



PICK & SHOVEL

Lincoln Gem & Mineral Club Lincoln, Nebraska
www.lincolngemmineralclub.org

General Meetings

All general meetings will be held at the Bethany Park Shelter at 7:00 PM on the third Thursday of the month. December and January are the only exceptions.

November 20, 2008
 December 14, 2008 Christmas Party
 January 24, 2009 Annual Rock Swap
 February 19, 2009

Board Meetings

December 3, 2008 - Gere Library - 6:30 PM Room 1
 January 7, 2009 - Gere Library - 6:30 PM Room 1
 February 4, 2009 - Gere Library - 6:30 PM Room 1
 March 4, 2009 - Gere Library - 6:30 PM Room 1
 April 1, 2009 - Gere Library - 6:30 PM Room 1
 May 6, 2009 - gere Library - 6:30 PM Room 1

Holiday Dinner

Will be on Sunday December 14 at the Bethany Park Shelter at 5:00 - 9:00 p.m.

The Club provides fried chicken and Members are to bring a hot dish and a cold dish.

If they want to participate in the gift exchange, bring a \$5.00 hobby related item, wrapped.

Rock Bingo will be played and prizes will be awarded.

November Program



The program will be the VHS video THE GIANT CRYSTAL CAVE a National Geographic Production. A team of scientists explore a Mexican cave filled with giant Selenite crystals some four feet in diameter and fifty feet long. With the temperature 120 degrees and humidity over 80% it is one of the deadliest environments on earth.

I would encourage members to bring Gypsum or Selenite crystals to display.

CLUB ELECTIONS

ARE TO BE HELD AT THIS MEETING

GENERAL MEETING

October 16, 2008 Bethany Park Shelter

The meeting was called to Order at 7:20 p.m. by President Terry Anderson. Nineteen adult members and two Pebble Pups attended. Two visitors, Leroy Leland and Larry Nelson, were present.

CORRESPONDENCE:

The date for the 2009 Geology Day is set for February 8, and the 2009 Grinding Party is scheduled for July 12. Both activities take place from 1:00 to 4:00 p.m. at the Nature Center.

OLD BUSINESS:

The minutes of the September meeting were published in the Pick & Shovel. Shirley Rockel moved to accept the minutes as published, second by Al Stewart. Motion carried. The Treasurer's report for September was read by Treasurer Lyman. Charles Wooldridge moved to accept the report, second by Al Stewart. Motion carried.

Lincoln Public Schools is still accepting specimen donations. Items still needed are feldspar, halite, talc, sandstone, shale, limestone, chalk, marble, slate, 3 bags of quartz, pyrite, copper sulfide, sulfur, granite, basalt, and fossil gastropods.

The Midwest Federation website is www.amfed.org/mwf.

Richard Peterson accepted the challenge of chairing the 2009 January Swap. Please assist him in whatever way you can.

Charles Wooldridge proposed having year-round meetings. The summer meetings would be social / educational, having picnics, field trips, etc. The Board recommends having year-round social meetings. Jim Marburger moved for the club to hold year-round meetings with the summer meeting being social with no business conducted, second by Robert Cropp, motion carried.

The Nominating Committee chair, Jim Marburger, presented the slate for this year's election. The slate is as follows: President – Terry Anderson; 1st Vice President – Charles Wooldridge; 2nd Vice President – Roger Pittard; Secretary – Sharon Marburger; Treasurer – Vera Lyman; and Board Members – Jim Atkins, Jim Marburger, Al Stewart, Ed Ridge, and Robert Cropp. The nominating committee needs two nominees. Judy Cropp was nominated. Other nominations for the nominating committee will be accepted at the November meeting. However, should no other nominations be received, the board member receiving the fewest votes will

be automatically elected to the nominating committee. Nominations closed for the night.

NEW BUSINESS:

The club's Articles of Incorporation and By-laws will be published on website for ease of access.

Charles Wooldridge gave kudos to Editor Jim Atkins for a great job on the Pick & Shovel. He would also like someone to volunteer to locate upcoming shows and associated dates to publish in the Pick & Shovel. If you would be interested in doing this, please contact Charles Wooldridge or Jim Atkins.

