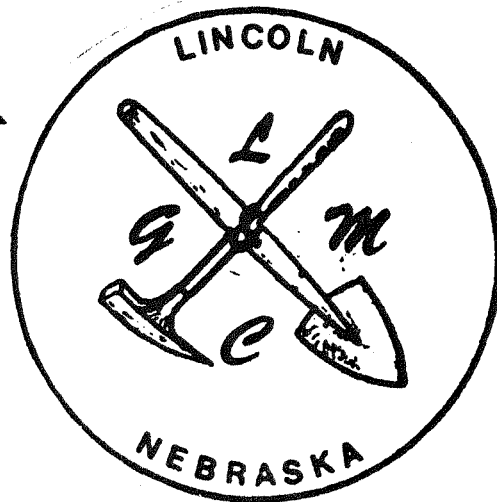


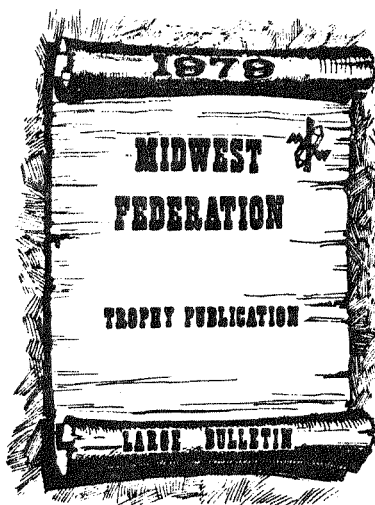
# THE PICK & SHOVEL



FEBRUARY 1981

*highlights*

*in*  
*this issue...* "PAINLESS SILVER PICKING"



OFFICIAL PUBLICATION OF

Lincoln Gem and Mineral Club, Inc.

P. O. Box 5342

Lincoln, Nebraska 68505

LINCOLN GEM AND MINERAL CLUB, INC.  
P.O. BOX 5342, Lincoln, NE. 68505

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.

MEMBER: American Federation of Mineralogical Societies (AFMS)  
Midwest Federation of Mineralogical and Geological Societies (MWF)  
Nebraska Association of Earth Science Clubs, Inc. (NAOESCI)  
Nebraska Academy of Sciences (NAS)  
Community Arts Council of Lincoln (CAC)

Regular Meetings: 4th Saturday of the month, September thru May; 7:30 P.M.  
At Nebraska Center, 33rd & Holdrege

1981 ELECTED OFFICERS:

President.....	Roger Pabian	315 'D' St.	Lincoln, 68502	474-2034
1st Vice Pres....	Irl Everett	2945 N. 65th St.	Lincoln, 68507	466-6204
2nd Vice Pres....	Howard Taylor, Jr.	910 New Hampshire	Lincoln, 68508	476-3707
Secretary.....	Nelda Oliver	5700 Otoe	Lincoln, 68506	489-5222
Treasurer.....	Phyllis Parks	2435 S. 19th St.	Lincoln, 68502	476-6798
Board Member....	Ray Lambert	1201 N. 79th St.	Lincoln, 68505	464-8552
Board Member....	Virginia Green	6120 The Knolls	Lincoln, 68512	423-5032
Board Member....	Lois Everett	2945 N. 65th St.	Lincoln, 68507	466-6204
Board Member....	Florence Boring	2836 S. 40th St.	Lincoln, 68506	488-6243

Nominating Committee--3 years: Marie Taylor, Jim Parks  
2 years: Bob Walker, Irl Everett  
1 year: Wilfrid Wittman, Edwin Johnson

STANDING COMMITTEE CHAIRPEOPLE:

Programs.....	Howard Taylor	1981 Show.....	Howard J. Taylor, Jr.
Education.....		Liaison/Calling.....	Marie Taylor
Hospitality.....	Bob & Mary Walker	Refreshments/Party....	Marj Heedick
Historian.....	John & Lillie Lewis	Scholarships.....	Howard Taylor
Librarian.....	Jim Parks	Outside Displays.....	Frank Rule
Membership.....	Mary Lambert	Housing/Property.....	Bruce Simon
Field Trips/Safety..	Walt McCoy	Publications.....	Glen & Flossie Litzenberg
Sunshine Corner....	Susan Taylor	Junior Activities.....	Mary Walker
NAOESCI Reporter....	Vera Lyman	Auditing Comm.1980....	Howard Taylor, Vera Lyman, Florence Boring

LONG RANGE PLANNING AND BY LAWS COMMITTEE:

1 year-Nelda Oliver, John Harrison      2 years-Jim Parks, Phyllis Parks  
3 years-Howard Taylor, Marie Taylor

PICK & SHOVEL STAFF:

Chairman: Glen Litzenberg

Editor.....Vera Lyman, 420 N. 56th St. Lincoln, NE 68504  
Club News.....Helena Baegl  
Sunshine.....Susan Taylor  
Circulation...Glen & Flossie Litzenberg

DEADLINE: 1st of Month of Issue. Original articles may be reprinted if credit is given the author and THE PICK & SHOVEL and a copy of the publication is sent to the Editor.

