

## CALENDAR

### CHRISTMAS BUFFET & MEETING

Sunday December 12, 1999 - 5 to 9 PM  
Antelope Park Shelter

Turkey & Dressing Ham  
(Provided by LGMC)  
Casseroles, Salads, Desserts  
(Provided by YOU -Club Members)  
Coffee - Punch (By LGMC)

Please bring your own table service, your family and your Christmas Exchange Gift along with your favorite Christmas Buffet Dish to share. Susan McMahan will be our Hostess. Roger Pabian is planning a slide program on "Adventures with Agate".

Editor's Note: Please re-read your November Calendar Page for further enthusiasm from me as I am not sure I'll even be able to finish this page. My **COMPUTOR** is giving me grief. I'm afraid to try the Christmas color, I'm several days later than I wanted to mail and I can't seem to get in the groove. It has me ready to give up completely so I hope you will all put on your Christmas Smiles and be there on Sunday to help get me back on track. **Apologies- Phyll**

Remember January 22, (**THE FOURTH SATURDAY**) is our Annual Indoor Swap.

Welcome these Officers and Board Members who were elected at our annual meeting in November!!

President	Edward Ridge	Board Members:
1 <sup>st</sup> Vice President	James Atkins	Kenneth Doe
2 <sup>nd</sup> Vice President	Grant Bennett	David Heffelbower
Secretary	Vera Lyman	Brett Jurgens
Treasurer	Phyllis Parks	Susan McMahan

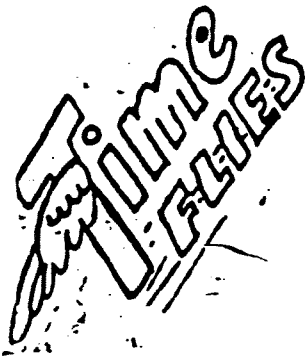
Our Thanks to Kay Jurgens and Marcia Hamilton-Eddy who are retiring with hopes of assisting with club activities in other ways.

**NEXT LGMC SHOW - MARCH 25-26, 2000, Pershing Auditorium**  
(Our 42<sup>nd</sup> Annual Show)

### DUES ARE DUE

LGMC By Laws state that dues are due by January 1<sup>st</sup> of each year and must be paid before January 31<sup>st</sup> or they become delinquent and a \$5.00 reinstatement fee will be assessed. You may begin paying dues anytime after November 1<sup>st</sup>. Make your checks payable to Lincoln Gem & Mineral Club, Inc. and send them to P. O. Box 5342, Lincoln, NE 68505. Dues are \$10.00 per adult member, \$2.00 per youth or \$22.00 for a family including all youth under 16 years of age. New memberships only require an additional \$5.00 per family as a registration fee.

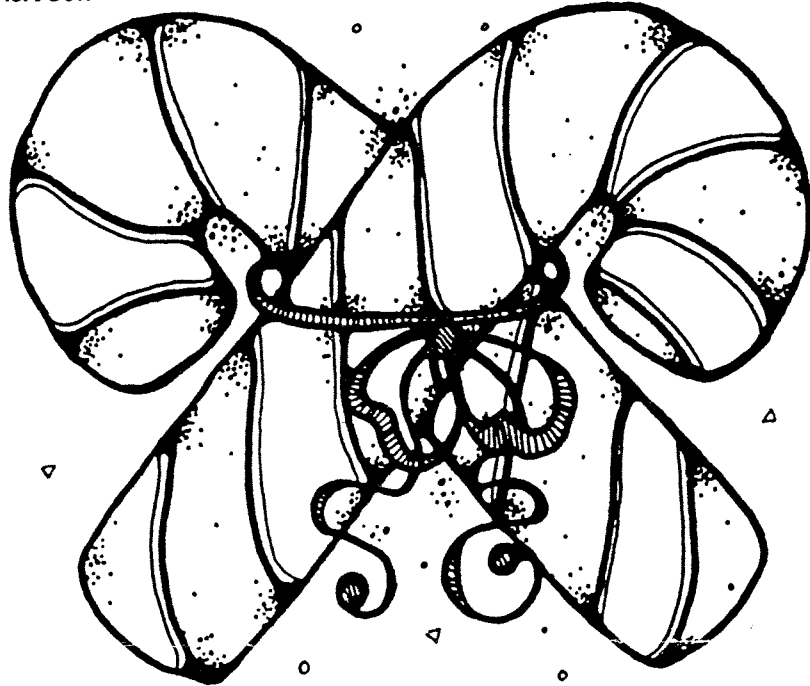
We urge you to subscribe to the Nebraska State Association publication 'The Gem Palette' at this time to assure yourself of news from other clubs in Nebraska. Please add \$3.25 per family and we will forward names to the NAOESCI Treasurer and the Editor.



