

# CALENDAR

Saturday, Jan. 23, 1999-21st Annual Indoor Swap-Flyer on Page 4B member bulletins.

**Regular Meeting:** January 23, 1999, 7:30 PM, Nebraska Center, 33<sup>rd</sup> & Holdrege Sts.  
45<sup>th</sup> Anniversary of LGMC Founding. Cake & Coffee to be served.  
Be prepared to stand up for the number of years of your membership!

**Program:** "Sentimental Journey: presented by Robert Fixture-member since 1981.

**Youth:** Come for the Swap and see what your leader has planned.

Sunday, February 14: Geology Day at Pioneer Park Nature Center. Members bring a bit of **Geology** and share with friends and visitors. Shirley Rockel, Chair

February 27: Regular Meeting at 7:30, Nebraska Center

**NEXT LGMC SHOW - MARCH 27-28, 1999, Pershing Auditorium  
(Our 41<sup>st</sup> Annual Show)**

## Nearby Shows to Visit

January & February--Check your Lapidary Journal and/or Rock & Gem if you are traveling.  
March 12-14 SHOW Greater Kansas City 38<sup>th</sup> Annual, 1775 Universal Ave., K.C. Mo. 64120  
(Exit at Front Street on I-435)  
March 13-14 SHOW Macomb, IL, Geodeland Clubs 19<sup>th</sup> Annual, WIU Student Union

**DUES  
ARE  
PAST DUE**

Dues were delinquent on January 1<sup>st</sup>, 1999, and must be paid before January 31<sup>st</sup>, 1999 to keep your membership active. If not paid you will not receive a February Pick & Shovel or have your name listed in the '99 Who's Who. Checks should be made payable to LGMC, PO Box 5342, 68505. Dues are \$10.00 per adult, \$2.00 per youth or \$22.00 for a family including all youth under 16 years of age. A \$5.00 reinstatement fee will be assessed any payments after 1-31-99.



If you wish to receive the Nebraska State Association publication "The Gem Palette" please add \$3.25 to your dues for each family so we can forward it with our list to the NAOESCI Treasurer for 1999.

## 1999 REGIONAL SHOW SCHEDULE

**EASTERN FEDERATION**  
August 6-8

New Carrollton, Maryland

**CALIFORNIA FEDERATION**  
June, 18-20

Turlock, California

**SOUTH CENTRAL FEDERATION**  
August 21-22

Bossier, Louisiana

**NORTHWEST FEDERATION**  
June 18-20

Hillsboro, Oregon

**SOUTHEAST FEDERATION  
/AFMS COMBINED**  
July 9-11

Nashville, Tennessee

**ROCKY MOUNTAIN FEDERATION**  
November 19-20

Tucson, Arizona

**MIDWEST FEDERATION**  
April 10-11

Columbus, Ohio

# YOUTH NOTES

By Kay Jurgens

Christmas is over, the cold weather has finally set in, and now we enter the last year of the century. I hope this century ends well! I know we'll have a great show, because the juniors are ALWAYS fired up about their booth at the show!

While searching for information on another topic, I found some wonderful rock paintings on the Internet. Many can be ordered, but I list sites here so that my artistic junior members can see what their own hands could possibly turn a rock into!

My sources began at Yahoo's rocks and stone crafts group. ArizStones, which shows painted stones for sale, is at :  
<http://www.primenet.com/azstones/>  
 Rocks painted as cats, dogs and wildlife, along with links, are found at:  
<http://www.rocknrowe.com>

A web site which will show you wildlife rocks and take you to the rock painter's web ring is: <http://www.mnsi.net/~hawk/>

The Rock Painter's Web Ring is also at:  
<http://www.linwellford.com/webring/default.htm> Item choice is at the top.

Yvonne Carter's site shows more painted rocks at:  
<http://www.geocities.com/Paris/Rue/8863>

A family web page which shows the rocks they have collected and purchased is at:  
<http://www.irving.org/rocks/>  
 They have trays of rocks which are labeled, and more trays which they haven't identified. Check it out to see if they have everything labeled right- maybe you can help them identify some- they say they are beginners. They also have links to other rock sites.