CALENDAR

General Meeting: Saturday, February 28, 1981  
 Nebr. Center for Continuing Education  
 33rd & Holdrege  
 Norfolk Room

Parking available north of building

Regular business meeting beginning  
 at 7:30 P.M. followed by a special  
 Program: "Gems of the Americas".

Board Meeting: Thursday, March 5, 1981 7:30 P.M.  
 5700 Otoe Street (Nelda Oliver home)

Jr. Activities Meeting:  
 Friday, February 20, 1981 7:30 P.M.  
 3029 T Street - Walker home  
 Mary Walker, Jr. Activities Chairperson

SHOW: 23rd Annual Show  
 April 11-12, 1981  
 Agricultural Hall  
 Nebraska State Fairgrounds

Be sure and mark these dates on your calendar.

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STATE SHOW: Nebraska Mineral & Gem Club  
 September 5-7, 1981  
 Omaha, NE

HASTINGS: Central Nebraska Rock & Mineral Society  
 April 17-19, 1981  
 4-H Building, Adams County Fairgrounds  
 South Baltimore, Hastings, NE

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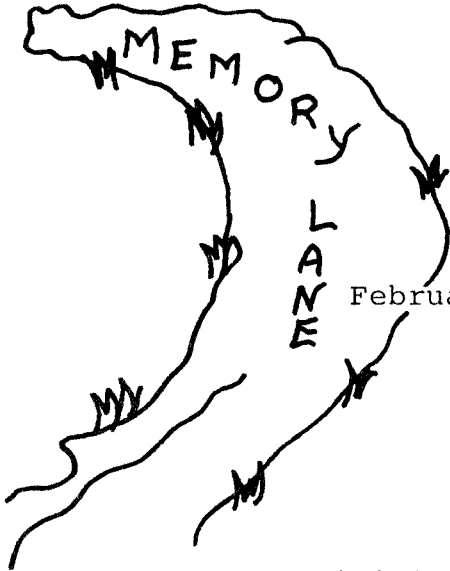
1981 FEDERATION SHOWS:

CALIFORNIA Anaheim, California August 7-9	EASTERN Lexington, Kentucky June 26-28	MIDWEST South Bend Indiana July 23-26	NORTHWEST Kent, Washington August 21-23	ROCKY MOUNTAIN AFMS SHOW Salt Lake City, Utah June 4-7	SOUTH CENTRAL Lubbock, Texas April 24-26
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HISTORY - "Ten and Twenty Years Ago"

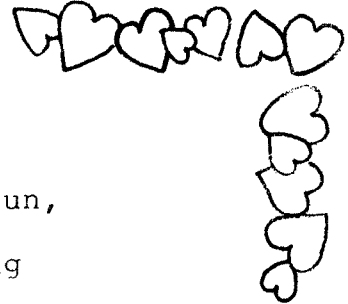
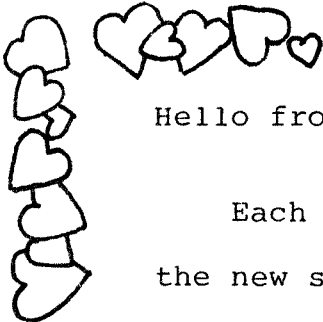
February 1971 . . We were still meeting at the W.O.W. Building. Program was presented by G. W. McKinney, Program Chairman, who had a colored movie entitled, "Rise and Fall of the Great Lakes."

The LGMC members were also working with the University at Morrill Hall in cleaning and preserving fossils.



February 1961 . . Big Change! We moved from the Morrill Hall to the Muny Building, 2200 'M' Street. We set the dates for our 3rd Gem Show. It was held October 7-8. Dr. Gibson was asking for 150 cases. It was to be held at the National Guard Armory.