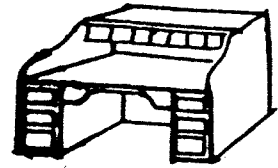
# Youth Notes

by Kay Jurgens

Christmas is just around the corner, and every child I know is already thinking of it. When asked "What month is it?", some reply "Christmas". We hope everyone can join us for our annual Christmas party. We will have good food, good fun, and good friends! Bring a gift for the gift exchange. It should be rock-related.



## From The President's Desk



Hello LGMC Members

I want to THANK all of the LGMC Members who have supported our activities in 1999 and want to wish you a big Seasons Greetings as we go into the next millennium. Thanks to both the 1999 and the 2000 Board of Directors that have helped and will keep helping conduct the plans for Lincoln Gem & Mineral Club.

Our Christmas Dinner will be at Antelope Park Shelter again and I hope that more members will attend and help make it special. Susan McMahan has accepted the chairmanship and has several volunteers to make it a good time. We'll have coffee, fruit drink, meat and dressing by the club and look forward to all the customary good food that the members bring to share. We'll have decorations, a tree to place your wrapped gifts for the exchange under, a great new program produced by Professor Roger Pabian and lots of good cheer.

In January it will be our 46<sup>th</sup> anniversary of the club's first meeting when our Founder, Irl Everett, researched the public library to find names of persons who were interested in 'rocks, minerals, fossils and lapidary. Then he got them together on January 15, 1955 and they started the club. We will have our 22<sup>nd</sup> Annual Indoor Swap on January 22, 2000, at The Nebraska Center, 33<sup>rd</sup> & Holdrege, from 1 to 5 PM, gather at Valentinos for supper then have our meeting at 7:30. Remember- everyone should be there to discuss and decide if we will be able to invite the federation to join us for another show after the year 2001.

February 13<sup>th</sup>, 2000 we are scheduled to support our Geology Day at Pioneer Park where they give us a big room, lots of tables & chairs, much encouragement and help us promote our hobby, our next show and other activities. We often get new members at these activities.

It is also time to start planning your displays, arranging for time to help and put some extra money away to spend at our 42<sup>nd</sup> Annual Gem & Mineral Show on March 25 and 26, 2000. John Harrison is Show Chairman so let him and his committees know what you will be doing for the Show.

In April we plan to present our Scholarship Grant for 2000. Special plans are in progress.

In May we'll close our spring meetings and let you know what we have planned for Summer activities.

I hope to see all of you at the Christmas meeting on December 12. Don't forget your wrapped gift for the exchange.

Have a great Christmas Season and go into the New Year with good health.

Edward Ridge

## Second Vice President Sez-

First I would like to thank all of you who voted me into office. It is too bad more members were not present for the voting. It seems to me that only a few of you are proud to be a member. I realize at times circumstances prevent some from attending every meeting. But remember it takes all of us to keep a good club from folding. Ideas are always welcome to keep up the interest of all members. I'm asking all members to think about this. Be a good member and help the club grow. Just had to get that out of my system. Please be a good member and participate in the club activities.

Will give you a birds eye view of my background. Born in southeast Iowa on a farm. Entered the US Navy in World War II. Served in the South Pacific. War was over and got out of the Navy. Did not stay out long. Then joined the Army Air Force. Which at a later date became the USAir Force. Two more wars, Korea and Viet Nam. Traveled throughout the world. Spent 30 years in the military.

Didn't become interested in lapidary until the late 60's. Looking back and can see where I missed out on some fantastic lapidary material. Retired at Travis Air Force Base in California. Became a member of the Vallejo Gem and Mineral Society of California. Later helped found the Fairfield Lapidary Society of California of which I am a Charter Member. Held most all offices in both societies many times. I'm also a member of Ye Old Timers Mineral Club which it is an international club of approximately 1200 members. With members through out the United States, Canada, and Australia. Have held the offices of 2<sup>nd</sup> VP and 1<sup>st</sup> VP. Am now a director. On a tour of Thailand I became interested in lapidary. After not finding commercial findings I turned to making my own in silversmithing.