I enjoy trying to unscramble words-  
 Let's see if you can unscramble these rockhound words:

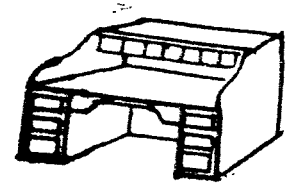
eeodg  
 kcip  
 eeeivrtla  
 mmhaer  
 cchbaaek  
 soilfs  
 eicepsmn  
 cokr lpei  
 eekrp  
 emg  
 raemnil  
 pieeifdtr  
 iemn  
 pwas

Answers can be found on another page.

I hope to see all the juniors at the swap this month. Be sure to bring something to swap!



## From THE PRESIDENT'S DESK



Hello L. G. M. C. Members:

By the time this letter comes to you the Holidays will have come and gone and the decorations will be put away. Some of us will be making plans for what we want to do. I will be making plans for the Club too.

So far for the next three months you will find our 21<sup>st</sup> Annual Swap in January and our 45<sup>th</sup> Annual Meeting. Some of us will bring materials for the Silent Auction as well. I will be there swapping and maybe trading. I also will be asking members how many displays they will bring to our March Show so that I can plan the display tables. On January 11 the Lapidary Class starts at Auld Center.

In February, besides the meeting, we have our 10<sup>th</sup> year 'Geology Day' at Pioneer Park Nature Center on Sunday February 14<sup>th</sup> from noon to 4 PM. Please bring gems, minerals, fossils or gem cutting illustrations to show the visitors. In February I will insert a postcard questionnaire for you to fill out and return to me so that I will know what to plan for the rest of the year.

In March, our big month--the 41<sup>st</sup> Annual Show--'Reflections to Past Centuries' at Pershing Auditorium. I hope to see all of you there with your displays, working and having a good time

Also we may be having another bus field trip---to the Kansas City Show on March 12, 13 or 14. Watch for more detail in February. We'll need to know how many are interested before a decision is made.

With imagination and advisement of the newly elected officers and board of directors of LGMC I hope this will be a good year.

Sincerely,

Edward Ridge

## CLUB NOTES

Dear Members of the LGMC:

It was a real pleasure to have you here at Midland Lutheran College to view the Glismann Collection of fossil woods, rocks and minerals, other fossils, shells and butterflies and the Larmon Collection of polished spheres. Your help with the identification of the spheres was much appreciated. Since that time we have been fortunate with additional help which the World Herald article brought. A specialist from a college in South Dakota who added some information, and then Roger spent an afternoon with us to finish it. Thank you so much, Roger!

Many special thanks for the fine articles by Ken Doe and Grant Bennett, and the excellent color copies of the photos. I have had copies made for Dr. Carlson and myself and have sent the originals on to Mrs. Glismann. She, along with others of her family are planning to come back in early August.

A very special thank you for the most unexpected and generous gift to Midland College in honor of the collection and those of us who work with it. It is almost exactly the amount needed to complete the cost of lighting the cabinet for the spheres. Dr. Carlson hopes to have the refinishing done, the lights installed during the Christmas break.

As you know, you were the first group to view the collection. In late October a group of Nebraska Science Teachers came to see it as part of their annual fall convention at Camp Calvin Crest. Interest continues to be expressed. Already we have reserved the dates of May 14, 1999 for a convention of Air Stream RV'ers who plan to camp at Christensen' Field here in Fremont. But our hospitality is not limited to groups. If any of you would like to arrange a visit call me at my home - 402-721-1724 and we will find a time.

Sincerely, Florence Marie Lueninghoener

( Received from Florence along with a special clipping and Christmas Note--)

If you find any errors please blame the typist who transferred the hand written letter to this page. pnp

\*\*\*\*\*

Talked to Club member Norman Balliet and he is flying out to Quartzite for a few days to check out the first days. Maybe we can talk him into a few words about it..