\* \* \* \* \*



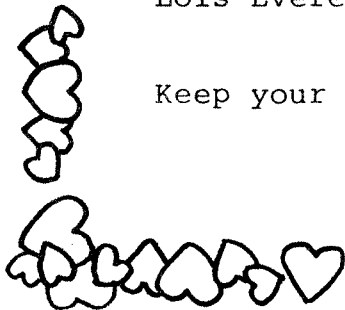
Hello from the Sunshine Corner:

Each soul must meet the morning sun,  
the new sweet earth, and the awakening  
stillness alone.

This month get well cards were sent  
to Earl Messelheiser and Irl Everett.

A sympathy card was sent to Irl and  
Lois Everett.

Keep your smiles Sunshine bright!



## THE PRESIDENT'S PAGE-----THE GRAVITY OF THE SITUATION

Several members have asked for a brief explanation of how the property of specific gravity is used in mineral and gem identification. The specific gravity is defined as the ratio of the weight of a substance to the weight of an equal volume of water. A cubic centimeter of water weighs one gram. A cubic centimeter (=cm<sup>3</sup>) of gold weighs 22 grams; therefore, the specific gravity of gold is 22.

To calculate the specific gravity of an unknown substance calls for a special balance called a jolly balance. The jolly balance makes it possible to weigh the sample in both air and water. Once the two weights are determined, the values are placed in the formula:

$$\text{Specific gravity} = \frac{\text{Weight of X in air}}{\text{Weight of X in air} - \text{Weight of X in Water}}$$

If we assume that the sample X weighs 10 grams in air and 6.2 grams in water, then

$$\text{S.G.} = \frac{10}{10 - 6.2} = \frac{10}{3.8} = 2.63.$$

Such computations as above are laborious and subjected to some error, especially when very small samples are weighed. If a sample weighs 1/10th of a gram and an error of 1/100th of a gram is made, the error translates to 10% or more.

Gemologists use heavy liquids for arriving at the specific gravity of an unknown stone. The liquids vary in S.G. A set of 6 liquids is made of those having S.G.s of 2.57, 2.62, 2.67, 2.85, 3.06, and 3.32. It is usually sufficient in gem testing to bracket the specific gravity between two figures such as 2.67 and 2.85, or to observe the reaction of the stone when it is immersed in the fluid. About 20 gem materials fall in the S.G. range of 2.67 to 2.85. Thus, one must rely on some other properties such as color, inclusions, transparency, etc. to make the final determination of what the stone is. If the stone sinks very slowly in the fluid or remains suspended in it, its S.G. is about the same as that of the fluid. For example, tourmaline (S.G. = 3.10+) will very slowly sink in the 3.06 liquid. Jadeite can be separated from nephrite because the former remains suspended in the 3.32 S.G. fluid but sinks quickly in the 3.06 S.G. fluid. Nephrite floats in both.

I will demonstrate the use of specific gravity fluids at the February meeting.

The February program promises to be quite interesting. It is the film "Gems of the Americas" that has been produced by the Gemological Institute of America and the Los Angeles County Museum. It is narrated by Richard Basehart. A review of the film has appeared in the February Lapidary Journal.

The March program will be presented by Professor Lloyd Tanner of the University of Nebraska State Museum. It will deal with fossils of the Fayum area of Egypt. Mr. Tanner was a member of several recent fossil collecting expeditions into this remote area.

Roger Pabian  
President

From the Editor's Desk . . . If we all take just a moment to recall all the comforts and freedoms that we enjoy from day to day; we cannot possibly forget all the humble people who have gone before us. Particularly, Lincoln and Washington, whose birth-days have been made national holidays and are observed this month. They truly fought for these freedoms, each in their own way; so that all of us might have them today. Therefore, we should always be thankful.

I am truly enjoying my job as Editor, even though it's not the easiest task at times. It's already become a daily challenge, and I like that.

EDITOR'S LAW: If you hit two keys on the typewriter, the one you don't want hits the paper.

\* \* \* \* \*

BRIGHTEN YOUR CORNER

We cannot all be famous  
or be listed in "Who's Who,"

But every person great or small  
has important work to do,

For it's not the big celebrity  
in a world of fame and praise,

But it's doing unpretentiously  
in undistinguished ways

The work that God assigned to us,  
unimportant as it seems,

That makes our task outstanding  
and brings reality to dreams.



So at the spot God placed you  
begin at once to do

Little things to brighten up  
the lives surrounding you,

For if everybody brightened up  
the spot on which they're  
standing

By being more considerate  
and a little less demanding,

This dark old world would very  
soon eclipse the "Evening Star"

If everybody BRIGHTENED UP  
THE CORNER WHERE THEY ARE!