Moved to Lincoln, Nebraska where I promptly joined The Lincoln Gem & Mineral Club, Inc. After a little while I was asked to be the Club's Reporter to the State Association Bulletin, The Gem Palette. Then at a later date I became a member of Board. Now it seems as if I have been elected to 2<sup>nd</sup> Vice President's position. I am also a director of the Nebraska Association of earth Science Clubs. So in some instances I'm in a daze. Please forgive me for it does pass on. Have missed a number of meetings myself. But I do enjoy traveling to the Gem Shows around the country. You may have read some of my stories "Adventures by Grant".

Here is hoping I can meet more of you at future meetings. It is really helpful to wear your name badge. I have a terrible memory. Thanks for lending me your time and patience.

See you down the road at a future club meeting. Grant D. Bennett, 2<sup>nd</sup> VP

Editor's Note: Thanks, Grant, for this brief resume. I wish each new member would share this same type of information with us so we could get to know them better and have them share more of the activities of the club. My own enthusiasm for the club makes me want to share in all of it's planned activities and new enthusiasm is needed to keep all activities (and perhaps a few new ones) as we try to increase the awareness of our wonderful hobby. Pnp

DUES ARE DUE

LINCOLN GEM & MINERAL CLUB, INC. - BOARD OF DIRECTORS - Nov. 2, 1999  
7:00 P.M. @ Kinkos, 48th & Vine (Conference Rm)

Meeting called to order with 7 Board members present and 2 guests,  
Shirley Rockel & Suzy McMahon.

Minutes of previous Meeting approved with motion by Phyllis, 2nd by  
Jim Atkins, Treasurer's report also approved with motion by Grant  
Bennett, 2nd by Jim A. Both motions carried.

BILLS: Presented for payment and approval with motion by Vera L.,  
2nd by Grant B. Carried.

OLD BUSINESS: Scholarship - \$ 500. deposit has been made to UNL  
Foundation. Chairperson Susan Taylor reports that UNL prefers to  
have presentation done at our April Meeting to give the students a  
better chance to apply after the holidays and also the money would  
be used by student during summer when they have to work in the fields.  
(If this is not satisfactory with the Board, they would have to make  
their wishes known to the Chair so she could notify UNL)

NAOESCI REPORT - Grant Bennett (@GI Show)

New State Officers - Ed Anderson - President  
- Donna Farlo - Sec/Treasurer  
- Ben Vrana - Vice President  
- Directors - Maurice Peterson  
Grant Bennett  
Irma Pharoah

Seven Clubs were present. Schyler will host State Show in 2000

Grand Island will host State Sway in 2000

SHOW: Contract with Pershing are being prepared and will be sent out,  
as follows: 2002 - March 23-24      2004 - March 27-28  
                  2003 - March 29-30      2005 - March 26-27

NEW BUSINESS: Approval by Board to pay following for 2000

MWF - \$ 2.00 per adult member

NAOESCI - \$ 1.00 per adult + 50¢ for Juniors

Friends of Museum - \$ 60.00

Keep our own insurance.

Motion by Vera L., 2nd by Kay J. to pay storage for ½ year. Carried.

No Silent Auctions or Swaps in City Parks. (no exchange of monies)

Nov. 20 - General Meeting - Silent Auction - Roger Pabian requested funds  
for Lapidary Fund.

Dec. 12 - Christmas Party - 5-9 P.M. Antelope Park

Chair - Suzy McMahan

Jan. 22, 2000 - Swap - NCCE - Scottsbluff/Minden Rms

Chair - Charles Wooldridge

Board Meeting - Dec. 1, 1999 7:00 P.M. @ Kinkos, 48th & Vine.

Respectfully submitted,

*Vera Lyman*  
Vera Lyman, Secretary

**NOTICE ALL LGMC MEMBERS:** The **QUESTION** of our club possibly hosting a Midwest Federation Show in  
or after 2001 has been asked. It was tabled until January 2000 so that research could be done regarding the needs of  
the Federation for such an event. This venture would require the assistance of all members and more time and space  
than we usually need for our annual shows. There would be attending benefits, possibly much larger attendance, some  
planned meetings, and part of the net profit would go to the Federation. Please be ready for final discussion and a  
decision at the January Meeting.