\*\*\*\*\*

Nice letter from Ben Darling with his check for family membership and The Gem Palette. He has been collecting some rocks in western Nebraska, got married in August, and is not sure how many meetings he can make but enjoys keeping up with his fellow Rockhounds here at LGMC. Good Luck to you, Ben, hope that you bring the whole family to the show-even if just to see and enjoy it.

\*\*\*\*\*

Editor's apology to Grant Bennett! I was so pleased at your latest 'High Adventure' report of the neat Mid-December Field Trip to S.E. Nebrasska with Roger Pabian and Bill & Betty White that I filed it away so carefully before the Holiday Rush hit me that I still haven't found it at press time. It surely sounded like a fun trip. Sorry to have mislaid it. pnp

\*\*\*\*\*

Answers to the word scramble on the junior's page:

geode, pick, leaverite, hammer,  
backache, fossil, specimen, rock pile,  
keeper, gem, mineral, petrified, mine,  
swap.

LINCOLN GEM & MINERAL CLUB, INC. - BOARD OF DIRECTORS - Dec. 1, 1998  
7:00 P.M. @ Kinkos; 48th & Vine Sts.  
(Preceded by Show Committee Meeting)

President Moore called the Meeting to order.

Nov. Minutes approved with motion by Ken Doe, 2nd by Marcia Hamilton.  
Carried.

Treasurer's report approved with motion by Marcia H. 2nd by Ed R.  
Carried.

BILLS: approved for payment and recorded.

OLD BUSINESS: Christmas Party- Sunday Dec. 13, 5-9 P.M. at Antelope Shelter. Club provide drinks and cups. Also turkey. Each family bring a hot dish, salad and/or dessert and their own table service.

Question of subscribing to NAOESCI Gem Palette @ \$ 3.25 each. All club members desiring a copy will pay for their own subscription.

NEW BUSINESS: Agreed to affiliation with Midwest Federation, NAOESCI, Friends Of Museum (Ashfall, Neihardt Museum, etc)  
(MWF - \$2.00 for ea. adult, \$.50 for ea. Junior) (NAOESCI - \$ 1.00 ea. adult)  
Treasurer also directed to pay Storage Facility fees for 6 mos.  
There will also be an Anniversary Cake for the January Meeting.

MEMBERSHIP: Karla Bannister 1309 Debbie Ln Marysville, KS 66508  
Motion by Marcia H. 2nd by Ed R. Carried.

MEETINGS: Jan. 23, 1999 - 21st Annual Swap - Dave Heffelbower, Chairman  
Feb 14, 1999 - Geology Day - Shirley Rockel, Chairperson  
Feb 27, 1999 - ?? Scholarship Presentations  
March - no meeting - 41st Annual Show - March 27-28

Special "Thank You" received from Midland Geology Dept.

NEXT BOARD MEETING - Jan 6, 1999 @ Kinkos, 48th & Vine @ 7:00 P.M.

Respectfully submitted,

*Vera Lyman*

Vera Lyman, Secretary

At our January meeting we will have the oral presentation of the December Minutes of the General Meeting and the Treasurer's report for approval as they were not available for the January Board Meeting.

Also we will have copies of the Proposed Budget for 1999 as recommended by the Board of Directors since including it in this Pick & Shovel would put us over our allowed weight for mailing at the first class rate of 33 cents.