Charles Wooldridge informed the club of a legislative bill in Washington, D.C. It is called the Fossil Bill. Please read the proposed legislation and voice your opinion to the USDA.

Charles Wooldridge presented the 2009 Show Report. He has arranged for a very nice Thunderegg display, and Bill Breckenridge has agreed to return with a small display and to do laser age dating of any bones that are brought in.

Halloween costumes: Jim Marburger – mica; Sharon Marburger – crazy lace; Charles Wooldridge – petrified wood; Terry Anderson – rock hunter (which is different than a rock hound); Leahh Anderson – Tiger iron.

The meeting adjourned to program and refreshments at 7:57 p.m. on a motion by Charles Wooldridge, second by Jim Marburger. The program was a video entitled "How to Set Diamonds".

Thanks to everyone who brought refreshments and to our Program Chair, Charles Wooldridge, for doing a great job of providing entertaining and informative programs.

Respectfully submitted,

Sharon Marburger

LGMC Board Meeting,

October 1, 2008, Gere Library

The meeting was called to order at 6:39 p.m. by Charles Wooldridge. Board members present were Charles Wooldridge, Vera Lyman, Sharon Marburger, Jim Atkins, John Harrison, Jim Marburger, and Al Stewart. Guest Ed Ridge also attended.

Minutes of the May and September meetings were distributed. Jim Marburger moved to accept the minutes of the May meeting as printed, second by Vera Lyman, motion carried. John Harrison moved to accept the minutes of the September meeting as printed, second by Jim Marburger, motion carried. The treasurer report for September was distributed. Jim Marburger moved to approve the report, second by Jim Atkins, motion carried.

OLD BUSINESS:

Jim Marburger is still trying to get information on permanent cloth table covers. Charles Wooldridge suggested we be careful about the covers and they don't always attach well to the tables.

More specimens for LPS have been received. More are still needed.

Vera Lyman reported that Roger Pabian will contact the Midwest Federation to try to recoup funds to cover the gross loss on the 2008 Show. The Omaha club generously allowed the club to use some of their cases for our 2008 Show. John Harrison moved to pay the Omaha club \$50 for transporting and allowing the use of said cases, second by Jim Marburger, motion carried. Treasurer Lyman will send a check.

The 2009 Swap will be chaired by Richard Peterson.

NEW BUSINESS:

Sharon Marburger suggested the club's Articles of Incorporation and By-laws be published on the website. Board members thought this to be a good idea.

Sharon Marburger requested that the list of information for the All American Award be published in the Pick & Shovel. The Board agreed.

The proposed budget for the 2009 show was presented. John Harrison moved to accept it, second by Al Stewart, motion carried.

Jim Marburger moved to adjourn the meeting at 7:31 p.m., second by Roger Pittard. Motion carried.

Respectfully submitted,

Sharon Marburger

Nebraska City Rock Swap

The swap will be December 7, 2009, the first Sunday in December, and will be from 12:00PM to 5:00PM. The site is across from the Ambassadors Nursing Home, just off of Business 75 near Larsen Motors. The building has restrooms and kitchen and is easy for loading and unloading.



Topaz

By Sharon Marburger

The American Heritage Dictionary defines topaz as a colorless, blue, yellow, brown, or pink aluminum silicate mineral, often found in association with granitic rocks and valued as a gemstone, especially in the brown and pink varieties.

Often confused with citrine quartz (yellow) and smoky quartz (brown), quartz and topaz are separate and unrelated mineral species. Although topaz is a very hard gemstone, an 8 on the Mohs scale of hardness, it can be split with a single blow and should



be protected from hard knocks.

Blue, once the most rare color of topaz, is today the most common, thanks to a stable enhancement process that turns colorless topaz blue. After the raw topaz is extracted from the earth and cut, it is irradiated to brown and then heated to sky blue. This enhancement process is permanent. A new treatment process, called vapor deposition, has been developed to create additional colors of topaz. In this treatment process, a thin colored film is bonded on the surface of topaz to create dark blue, red, pink, and green colors or rainbow iridescence. These vapor deposition-enhanced topaz colors must be handled with special care, as the coating can be scratched or abraded.