- Helen Steiner Rice

Minutes - Lincoln Gem & Mineral Club, Inc.  
Board of Directors - January 8, 1981

The meeting was called to order by President, Roger Pabian on January 8, 1981 at American Charter, 40th & South with EIGHT board members and Vera Lyman, Howard Taylor, Frank Rule, Glen & Flossie Litzenberg present.

Minutes of the December meeting were read and approved with a spelling correction.

Treasurer's report: Cash on hand \$ 20.00, Transmatic Account \$ 881.14, F.F. Certificate \$ 4,059.72, NBC Checking \$ 49.02.  
Income received: Membership \$ 41.00, 2 new Members \$ 12.00.

Expenses paid out: Program \$ 15.00, UNL Foundation \$ 250.00 for two scholarships of \$ 125.00 each, \$ 12.84 Pick & Shovel Supplies, MWF Dues \$ 62.50, NAOESCI Dues \$ 42.35, Christmas meals to UNL Center \$ 314.00, \$ 19.43 Dec Pick & Shovel mailing.

Motion Virginia Green to accept treasurer's report as read, seconded Nelda Oliver. Carried.

Bills were read: Bulk mail permit increase \$ 10.00, refund for camping to Ray Soderquist \$ 24.00. Motion to pay bills as read by Ray Lambert, seconded Virginia Green. Carried.

1981 Bills: \$ 11.00 Sunshine, \$ 24.60 for Dec Pick & Shovel, \$ 10.52 Page Trophy for name plates for club cases, \$ 45.00 Film rental for Feb. program, \$ 10.66 for promotional material for swap. Motion to approve Irl Everett, seconded Jim Taylor. Carried.

No old business.

New Business: 1981 Committee appointments

Program	Howard Taylor	1981 Show	Jim Taylor
Education		Calling/Liaison	Marie Taylor
Hospitality	Bob & Mary Walker	Refreshments	Marge Heedick
Librarian	Jim Parks	Scholarship	Howard Taylor
Membership	Mary Lambert	Outside Displays	Frank Rule
Field Trip	Walt McCoy	Housing & Property	Bruce Simon
Sunshine	Susan Taylor	Jr. Activities	Mary Walker
Editor	Vera Lyman	Publications	Glen/Flossie
NAOESCI Reporter	Vera Lyman		Litzenberg

1980 Auditing Committee - Howard Taylor, Vera Lyman, Florence Boring

Irl Everett suggested the President write a letter to Marilyn Smits thanking her for all she has done for the Club.

Motion Ray Lambert Committee Appointments be approved by board, seconded Irl Everett.

1981 Budget:

Programs	\$ 400.00	Sunshine	\$ 25.00
Historian	15.00	Editor	550.00
Librarian	100.00	Refreshments	50.00
Field Trips	50.00	Bulk Permit &	
		P.O. Box Rent	68.00

Minutes - Board of Directors - January 8, 1981 -continued

Scholarship	\$ 250.00 (pd)	Rent	\$ 150.00
Outside Displays	10.00	Dues to Organizations	125.00
Housing & Property	25.00	Awards	40.00
Jr. Activities	50.00	MWF Delegate	150.00
Bond - Treasurer	60.00		

Motion Phyllis Parks to bring budget to floor on meeting, seconded Ray Lambert. Carried.

Roger stated displays at Nature Center are getting a lot of use. He asked about putting a black light display, either construct or modify a case for the BL display - this is a good place to get some additional exposure. Should post a Pick & Shovel every month

Motion Irl Everett that Board table this and bring to the floor of the Club, seconded Ray Lambert. Carried.

Howard Taylor is in charge of the Swap at the January Meeting. We will have our regular meeting room and the one across the hall. Swappers Bucks will be available. This is for the AFMS Scholarship fund.

Motion Ray Lambert all proceeds for the auction be given to the AFMS Scholarship fund to break the 1500%, seconded Irl Everett. Carried. The 1980 Show Board will donate three articles for the auction.

Jim Taylor, 1981 Show Chairman - Committee spots need filling. Hospitality for Sunday Breakfast, work shop, hospitality, ticket sales. There's a question on the Silent Auction and Raffle. Virginia Green volunteered for first aid.

No further business. Motion Ray Lambert meeting be adjourned, seconded Irl Everett.

Meeting reopened ...Vera asked about Gem Palette. Discussion on whether club should provide a subscription for the year 1981. This is 6 issues.

Motion Phyllis Parks to bring to floor of the meeting and see how many members would like to receive it. Died for lack of second.

Jim Taylor made motion we take money out of treasury revenue of 1980 Show. LGMC to buy a Gift subscription for each member family for one year, seconded Lois Everett. Carried.