Lincoln Gem and Mineral Club, Inc.  
P. O. Box 5342, Lincoln, NE 68505

Proudly Presents  
its'

21st Annual  
Gem and Mineral



# SWAP

Nebraska Center for Continuing Education  
33rd & Holdrege Streets, Lincoln, NE

Saturday, January 23, 1999

***Swappers Dollars in Use: No Cash Transactions. Ten Percent Surcharge on Swappers Dollars. Come, enjoy the day of swapping and trading your minerals, gems, jewelry, fossils, findings, equipment etc. Children's Activities. Silent Auctions. Free Coffee. Materials offered for swap or trade are restricted to rock-related items.***

***Lincoln Gem and Mineral Club will furnish one 6 foot table and chairs to each swapper. Swappers may bring in additional tables only with the approval of the swap committee.***

***Admission: Swappers Tables---Donations for Silent Auctions.  
All others free.***

***Hours: 12:00 Noon to 5:00 PM***

***The swap will be followed by the general meeting of the Lincoln Gem and Mineral Club beginning at 7:30 P.M. Everyone invited.***

## HOW ARE FOSSILS NAMED?

To add order to the study of paleontology, or any other biological science, it is essential that all life forms be classified. The science of classification of both living and fossil organisms is called **taxonomy** and each taxonomic category is called a **taxon** (plural **taxa**). Most people do not understand how a species is named or described and it is the aim of this little item to explain taxonomic basics.

Living organisms are divided into taxa called kingdoms of which there are five: **Monera**, prokaryotic cells including blue green-algae and bacteria; **Protista**, unicellular, eukaryotic organisms with both plant- and animal-like characters; **Fungi**, multi-cellular, non-photosynthetic organisms such as mushrooms; **Plantae**, multicellular, photosynthetic organisms such as trees; and **Animalia**, multicellular consumers of the above. Each kingdom is subdivided into progressively smaller taxa and the fundamental taxonomic unit is the **species**.

A species is a group of closely related, interbreeding organisms that possess one or more common features that distinguish it from all other species. The definition of a living species, and of most fossil species, takes into account individual differences. Biological scientists have developed a system called **binomial nomenclature** to name all living organisms. This system was first developed by the Swedish biologist Linne' (=Linnaeus) and published in 1758. Linnaeus thought that he was discovering the "plan of the Creator" and he developed a very useful system that has changed very little since its inception. Below is a table showing how a human and a crinoid are classified:

Taxon	Crinoid	Human
Kingdom	Animalia	Animalia
Phylum	Echinodermata	Chordata
Class	Crinoidea	Mammalia
Subclass	Inadunata	
Order	Cladida	Hominidae
Family	Diphyuicrinidae	Primate

Genus	<i>Graffhamicrinus</i>	<i>Homo</i>
Species	<i>stullensis</i>	<i>sapiens</i>
Individual	UNSM 52799*	Helen Cummons

\*Obviously, a fossil has no proper name. This individual is a particular specimen in the University of Nebraska State Museum collections.

Species names are proposed by scientists and this work is referred to as **systematics**. To erect a new species, a scientist first must study the descriptions and illustrations and, if possible, the actual specimens of already described species in the literature. Suppose that a scientist finds that some of the fossils in the collections being studied differ from all of the described forms by having diagonal cross-hatches across one of the plates that make up the animal's body. The scientist first studies all of the described specimens and borrows examples, called type specimens, from other collections and compares the new find to all of these. If these studies show conclusively that the material at hand differs from all of the described material the scientist proposes a new species, describes it, illustrates it, and publishes the material in one of many recognized journals. The **International Commission on Zoological Nomenclature (ICZN)** stipulates in its code that "numerous, identical copies..." of the document describing the new species be made available to the research community. New species are often described in confidential reports of oil or mining companies or government agencies but these count for naught because the reports were not available to the public at the time the new species was named. A new species described in a thesis or dissertation does not count if that work remains unpublished. Researchers in other parts of the country or world can study the new description and decide whether or not it is valid. It may be rejected by other workers or it may be accepted. If someone can show that the new species was previously named elsewhere, a

**synonym** results and the earliest description has priority. To describe a new species, the scientist must publish along with the new name a description of the organism, otherwise a **nomen nudum** is created and the species name is invalid, and that name can not be used again.