There are many legends and folklore surrounding topaz. During the Middle Ages, it was thought to heal both physical and mental disorders and prevent death. The Greeks believed it had power to increase strength and to make its wearer invisible while the Romans believed it had power to improve eyesight. The Egyptians wore it as an amulet to protect them from injury. When worn as amulet, topaz was said to drive away sadness and strengthen the intellect. Mounted in gold and hung around the neck, it was believed to dispel bad charms. Topaz was also said to change its color in the presence of poisoned food or drink. All these mystical powers were believed to increase and decrease with the phases of the moon.

www.bernardine.com
www.jewelryimpressions.com.

2008 GEM & MINERAL SHOWS

Nov 21 - 23 Golden, CO Denver Area Mineral Dealers, Exhibit Hall of the Jefferson County Fairgrounds, 15200 W. 6th Ave.

Dec 12 - 14 Longmont, CO Flatiron Rock Club, Boulder County Fairgrounds, Hover & Nelson Roads

2009 GEM & MINERAL SHOWS

Feb. 27 - Mar. 1 Golden, Co Denver Gem and Mineral Guild, Jefferson Co. Fairgrounds

Mar. 13 - 15 Kansas City, MO.
 Assn. of Earth Science Clubs of Greater Kansas City, Business & Technology Center, 1775 Universal Ave. Location just off of Front St & I 480)

Mar. 21 - 22 Cedar Rapids, IA Cedar Valley Rocks & Minerals Soc., Teamsters Union Hall, 5000 J Street SW

Mar. 27 - 29 Ft. Collins, CO Ft. Collins Rockhounds, Lincoln Center, 419 W. Magnolia. 27th hours 4-8pm

Mar. 28 - 29 Lincoln, NE Lincoln Gem & Mineral Club, Pershing Auditorium, 226 Centennial Mall South

Apr. 24 - 26 Wichita, KS Wichita Gem & Mineral Society, Cessna Activity Center, 2744 George Washington Blvd.





Lincoln Gem and Mineral Club

proudly presents its
30th Annual Mid-Winter

ROCK SWAP

held at

Bethany Park Shelter House

Saturday, January 24, 2009

1:00 p.m. – 5:00 p.m.

Free Admission



Buy, sell or trade rocks, minerals, fossils, jewelry, equipment, and other items related to the rock / mineral / fossil hobby, lapidary, or jewelry making.

Swappers set up at 12:00 noon. Swap opens at 1:00 p.m. and closes at 5:00 p.m. The General Meeting follows at 7:00 p.m. and is open to visitors.

Swappers with tables are requested to provide material for the silent auction. Proceeds go to Southeast Community College Lapidary Grants.

Cash sales must be completed using Swapper Dollars. Swapper Dollars are available from the Club Treasurer at a 10% surcharge, payable by the buyer. Proceeds benefit Southeast Community College Lapidary Grants.

For Further Information:

Lincoln Gem & Mineral Club, Box 5342, Lincoln, Nebraska 68505-0342 or
Richard Peterson, (402) 489-2996



Fossil Monitor Lizards

by Lynne M. Clos

<http://www.fossilnews.com/1995/varanus.html>

Monitor lizards or goannas (family Varanidae) are common in tropical and subtropical areas of the globe today, consisting of almost three dozen species spread across Africa, Asia, the East Indies, and Australia. The largest is the ferocious, 3-meter Komodo dragon (*Varanus komodoensis*) which will eat livestock and humans; most varanids are smaller (though still fairly large as lizards go -- a meter or two long), and feed on small animals, molluscs, insects, and eggs. The first fossils of the genus *Varanus* are found in Africa in the Early Miocene, while the family Varanidae has a fossil history extending back into the Cretaceous of Mongolia.