Meeting closed.

Nelda Oliver, Secretary

PAINLESS SILVER PICKING (WELL, ALMOST PAINLESS!!!)

Sitting here at the end of January contemplating my latest natural gas bill, brings me to some sobering conclusions about my favorite hobby.

In case you are wondering, a hobby is defined by the American Heritage Dictionary as "An occupation, activity or interest engaged in primarily for pleasure." However, with the cost of energy skyrocketing and the pocket book being increasingly pinched, one's hobby or lack of it can become painful rather than pleasurable.

What can we do to keep our hobby related costs down? How can the dollar be stretched to its maximum efficiency? A few suggestions follow. If you fellow club members can think of others, please share your knowledge by inserting a small quip in the Pick & Shovel.

1. Car pool when going to shows, swaps, etc. The money you save on gasoline could allow for that special purchase you might otherwise not be able to afford.

2. Try to plan your silver picking activities as follows:

- a. Learn how to judge what constitutes top quality cutting materials and what lowers a material's value. Is it attractive enough to be purchased? It is an odd shape or size that can't be handled by ordinary lapidary techniques? Is your equipment adequate for the material? Is it a desirable collectible? Is it clean solid material free of flaws and impurities?
- b. Look for the best example of a given material you can find. To get the best quality materials, in most cases, you have to pay the going price. Ask the dealer for better quality materials than those on the table top. Always look toward upgrading your collection.
- c. Keep a list of the most wanted items. Remember why you are looking for the items and seriously try to locate them. An empty purse from buying non-listed junk items won't pay for that special purchase when you find it.
- d. Look at cutting materials twice before investing. Double check quality.
- e. Sample expensive materials. Cut some and see what quality of rough is being offered. Reorder if it meets your quality standards.
- f. Don't even consider purchasing if it isn't an unusual item, something you need for a project or collection or it isn't of top quality. If you can't visualize a fracture free quality finished product, forget it.
- g. Selectively work only the best materials that you can acquire. You not only waste energy and dollars but time by working with inferior materials unless a practice run is warranted by some unusual cut.
- h. Precut slabs may be the best buy. You can see what you're getting. Figure how the slab is to be used and the possible return. Buying rough can be a gambler's game.

PAINLESS SILVER PICKING - continued

- i. If you are looking for something very special and find it, buy it. The price may not always be right, but it probably isn't going to get any cheaper. It will probably end up costing you more to run around trying to find a cheaper example of equal quality assuming that one is available.
- j. Never pass up a bargain if it meets the standards for top quality. This is the only time I would deviate from my planned list of items sought.
- k. If you find a top quality item that will add to your collection or lapidary needs, buy it. Top quality is hard to find. It is probably a bargain. See equation:  
(Top Quality & Satisfaction & Beauty = Enjoyment & Value = Bargain)

This article can be summarized in two words: Planning and Quality. Conserve where possible to be able to buy top quality materials which you can enjoy. Learn the criteria of quality and the current market prices of the material sought. Plan your purchases in advance. In the long run, only the top quality materials tend to increase in value. What may appear expensive today, will bring the greatest return both today and tomorrow.

- Submitted by Ray Lambert

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EMERALD MINES RENTED -

Bogota, Colombia - Making an if you can't lick them join them decision, the Colombian government for the first time is receiving money from the world's largest emerald mine by renting it to the ringleaders of gangs that fought a violent war for its control.

After so many years of problems, it was the only formula we could find that allowed the government to get something out of it, a company official said.

The Colombian authorities collected more than \$10 million in rent and taxes in 1979 from the Muzo mine, the source of the world's finest emeralds.

This country produces 90% of the emeralds sold internationally, and the gem's 30% yearly price increase during the last dozen years has made millionaires of some Colombians and dead men of many more.

In Bogota this has spurred a business that is conducted in furtive transactions by hundreds of traders on street corners and in cafes and in grand style in high-gloss surroundings such as the 43rd story offices of Seiichi Kawai, a former gardener turned world's leading emerald exporter.

Danger accompanies everyone in the emerald business. The 46 year old Japanese immigrant said he had only one pistol. "If they killed Kennedy, they can kill me," he said, adding with an

EMERALD MINES RENTED - continued

urbane smile, "However, I find you can avoid problems if you have a gun and produce it at the right time."

A Gardener

Kawai came to Colombia in 1958 and, after several years of tending gardens, decided he wanted to join the ranks of those who owned them.

"I looked around, and saw that the Colombians who were making money were either in trade, industry or emeralds."