A **holotype** specimen, one on which the new species is based, must be named and specimens furnishing supplemental data called **paratypes** can also be designated. These specimens must be in a safe repository where they will be accessible to subsequent researchers. Such repositories are found in research museum collections or the academic departmental collections of various universities. There are many other kinds of type specimens, but the holotype is the only one required. The ICZN has published rules and opinions for naming new species and these must be followed by all researchers.

The portion of a research paper where the organisms are described is called the systematics. The systematics are very important as they are the basis for all other branches of biological sciences. The interpretations of a paper in paleoecology or biostratigraphy will essentially be no better than the systematics that support them. Below is an example of the systematic part of a paper showing a species that has been previously described and for a species that is being newly described and the explanations show what all of this means.

**Taxonomic Headings.** In the following example [for the Pennsylvanian trilobite *Ameura missouriensis* (Shumard)] the authors (Pabian & Fagerstrom [P&F], 1971, p. 811) of the paper agree that the higher taxa are valid. Subsequent research may suggest that a species be moved to another genus or serve as a type species for a new genus. Similarly, genera can be moved into other families or new families created around them, and families can be moved to other orders and new orders

erected to accommodate them, etc. The following illustrates some examples:

Phylum ARTHROPODA  
Class TRILOBITA  
Order PTYCHOPARIIDA  
Family PHILLIPSIIDAE  
Genus AMEURA

*Ameura* Weller, 1936, p. 713-714; Weller, 1959, p. 401; Chamberlain, 1969, p. 60.

(The above 3 lines show what P&F considered to be the genus *Ameura*.)

*Type species.*--*Phillipsia missouriensis* Shumard, 1858, p. 225-226.

(These two lines show from which earlier described species the genus *Ameura* was derived.)

*Ameura missouriensis* (Shumard)

Plate \_\_\_\_\_, Figs. \_\_\_\_\_

(These two lines show P&F recognize *A. missouriensis* as a valid species and where it is illustrated in their text.)

*Phillipsia missouriensis* Shumard, 1858, p. 225-226. (Original usage)

*Phillipsia major* Shumard, 1858, p. 226; Meek & Worthen, 1872, p. 238, Pl. 3, figs 2a-c; Herrick, 1887, p. 60; Vogdes, 1887, p. 85, pl 3, fig. 14; Hare, 1891, p. 35, pl. 1, figs. 5, 8a-c; Keyes, 1894, p. 238, p. 32, figs. 8 a-d, 9 (not 8e); Weller, 1898, p. 422; Girty, 1903, p. 447; Grabau & Shimer, 1910, p. 304; Walter, 1924, p. 335, pl. 26, figs. 27, 28.

*Proetus longicaudus* Hall, 1861, p. 80; Hall, 1862, p. 168, pl. 10, figs 32-34; Williams, 1881, p. 156; Hall & Clarke, 1888, p. 121, pl. 20, figs. 32-34; Weller, 1898, p. 505.

*Phillipsia (Griffithides) sangamonensis* Meek & Worthen, 1865, p. 271-273.

*Phillipsia nodocostatus* Hare, 1891, p. 33, pl. 1, figs. 1a-c; 2-4, 7; Weller, 1898, p. 23.

*Ameura sangamonensis* Weller, 1936, p. 713-

714; Shimer & Shrock, 1944, p. 637, p. 275, figs. 25-27; Pabian & Fagerstrom 1968, p. 205, 206, fig. 10.

*Ameura major* Weller, 1936, p. 714; Shimer & Shrock, 1944, p. 637, pl. 275, figs. 23-24; Chamberlain, 1969, p. 61-62, pppl. 13, figs. 17, 20, 21.

*Ameura missouriensis* Chamberlain, 1969, p. 60-61, pl. 13, figs. 15, 16, 18, 19, 32-34 (see for synonymy to date).

The above 33 lines, the synonymy, show what previously described species P&F think should now be included in *A. missouriensis*.

The authors believe that the genus is valid. They may emend or restrict the generic concept, or even suppress the genus upon presenting new evidence for doing so.

The synonymy shows what previously described species P&F (and only P&F) consider to be of the same species, or synonyms.