The nearest living relatives of modern goannas are the earless monitor *Lanthanotus*, an obscure southeast Asian lizard, and the gila monster and beaded lizard of the genus *Heloderma*. The true monitor lizards form a cohesive group that is easily identifiable by their streamlined shape, elongated neck, semi-erect posture, and forked tongue. They inhabit a variety of niches ranging from savannah to woodland to riparian habitats. Those monitors which spend a lot of time in the water have tall neural spines on their tail vertebrae. This makes the tail tall and flat so that it is useful as an organ of propulsion. The earliest known member of the genus, *Varanus rusingensis* from the Miocene of Kenya, also had such a tail and was probably semiaquatic like the Nile monitor (*V. niloticus*) of today. Some of the Asian monitors, e.g. the water monitor *V. salvator*, also spend a lot of time in rivers. Freshwater molluscs form a significant portion of the diet of the Nile monitor and Gray's monitor (*V. olivaceus*), and probably also did for the 18-million-year-old Rusinga monitor (*V. rusingensis*), as evidenced by the appearance in adulthood of a durophagous dentition (blunted, crushing-type teeth). Features of the skull bones show the Rusinga monitor to have been less specialized for such a diet than the modern molluscivorous lizards, however.

Most other modern monitor lizards are active predators with sharp, trenchant teeth. They pursue such agile prey as birds and squirrels, which they find by tongue-flicking in the manner of snakes. Most fossil monitors appear to have been of this type, as shown by their similar skeletal features and teeth. Aside from the Rusinga

monitor, no fossil species of the genus *Varanus* is known with much completeness: there are several European species from the Miocene through the Pleistocene which are described based only on isolated vertebrae. The best-known fossil relatives of *Varanus* are two species of the genus *Saniwa*, which are morphologically quite similar to the extant monitors. *Saniwa ensidens* comes from the Paleocene through Oligocene of North America and *S. feisti* is described from good material from the Eocene of Europe. Both are known from relatively complete skeletons. Both appear to have been active, terrestrial predators.

The earliest members of the family were unearthed as part of the Polish expeditions to Mongolia, and come from Cretaceous sediments there. *Cherminotus*, *Saniwides*, and *Telmasaurus* are all known from good skull material, but postcrania are limited. *Telmasaurus* appears to be most closely related to *Saniwa*, and it may have been ancestral to forms which crossed the Bering land bridge into North America. *Saniwa* then arose in the New World and continued to migrate eastward (fossil varanid vertebrae are known from Ellesmere Island) into Europe during a period of tropicality during the Eocene. Although little fossil evidence exists, it is postulated that the genus *Varanus* arose separately from the Cretaceous stock and migrated westward through Asia to colonize Africa during the Early Tertiary.

Further afield, the teeth of all varanids show a labyrinthine infolding of the dentine which is visible as longitudinal striations on the surface. This feature is characteristic of the more inclusive group Varanoidea and unites goannas with those aquatic leviathans, the mosasaurs. When watching a Komodo dragon eat, the relationship is not hard to imagine. But things were even worse in Australia during the Pleistocene, when the gigantic *Megalania* stalked the land. *Megalania* was more than twice the size of modern Komodo dragons and could bring down the giant marsupial *Diprotodon*. There's an excellent diorama of just such a battle in the Australian Museum in Sydney. After seeing it, a person is glad that varanids haven't inhabited the Western Interior in millions of years!

WANTED: Scholarship Honoree

by Judith Washburn, MWF 1st Vice President

We need your help... Now! We have to select an individual, or couple, who in turn will select the recipients of the MWF share of the AFMS Scholarship Awards for the current year - 2009. Each Regional Federation selects its own awardee who selects the school(s) and student(s) within that federation's geographical area. This is an awesome honor!

How can you suggest a candidate for this honor? It's easy:

- 1) A candidate may be someone in your own club or another club who stands out as worthy of such an honor due to their dedication and service;
- 2) A candidate could be a Federation officer or committee chair who has served the organization faithfully and well over the years;
- 3) A candidate could be an individual in the professional world, such as a professor at a university or college who has contributed to the hobby by helping a club with projects, or serving as a speaker for meetings and shows when called upon; or
- 4) A candidate could be a museum curator or on the staff of a geological survey who has likewise served the hobby.