He bought a \$10 stone and sent it to a friend in Hong Kong. When the friend wrote him six months later that he had sold the gift for \$360, Kawai knew he had found his calling.

Assiduously polite, Kawai turned aside all questions about how much he exports. A map of Colombia on the wall, however, attested to the millions of dollars he has made. It showed a shaded area the size of a small state. It was his million-acre cattle ranch.

Colombia exported \$106 million worth of emeralds last year, but even officials conceded that the figures reflected at best only 70% of the transactions.

For years, the emerald mines of Colombia showed no reported profit while individual miners continued to get rich. They would tell the government they weren't finding any emeralds, but somehow Colombian emeralds kept ending up in store windows in New York and Paris.

- submitted by Ewald Paul

via - New York Times  
via - Lincoln Journal  
(Dec. 1980)

*Please Note!*

\* \* \* \* \*

"GEM" COMMEMORATIVE STAMP REQUEST

AFMS President Dan Caudle has contacted Asst. Postmaster General Gordon C. Morrison in Washington, D.C. requesting the issuance of a set of four stamps depicting our American Gem Inheritance. The stamps would be of the four most famous Gems in the Smithsonian including, of course, the Hope Diamond. Pictures of some of these gemstones had previously been sent to the postmaster for consideration.

Since the U.S. has never had a gem stamp and it is an item that every person in our country is familiar with and enjoys, it is felt that these stamps would be well received.

President Caudle also requested that the stamps, if issuance is approved, first be issued at our National Convention in Houston, Texas, JULY 8-11, 1982.

- via American Federation  
Newsletter, December, 1980

2407 S. 39 Street  
Lincoln, Nebraska 68506  
January 26, 1981

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

Attention: Roger Pabian, President

Dear fellow Club members:

I would like to express my appreciation for the scholarship award which I received at the club meeting on January 24, 1981. It was an unexpected and welcome surprise.

I am presently working towards my Bachelor of Science degree in Geology with future plans for a graduate degree.

Sincerest thanks,

*Lee J. Pivonka*

Lee J. Pivonka

Our very best wishes for a successful future, Lee.

THANKS

I wish to thank the Board of Directors and members of the L.G.M.C. for the gift of the electric typewriter. The "In Appreciation" makes it extra special.

It was a pleasure to edit the Pick & Shovel. The nicest part of it all was the personal contacts that I enjoyed during the eight years that I was editor.

Evelyn Ulrich

Our very best wishes for you, Evelyn.

\* \* \* \* \*

My sincere thanks to fellow Club members for selecting me as "Rockhound of the Year". It is indeed an honor and greatly appreciated. THANK YOU.

Howard Taylor

\* \* \* \* \*

23rd ANNUAL SHOW

The 23rd Annual Gem and Mineral Show hosted by the Lincoln Gem and Mineral Club will be held in the Agricultural Hall of the Nebraska State Fairgrounds on April 11 and 12, 1981.

The 1981 Show Committee is made up of the following club members:

- CHAIRMAN Jim Taylor
- FLOOR MANAGER Glenn Lyman
- PUBLICITY Roger Pabian
- DEALERS Howard Taylor
- RIBBONS & RECOGNITIONS Marie Taylor
- AWARDS BREAKFAST Lois Everett
- PROGRAMS Janet Kehling
- SPECIAL FEATURES & DISPLAYS Vera Lyman
- WORKING SHOP Frank Rule

- continued

23rd ANNUAL SHOW - continued

TICKET SALES	Bob & Mary Walker
HISTORIAN	John & Lillie Lewis
FIRST AID	Virginia Green
REFRESHMENTS	Marjorie Heedick
RAFFLE	Walt McCoy Nancy Neihardt
SILENT AUCTION	Carolyn Rose

The members of the 1981 Show Committee are all working very hard to make this year's show as big a success as the show that we have held in past years. Several of these people are looking for club members to help them during the show. Contact members of the 1981 Show Committee and volunteer your time and talents in helping us to put on "our show".

This year's show will feature 14 dealers including some that have been here at past shows, and several that will be here for the first time. There will also be a variety of working demonstrators displaying many different sides of our hobby, including gold and silver casting, marble and sphere making, making agate wind chimes and the art of scrimshaw.

There will be an Awards Breakfast at 8:00 A.M. Sunday morning April 12, 1981. The breakfast will be held at the Pantry Restaurant in the Agricultural Hall. Everyone is invited to attend; it will be a very enjoyable part of your Palm Sunday weekend. Club members wishing to join us for the Awards Breakfast are asked to contact Lois Everett and let her know that they are planning to attend.