The type species shows what the authors consider to be the basis for the genus having been erected originally, and a listing of species they include in the genus may follow. Other authors may include other species or delete some of the species listed here.

The authors accept the genus *Ameura* as erected by Weller in 1936. The type species shows that *Ameura* was based on the species *Phillipsia missouriensis* described by Shumard in 1858. The species' author's name in parentheses shows that the species was originally described as a species of another genus, in this case, *Phillipsia missouriensis*. Anytime a species is assigned to another genus, the species' author's name is placed in parentheses. When Weller erected *Ameura* in 1936 and placed *P. missouriensis* in it, he created a new combination. A new combination can be indicated by placing the original authors name in parentheses and the combiners name outside, such that you would read: *Genus name species name* (Original

author) New Combiner, date. When a species name is given with the author(s) name(s) out of parentheses, it is exactly as the original author(s) described it.

The synonymy here shows that 8 species have at one time or another been called what P&F now consider to be *Ameura missouriensis*. The first species name *missouriensis* always has priority and it is interesting to point out here that it has a one page priority (p. 225) over the species *major* (p. 226), so that priority can be measured in single pages over a few minutes or numerous pages over many years.

Pabian & Fagerstrom (1971, p. 814-815) described a new species in the genus *Anisopyge*. The headings for their description are as follows:

Genus ANISOPYGE Girty

*Anisopyge* Girty, 1908, p. 505-506; Weller, 1944, p. 321; Weller, 1959, p. 0402; Cisne, 1971 (*partim*).

(The above lines give a history of the genus name and how it was used; (*partim*) means that P&F did not include all of Cisne's species of *Anisopyge*)

*Type species.*—*Phillipsia perannulata* Shumard, 1858, p. 269; 1859, p. 388.

(These lines show the species from which Girty derived the genus *Anisopyge*.)

*Other species included.*—*Anisopyge inornata* Girty 1909, p. 118; Cisne, 1971. *A. sevilloidia* Chamberlain, 1970; *A. whitei* Pabian & Fagerstrom new species.

(The above lines show what species P&F included in the genus *Anisopyge*)

Sections with remarks about the generic concept; the stratigraphic distribution, geographic distribution, preferred environments for the genus, etc., may follow, leading up to the heading:

*Anisopyge whitei* Pabian & Fagerstrom,  
1971

new species

Plate \_\_\_\_\_, figs. \_\_\_\_\_

The heading for the new species shows its name, the name(s) of its author(s), and is followed new species or n. sp. A figure reference is given and this is followed by *description* and *remarks*.

*Description.*--The telegraphed description that includes all of the salient features of the new species appears here.

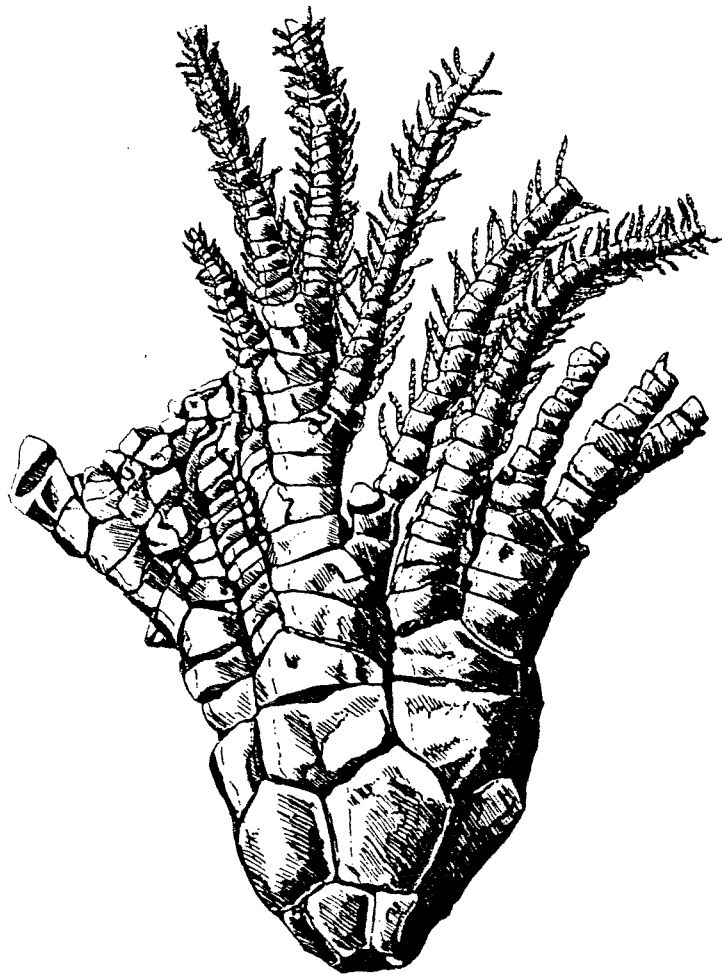
*Remarks.*--This includes material on how this species varies from others; its environment, distributions, etc.