What kind of information do you need to supply? The more information you offer, the better. Use the following guidelines:

- 1) Include services to rock clubs, students, and the community;
- 2) Note accomplishments and/or contributions made to the earth sciences (geology, mineralogy,

paleontology, archaeology, oceanography, etc., whichever may be his/her specialty);

- 3) List universities or colleges attended, degrees received, papers, pamphlets or books written alone or in conjunction with someone else;
- 4) List honorary and professional organizations, present or past positions held, and honors which have been received;
- 5) Include personal information such as date and place of birth, marital status, number of children, home address, etc.; and
- 6) If possible, include a black and white wallet-sized photo of the candidate.

The Board of Selectors must rely on the information you send, so include everything you can to support your nominee. Send your nomination to :

Judith Washburn
107 Deer Creek Road
Rochester, IL 62563-9220

or to jrwashburn1@msn.com
<<mailto:jrwashburn1@msn.com>>

If you have questions, call:217-498-7713

DEADLINE: December 20, 2008

ALL AMERICAN CLUB AWARD INFORMATION NEEDED

Please review the list below to see if you have information that can be added to the All American Club Award application / book. I need your help to compile an accurate and well-rounded book for submission. You may send your information to me at Sharon Marburger, Box 64, Hickman, NE 68372, or e-mail to mamamar@windstream.net. Please provide documentation of your activities, including photographs, if you have any. I will return your originals to you. Thank you, in advance, for contributing to this project.

Did you participate in any Special Group Meetings (established groups) for Cabbing, Faceting, Metal-working, Beading, Mineral study, Fossil study, Intarsia, Jewelry making. What group and how many attended?

If you posted show fliers in 2008, where did you posted them.

Did you serve as an officer, committee chair, or committee member for MWF or AFMS?

Did you give a program for another club? If so, what program and club(s)?

Did you attend another club's show, swap, or other function? Where, when, and which club?

Did you display or demonstrate at another club's show? Where, when, and which club?

Did you participate in another club's field trip? Where, when, and which club?

Did you give a talk or demonstration at a local school? Where and when? Do you have pictures, thank you cards, letter, or certificate of appreciation?

Do you have a display at a local public site? Where? Do you have pictures, thank you cards, letter, or certificate of appreciation?

Have you served on a governmental agency committee in 2008?

Have you provided comments on governmental agency proposals in 2008?

Have you contacted a congressional representative in 2008 regarding legislation affecting access to collection sites?

Have you supported access/collecting lobbying organizations in 2008?

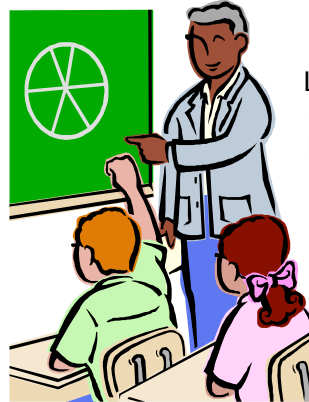
Visitors

October 16, 2008

Leroy Leland

Larry Nelson

Rocks For Schools



LPS would like samples for the 5th grade classes; 1-2 inches in size, bagged in twelves. The specimen list is listed below. Please bring your bags of rocks to the meetings to give to Vera or call Vera to make delivery arrangements.

1	Quartz	13	Obsidian
2	Feldspar	14	Pumice
3	Mica	15	Sandstone
4	Calcite	16	Shale
5	Halite	17	Limestone
6	Talc	18	Chalk
7	-----	19	Coal
8	Pyrite	20	Marble
9	Copper Sulfide	21	Slate
10	Sulpher	22	Quartzite
11	Granite	23	-----
12	Basalt	24	Fossil Gastropods



PEBBLE PUPS

By Sharon. Marburger

Hello Juniors! It is my desire to dedicate a page to you in the Pick & Shovel. If there is something you'd like to see on this page, please let me know. Answers on page 10.