A series of interesting programs is being planned. These programs will be presented during the afternoon hours of both days of the show.

This year's show will also feature a Silent Auction. All club members who are interested in donating material to be sold during the Silent Auction should bring these items to the show where they can be turned over to the people that will be running the Silent Auction.

There will be several outstanding exhibits present at this year's show including those being displayed by our own club members and several of the dealers and demonstrators that will be participating in this year's show. This show will include a new feature called "President's Row", which will contain exhibits of the past presidents of the Lincoln Gem and Mineral Club.

Show Chairman, Jim Taylor

FEBRUARY CONGLOMERATE

According to my LGMC Pick and Shovel file, this is the 59th article I have written for our Club Bulletin since 1969; the 50th since the U.S. Bicentennial year in 1976. Thanks, fellow agate lickers (and kissers) for tolerating them, even though some were not completely related to our great hobby. In the February 1977 issue, I used essentially the above title. February has been shortchanged calendarwise over the years, so a little broadening of the subject may be in order.

Usually by this time we have had a lot of winter, but so far we stay-at-homers have been blessed, though dealers selling snow throwers, sleds and ski equipment are "fit to be tied." Local rockhounds never had winter-scrounging so good. These halcyon days however, could end at any time!

Mt. St. Helens has held the news spotlight since last Spring and may erupt some more before settling down to dormancy. Our Club's January program was informative and enjoyed by an unusually large attendance. Probably no volcano in history has been so well covered by scientific news and photographic documentation.

In the year A.D. 79 Pliny, the Elder, would have loved a tape recorder and a Polaroid to record the big eruption of Mt. Vesuvius. He didn't even have a cassette, a "little Brownie" or a wet towel; much less a microphone, a telephoto lens or a gas mask! So he suffocated in the noxious gas and ash as he tried to get a closer "look-see" at the natural pyrotechnics. Pompeii's ruins still hold some of the secrets, which could be a little spicy, even by today's standards.

The January 1981 issue of National Geographic has two most interesting features; one about Mt. St. Helens' recent tantrums and the other tells of a volcanic ash storm that struck northern Nebraska about 10,000,000 years ago; a pre-news media event. These articles have been mentioned by the media recently. The Nebraska locale is near Orchard, Antelope County. Many ancient animals, especially rhinos, were suddenly overwhelmed and entombed by the intense drift of ash from a remote western volcano; a tremendous one.

The National Geographic indicated the total airborne ash and pumice ejected by Mt. St. Helens was about one cubic kilometer, and the eruption of Tambora, Indonesia in the year 1815 blew out 80 cubic kilometers. The ash spread over the earth caused "the year without a summer". The year 1915 was so-called, but I do not recall any great volcanic action that year, my seventeenth. Volcanic ash has played an important part in climate and weather. Washington state fruit growers claim it made superb apples.

Why did so much fine ash come from St. Helens instead of lava from liquified magma? It seems that the solid rock materials in the shattered cone were under great pressure, and inter-particle

FEBRUARY CONGLOMERATE - continued

spaces held trapped gases and water. The enormous release of energy within the cone, coupled with great heat, broke the solid mass into dust. Volcanic eruptions seem to vary in their physical nature, depending on many concurrent factors of temperature, moisture content and chemical composition of materials involved. Active volcanoes worldwide seem to show these variations. Volcanologists do not fully agree on all volcanology.

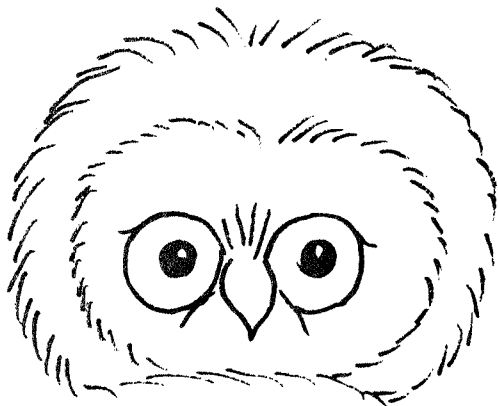
Stress in solid materials does not always involve volcanic forces. Rock pressures within deep mines are unbelievably great. I have at hand a clipping from a Lincoln newspaper of December 4, 1975 with the headline "Rocks Explode, Kill In Mines". Several miners had been killed by "rock bursts" in deep shafts in the Coeur d'Alene Mining District, rich in many minerals. These rock explosions occurred when pressures were released by mining activities on brittle quartz. Often these pressures had been more than 25,000 pounds per square inch. When such stress is removed, the burst may sound like a dynamite blast. Some are harmless and may spit out only little flakes of rock.