*Material studied.*--This includes a list of materials that were studied; their sources of origin and their permanent repositories. In the case of a new species, a holotype specimen and paratype specimens (if there are any) must be so designated.

The heading for the new species shows its name, the name(s) of its author(s), and is followed new species or n. sp. A figure reference is given and this is followed by *description* and *remarks*.

This will continue next month with an explanation of what all of the ----*ensis*'es and ----*orum*'s or those strange suffixes and prefixes tell the paleontologist.

Roger K. Pabian



### About the crinoid above.

Quite a few invertebrate fossils have been named for the State of Nebraska. These will be the subjects of some future educational notes. The crinoid crown above is probably the finest example of the early Permian species *Nebraskacrinus tourteloti* Moore, 1939. This example was collected by Gordon Baird in 1968 from outcrops of the Grant Shale Member of the Winfield Limestone Formation near Odell, Gage County, Nebraska. This example is a topotype as it was collected from the same area at which R. C. Moore collected the holotype specimen. The species was subsequently re-described by Pabian and Strimple in 1974. Illustration by Frances Gould. RKP

## 1999 ELECTED OFFICERS

<b>President</b>	Edward Ridge, 2507 A Street.	Lincoln, NE 68502	477-8469
<b>1st Vice-Pres.</b>	Kenneth Doe, 925 El Avado Avenue	Lincoln, NE 68504	466-4877
<b>2nd Vice Pres.</b>	Jim Atkins, 1333 So. 15 St., Apt. 1	Lincoln, NE 68502	438-2434
<b>Secretary:</b>	Vera Lyman, 420 N. 56th St.	Lincoln, NE 68504	464-6089
<b>Treasurer:</b>	Phyllis Parks, 2435 So. 19th St.	Lincoln, NE 68502	476-6798
<b>Board Member</b>	Marcia Eddy-Hamilton, 4903 Hillside St.	Lincoln, NE 68506	489-0716
<b>Board Member</b>	Kay Jurgens, 14421 Danvers St.	Waverly, NE 68462	786-2756
<b>Board Member</b>	Grant Bennett, 721 No. 58th St.	Lincoln, NE 68505	466-5377
<b>Board Member</b>	David Heffelbower, 1819 Washington St.	Lincoln, NE 68502	475-4713

## Nominating Committee

<b>3 years</b>	<b>Jerry Moore</b>
	<b>Kevin Schwartzman</b>
<b>2 year:</b>	Roger Pabian
	Bill Rockel
<b>1 year:</b>	Shirley Rooeckel
	Kenneth Doe

**Chairman:** Immediate Past President

## Long Range Planning & By-Laws Committee

<b>3 years</b>	<b>Charles Wooldridge, Chair</b>
	<b>Kevin Schwartzman</b>
<b>2 Year:</b>	David Heffelbower
	Jim Parks
<b>1 Year:</b>	Vera Lyman
	Roger Pabian