Happy November, Pebble Pups. Check out this month's word search. It contains traditional and modern birthstones, PLUS an added bonus. After you locate all the birthstones, write down the remaining letters to find a special message! Happy hunting!

P	A	E	B	B	E	N	O	T	S	D	O	O	L	B	ALEXANDRITE
L	L	N	O	C	R	I	Z	E	M	E	R	A	L	D	AMETHYST
E	E	P	U	P	S	X	Y	N	O	D	R	A	S	R	AQUAMARINE
O	X	D	C	G	R	E	N	I	R	T	I	C	A	K	BLOODSTONE
E	A	N	P	A	O	P	A	L	E	B	B	B	P	E	CARNELIAN
S	N	O	C	R	S	P	U	A	L	R	A	E	P	P	CITRINE
A	D	M	A	N	E	S		M	R	O	C	K	H	E	CHRYSOPTASE
R	R	A	R	E	Q	P	E	R	B	B	T	L	I	N	DIAMOND
P	I	I	N	T	U	R	Q	U	O	I	S	E	R	O	EMERALD
O	T	D	E	O	A	U	E	O	N	P	Y	U	E	T	GARNET
S	E	P	L	P	R	B	S	T	Y	R	H	O	L	S	LAPIS
Y	C	K	I	A	T	Y	P	E	X	B	T	B	A	N	MOONSTONE
R	L	E	A	Z	Z	T	O	D	I	R	E	P	P	O	ONYX
H	T	A	N	Z	A	N	I	T	E	P	M	U	I	O	OPAL
C	P	E	N	I	R	A	M	A	U	Q	A	S	S	M	PEARL
															PERIDOT
															ROSE QUARTZ
															RUBY
															SAPPHIRE
															SARDONYX
															TANZANITE
															TOPAZ
															TOURMALINE
															TURQUOISE
															ZIRCON

Fun challenge: See how many birthstones you can match up with the correct month. Bring your answers to the November meeting.

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Advertising by rock-hobby business or interest is permitted with the approval of the Board. The rate is set at \$15.00 per full page; \$7.50 per 1/2 Page; \$5.00 per 1/3 page and \$3.75 per 1/4 page (min) per issue, paid in advance. These ads will be placed through out the bulletin a space permits.

Subscription to the Pick & shovel is \$10.00 per year mailed.

Dues to Lincoln Gem & Mineral Club are as follows:

Adults (age 16 and over) \$10 per year; Juniors (age 12 to 16) \$2 per year; Family membership (Couple, resident children under age 16) \$22 per year. New memberships must be approved by the Board, after applicant attends at least one meeting of the Club and pays the above dues plus a \$5 registration fee.

Meetings: Third thursday, September through May except December & January. Those dates will be announced. The meetings are held at Bethany Park Indoor Shelter, at Cotner and Vine Street.

or E-Mail Newsletters to: jna@inetnebr.com

Lincoln, Nebraska 68505-0342

Lincoln Gem & Mineral Club

P.O. box 5342

Lincoln Gem & Mineral Club

Mail Exchange Newsletters to:

L.G.M.C. Web address-Courtesy of Jim Atkins
<http://incolor.inetnebr.com/jna/gemclub/lgmc.htm>

Your *Pick & Shovel* staff:

Publisher: Lincoln Gem & Mineral Club, Inc. P.O. Box 5342,
 Lincoln, Nebraska 68505-0342

Editor: Jim Atkins 3028 So. 35th Street, Lincoln, Nebraska 68506
 E-mail: jna@inetnebr.com

Circulation: Phyllis N. Parks 402-476-6798

Business Reporter: Vera Lyman 402-464-6089

News Reporters: All Members

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The purpose of this corporation shall be to study, promote an interest in, and disseminate knowledge of lapidary and various Earth Sciences including by not necessarily limited to Geology, Paleontology and Mineralogy. It shall be a particular purpose of the corporation to provide education in these fields to its members and the general public, especially to youth and student groups.