LINCOLN GEM & MINERAL CLUB, INC. - GENERAL MEETING \_ Nov 20, 1999  
7:00 P.M. @ NCCE - Beatrice Rm.

Meeting called to order with 12 members and 3 juniors present.  
Guests were Aaron Nelson, Mr. Bingel & Billie Heffelbower.  
Oct. minutes approved with motion by Grant Bennett, 2nd by Charlene  
Bingel. Carried.

Treasurer's report approved with motion by Charles W., 2nd by Dave H.  
Carried.

OLD BUSINESS: When contracts from Pershing are received, they will be  
presented for approval.

Susan McMahan, Christmas Party Chair, has requested that there be a  
gift exchange for the Christmas Party. (Hobby related gifts- \$5.00)

Show Budget for 2000 - Board recommends its approval. Changes in  
Security & Publicity only from last year. So moved by Charles W.  
2nd by Jim A. Carried.

NEW BUSINESS: Election of Officers for 2000

Charles W., nominating Chair, intertained motion to suspend rules.  
2nd by Phyllis P. Carried.

Motion by Grant Bennett to vote slate as printed. 2nd by Phyllis P.  
2 nominations needed from floor for 3-year terms on Nominating Comm.  
Nominated were Jim Parks, Charlene Bingel.

Vera L. moved that nominations cease, 2nd by Dave H. Carried.

REPORTS/COMMUNICATIONS:

Jan. Swap. - Chair - Charles Wooldridge. Roger Pabian working on flyers.

Adeline Nolde @ Homestead Nursing Home (Temporarily) Under the weather  
and they felt she should stay rather than at home alone.

Board Meeting - Dec 1, 1999 @ 7:00 P.m. Kinkos.

Respectfully submitted,

*Vera Lyman*  
Vera Lyman, Secretary

**LGMC Treasurer's Report for November 1999**

	NBC Checking Balance October 31, 1999	\$4627.61
Receipts:		
Membership Dues Prepaid for 2000	116.00	
Member Subs. Prepaid State 'Gem Palette'	13.00	
Member Donation to LGMC Ed/Schol. Fund	40.00	
Key Deposit Check-Oct. Returned to void	50.00	
Nov. Silent Auction (Spec. Lap. Equip. Fund)	66.00	
Show Dealer Space for 2000 AD	<u>800.00</u>	1085.00
Payments:		
November Board Meetings at Kinko's	20.00	
Printing Nov. Pick & Shovel	52.08	
Purchase 3 month Certificate of Deposit	<u>4000.00</u>	<u>4072.08</u>
	NBC Checking Balance November 30, 1999	\$1640.53

Invested 2000 Show Monies in short term Cert. Deposit so they would be available for early show payments.

Rewrote 2 10 month Cert. Deposit for 13 month period at better rate of interest. (4.82 up to 6.01) Interest deposited  
in Money Market Account as usual.

## Turquoise, December's Birthstone

Roger K. Pabian

If you were born in December, you have the choice of at least two different birth stones. Turquoise is one of the choices and zircon is the other. Historically, Turquoise has been a very important and long used stone. It has been found among Egyptian artifacts including jewelry and decoration on tombs. The term Turquoise is probably derived from the French pierre turquoise (Turkish stone). The name appears both with a final "e" (turquoise) and without the final "e" (turquois). Mineralogists have preferred the latter spelling and it is the custom of the jewelry industry to apply the names and spellings as do the mineralogists since mineral names are generally universal throughout the scientific world.

In the old world, the Egyptians and Persians and Mongols valued Turquoise highly. Turquoise is a very popular stone in Tibet. The Persians were extremely fond of fine, sky blue turquoise and the name "Persian Turquoise" is now applied to these stones as a color grade rather than as an indication of source area. In the New World, the Aztecs and Incas utilized turquoise but the American Indians of the Southwest have probably brought more attention to this stone in recent years than any other culture. Visits to jewelry stores, art and craft shows and gem and mineral shows will usually provide many examples of squash blossom necklaces and thunderbird motifs.