## Standing Committees

<b>Membership:</b>	Shirley Rockel	<b>Programs:</b>	David Heffelbower
<b>Education:</b>	Roger Pabian	<b>MWF Liaison:</b>	Vera Lyman
<b>Field Trips:</b>	Jerry Moore, Coordinator	<b>Scholarship:</b>	Susan Taylor
<b>Historian:</b>		<b>Christmas Party</b>	
<b>Hospitality:</b>	Eddie "Lightning" Ridge	<b>1999 Show:</b>	Jim Marburger
<b>Study Coordinator?:</b>		<b>2000 Show:</b>	John Harrison
<b>Housing/Property:</b>	Jim Parks	<b>2001 Show:</b>	
<b>Youth Activities:</b>	Kay Jurgens	<b>1999 Swap:</b>	David Heffelbower
<b>Librarian:</b>	Roger Pabian	<b>2000 Swap:</b>	

**Auditing Committee?:**

**Gem Palette Correspondent:**

**Geology Day Coordinator:** 2nd Vice President

L. G. M. C. Web Page Address :

<http://nesen.unl.edu/lgmc/lgmc.html>

## Your PICK & SHOVEL Staff

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<b>Circulation:</b>	Jim Parks 476-6798

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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 but 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, particularly youth and student groups.

## J. J. & L. ROCKS and MINERALS


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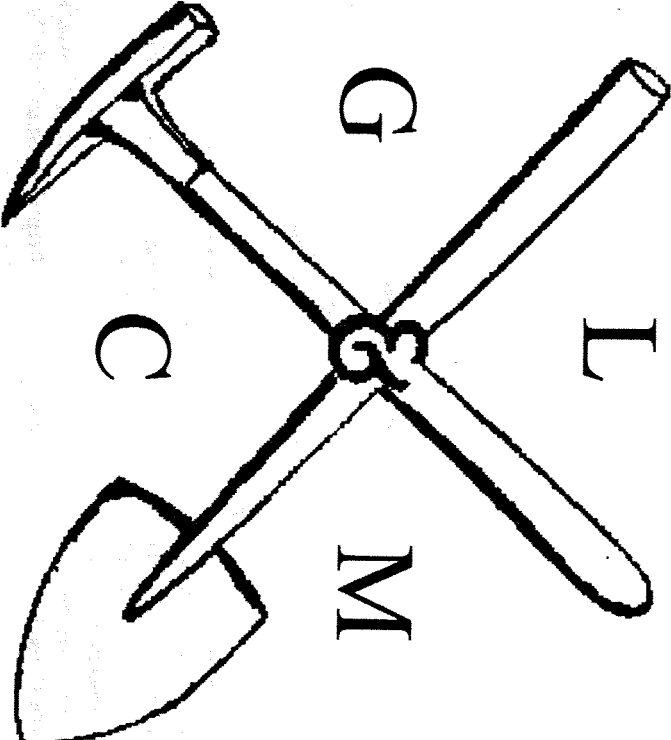
Dues to Lincoln Gem & Mineral Club are as follows:

<b>Adult</b>	(ages 16 and over)	\$10.00/yc
<b>Junior</b>	(ages 12 to 16)	\$2.00/yc
<b>Family Membership</b>	(Husband, wife, resident children under age 16)	\$22.00/yc

New memberships must be approved by the Board, after the applicant attends at least one meeting of the club and pays the above dues plus a \$5.00 registration fee.

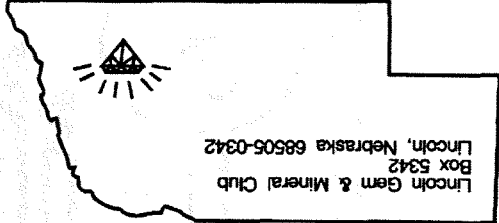
# THE PICK & SHOVEL

JANUARY 1999



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LINCOLN, NEBRASKA

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