World of Agates” presented by Doug Moore on Sunday, August 16 at 2pm.

Dupage County Fair

CGMA Demstrators

**34rd Annual Upper Peninsula Gem and Mineral Show
Ishpeming Rock and Mineral Club**

Ishpeming Elks Club Hall
597 Lake Shore Drive
Ishpeming, Michigan
Free Admission

July 31 - Field Trips to Local Quarries for micromount. Hard Hat and Goggles required.

August 1- 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 2 - Field Trip to Lindberg Quarry for Kona Dolomite. Hard Hat and Goggles required.

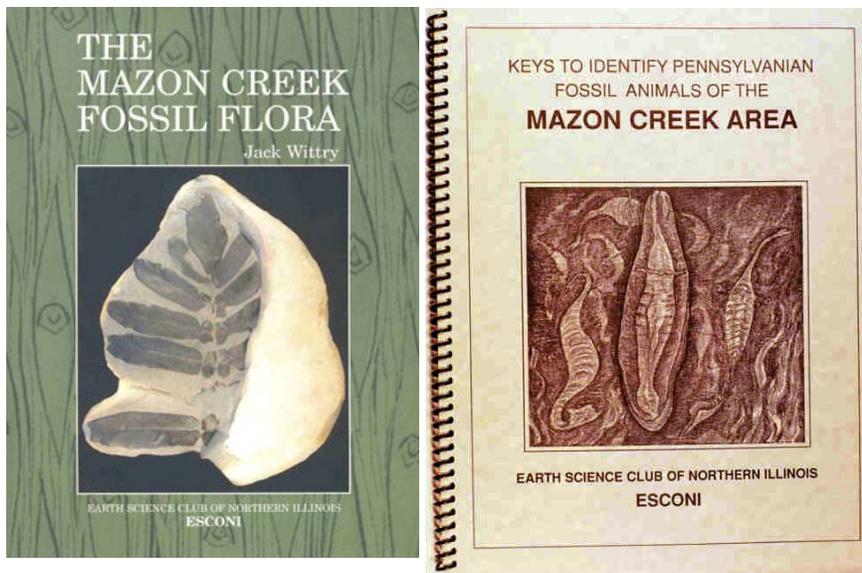
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Check here for more details http://www.museum.mtu.edu/copper_country_mineral/index.html

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Auler, Dorothy	130 Windsor Park Dr / Apt C-125	Carol Stream, IL	60188	67/1	(630) 407-0474
Bain, David & Shannon	5 Windjammer Ct	Grayslake IL	60030	09/5	(847) 322-9072
Balasanov, Yuri & Elena	2238 Asbury Ave	Evanston IL	60201	09/5	(847) 328-6004
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Buzyna, Len & Nina	165 Exmoor Ct	Deerfield IL	60015	05/10	(847) 940-8388
Cachel, John & Pamela	8293 N Wisner St	Niles IL	60714	09/3	(847) 698-6616
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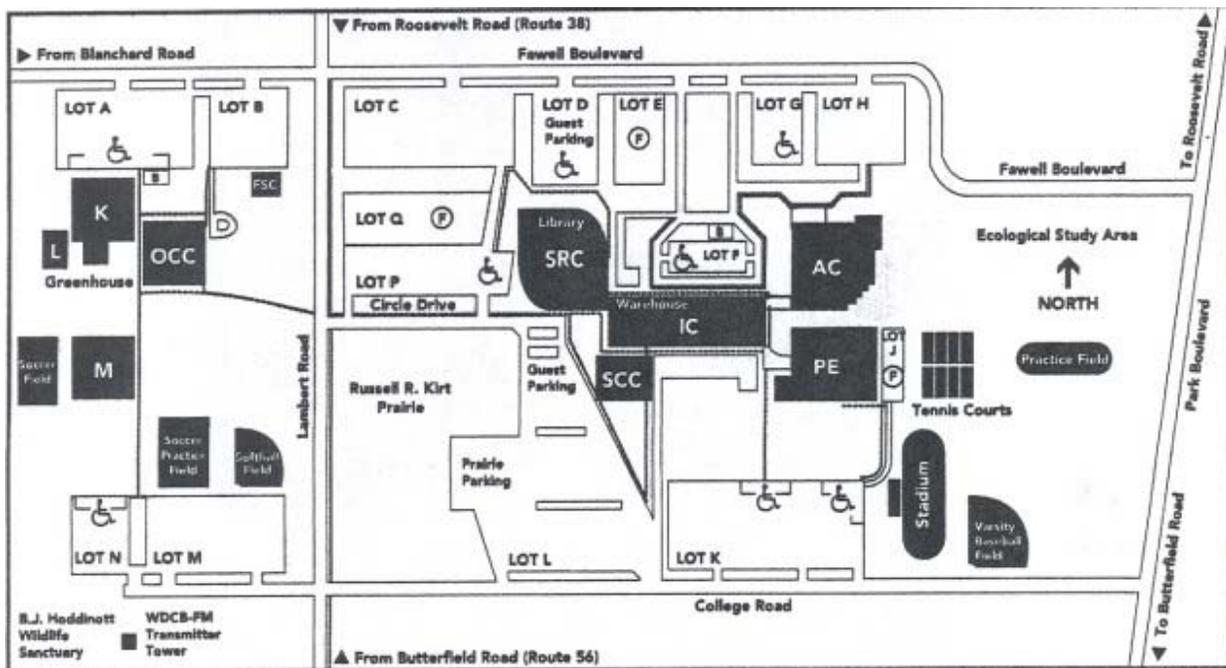
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