Turquoise is a hydrous phosphate of aluminum and copper  $\text{CuO} \cdot 3\text{Al}_2\text{O}_3 \cdot 2\text{P}_2\text{O}_5 \cdot 9\text{H}_2\text{O}$ . Most turquoise has been found in deeply weathered and altered rhyolitic volcanic rocks. Turquoise may be a weathering product of the mineral apatite, or it may even include some organic phosphate. Turquoise forms triclinic crystals---three unequal axes, none of which intersect at right angles. Only micro- or very minute crystals of turquoise are known. Strangely, the most common occurrence of turquoise crystals has been in Virginia, an area from which little, if any, gem turquoise has been produced. Turquoise is fairly hard, 5-6 on a scale of 10. It may be chalky to brittle, the latter showing a conchoidal fracture. Better rough grades may have a waxy luster whereas lower grades are dull. The chalky material is often impregnated with a resin to make it more durable and more lustrous. The resin-treated turquoise can usually be detected by odor. The specific gravity ranges from about 2.60 to 2.83.

Turquoise is almost always opaque but rare, translucent stones are known to exist. The refractive indexes range from 1.61 on the low end to 1.62 in the middle and 1.65 on the high side of the scale. It is biaxial positive and has a fairly high dispersion. Optical tests are usually not needed to determine if a stone is turquoise as physical tests will almost always suffice.

Turquoise may form as chalky coatings or finely disseminated crystals in small cavities and crystal interstices in the host rock. This fact has led to the development of reconstituted turquoise. The rock that contains turquoise is finely pulverized and the turquoise is separated from the gangue by a flotation process. The pulverized turquoise is placed into a bomb and it is injected with a resin to form a brick. Pulverized pyrite and other natural appearing inclusions may be added to the mixture to produce a more convincing turquoise substitute. Finer grades of turquoise are usually blue to blue green and names such as "robin's egg blue" or "sky blue" have been used to describe these stones.

Several natural and synthetic things may be confused for turquoise. Vivianite is a hydrous ferrous phosphate,  $\text{Fe}_3\text{P}_2\text{O}_8 \cdot 8\text{H}_2\text{O}$ , that may impart a blue color to fossil bones. Some of this material is sometimes offered under the trade name of bone turquoise. The bluish tinge shown by many of the fossils in museum exhibits is due to the presence of vivianite.

Continued next page

## TURQUOIS (continued from page 5)

Variscite is a yellow-green to blue-green hydrous phosphate of aluminum,  $AlPO_4 \cdot 2H_2O$ . It is much softer than turquoise and crystallizes in the orthorhombic system. Malachite, a copper carbonate,  $Cu_2(OH)_2CO_3$  is a very deep blue green and usually has a layered structure. Chrysocolla is a hydrous silicate of copper,  $CuSiO_3 \cdot 2H_2O$ , that is only 2 to 4 hard and has a specific gravity of about 1.46 to 1.57. Chrysocolla may often be impregnated with or suspended in chalcedony and produce a very hard but deep blue green stone.

Colored glass is often sold as a turquoise substitute and it usually shows swirls, bubbles, and a conchoidal fracture. It may contain some added, pulverized pyrite or bronze foil. Plastic will have a very low specific gravity and often show bubbles. It will melt and emit an odor if a non-conspicuous point of the stone is touched with a hot needle.

## For Further Reading:

Ford, W. E., 1958. Dana's Textbook of Mineralogy. 19th Edition. John Wiley & Sons, New York, 851 p.

Schumann, W., 1997. Gemstones of the World, Revised and Expanded Edition, Sterling Publishing Company, New York, 271 p.

Shipley, R. M., 1971. Dictionary of Gems and Gemology. Gemological Institute of America, Los Angeles, 230 p.

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Paragraphs clipped from the November & December Midwest Federation Newsletter by Editor:

**Willis Smith, our new President, reported the following...Clubs in his area, St. Louis, have sent information about their club to the attendees of shows taking place in the area, which has resulted in new members!!! Let's all try this, might be the answer to our problem of declining membership. A lot of people will not take the time to join a club while visiting their show, but could very well join after they have gone home, and given it some thought.**

**HOW DO YOU BUILD A "MAILING LIST". Easy, people are more than happy to fill out a "Door Prize" form, IF you have a nice door prize, and they stand a chance of winning it. Works at our Kalamazoo show...we have over 1400 names on our mailing list...people that we send a flyer each year, reminding them of the show...after three years, if they haven't attended, they are dropped from the list.**

**REMEMBER...Nothing is achieved before it is thoroughly attempted.**

*Dec 99 M.F.  
News Letter*

**It appears we have to go on a recruiting drive. The Federation lost 3 clubs and ??? members this past year. This involves all of us. The Rockwood Club here in Missouri is using the Associations' mailing list to recruit more members. The Mineral Area Gem & Mineral Society has used the successful Missouri Mine All State Swap to increase their membership. A new club is being formed in St. Charles County. They too used the mailing list of the Association from the recent show. My next job is to see that they are recruited into the MWF. A successful club has a quality program every month, and it has a field trip every month. It should set up a junior program, and must have presentations to the public. The presentations can be an annual show, or place exhibits in schools, museums, libraries, etc.**

*Nov 99 MWF  
PRES*

## 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 Roockel
	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>	

**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

<b>Publisher:</b>	Lincoln Gem & Mineral Club, Inc., P.O. Box 5342, Lincoln, NE 68505-0342
<b>Editor:</b>	Phyllis Parks 476-6798
<b>Business Reporter:</b>	Vera Lyman 464-6089
<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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Read your bulletin for new materials or specials from the above advertisers.

Advertising by rock-hobby business or interest is permitted with the approval of the Board. The rate now 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 the bulletin as space permits.

Subscription to the *PICK & SHOVEL* are \$10.00 per year mailed.

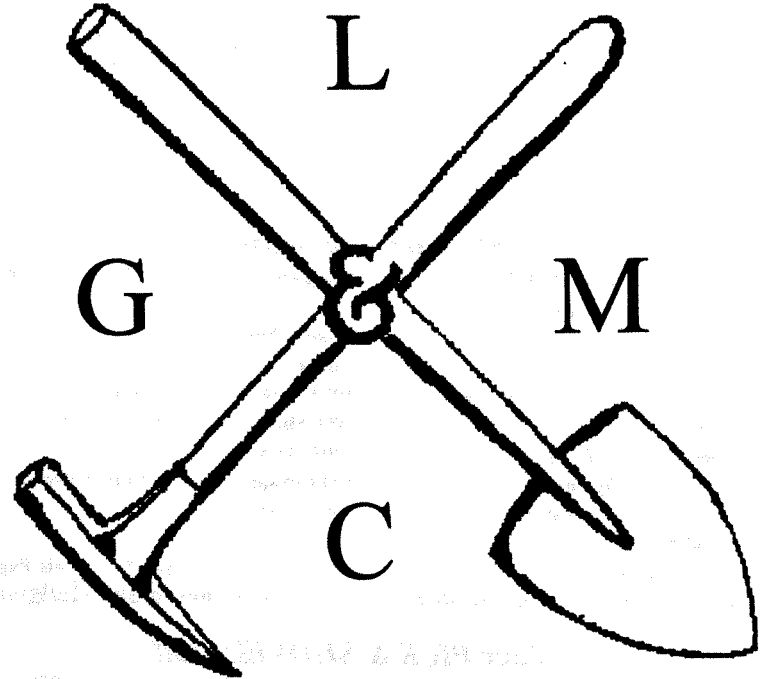
Dues to Lincoln Gem & Mineral Club are as follows:

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

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.

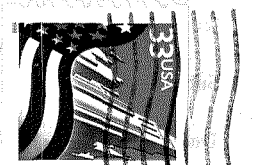
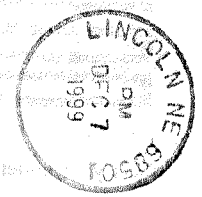
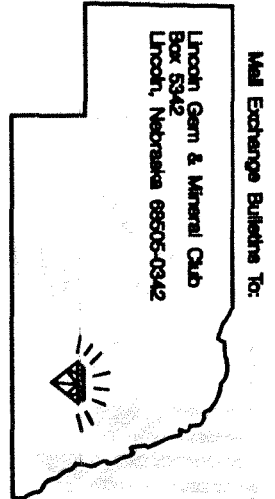
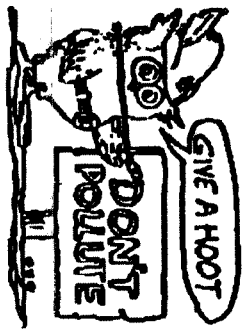
# THE PICK & SHOVEL

DECEMBER 1999



OFFICIAL PUBLICATION OF  
LINCOLN GEM & MINERAL CLUB

LINCOLN, NEBRASKA



**H. E. L. P.**  
Help Eliminate Litter Please

Associated with



Susy McMahan  
5636 Greenwood St.  
Lincoln, NE 68507  
|||||