Safety methods to predict these disturbances are being tried. The Hecla Mining Company's Lucky Friday Mine, Mullan, Idaho, uses seismic monitoring devices on five production levels where ore veins may plunge thousands of feet downward at a 70 degree angle. They strung 20,000 feet of wire attached to geophones; microphone-like instruments. When a seismic event is detected, it is amplified 1,000 times and transmitted to a computer on the surface. This determines the location of the activity. An increase in volume indicates the area is approaching its limit, and a warning is given to those workers near the potential danger spot, and they immediately vamoose, i.e. skedaddle!

- by J.D. Young

P.S. Those "pick and shovel" boys in the warning zone probably don't even pause to observe "Miller Time".

J.D.Y.



GIVE A HOOT  
DON'T  
POLLUTE

"FUN IN THE SUN"

Shortly before Thanksgiving, Lynn and I received an invitation to spend the Holidays and stay awhile with friends in Tucson. We left Lincoln just ahead of the change in weather and arrived in Tucson late afternoon of December 24th in sunshine and warmth.

Christmas Eve we attended worship service at Christ M.E. church. The entire perimeter of the church lot and the interior of the courtyard were lined with luminaires; hundreds of them. A luminaire is a large grocery sack filled with about four inches of sand with a lit candle inside. Many of the churches were so decorated, as well as some homes. What a beautiful and inspiring sight to see on a clear Christmas night and the stars above shining in all their beauty. Christmas Day we could very well have eaten our dinner outside. It was that warm. In fact, the temperature was near 80 degrees every day we were in Arizona except for the day we left for home, when it began to rain. Words from our friends indicated it rained a whole week for which they were most grateful. It was feared the desert would not be very showy this spring because of lack of moisture.

On this trip we were made aware of the many facets of Arizona. We were told only 17% of the land is taxable and productive, yet Arizona ranks 11th in the nation in agricultural production. Cotton harvest was nearly completed and the ground was being made ready for garden crops. The source of water for irrigation is from dams. Very few well irrigation systems were seen. We saw many Pecan orchards and in the Yuma area citrus fruit and Date orchards. We took route 83 and 82 to Nogales, Mexico. This was an interesting route and we saw grassland, cattle, beautiful ranch homes, irrigated fields of alfalfa and other forage crops. Along the side of the road a rippling clear stream rushed along the way and in the distance could be seen Coronado National Forest. This grazing area I could equate to Nebraska's Pine Ridge butts.

Places of interest visited around Tucson were Tombstone, Bisbee, Old Tucson, Arizona Desert Museum, Tumacacori Mission, Sax Xavier Mission and the Circle C Chuckwagon. If ever in Tucson between the middle of November to the middle of May, stop at the Circle C for a real treat.

On New Years Day, we journeyed to Tempe to visit Ralph and Rosalee Ulrich and Sandra. Sandra is a second semester Freshman at A.S.U. The stay with Rosalee and Ralph was a truly enjoyable part of our trip. We enjoyed visiting, going to a Mall Show, sight seeing, rock hunting and eating. At the Arizona Desert Mineral Museum we visited with Art Bloyd. Art outlined some areas in which to hunt. One we visited. On exhibit at the museum are outstanding collections of minerals and agates all properly identified as to substance and location.

On Saturday, Rosalee packed a lunch and we took off for Horseshoe Dam and Seven Springs area. To reach our destination, it was necessary to go through Carefree. Here is located Dick VanDyke's studio; as well as some fantastic homes built in the desert wilderness on the most unbelievable and inaccessible places. Many

FUN IN THE SUN - continued

are owned by movie and TV celebrity. It's understandable why these homes cannot be saved in the event of a brush fire.

In the Horseshoe Dam area can be found Quartz outcropping and Black Agate. We found some Zeolite nodules. There were a group of fellows panning for Gold. I was shown one gold speck on the side of their pan. The area was beautiful; large trees, a delightful place for camping, picnicing, fishing and hiking. The trip to Seven Springs goes through rugged country. Of interest here are the fences, table supports and rest rooms constructed of beautiful Red Jasper. Lynn brought home a piece of this Jasper. It was surprising the number of people here on picnics, camping and just enjoying themselves in shirt sleeves, kids barefoot, on the 3rd of January. Could have been Branched Oak in mid Spring or late Summer.

On Sunday, with Ralph in the driver's seat, we drove to a place called Burro Creek by way of Highway 93; approximately 70 miles north of Wickenburg. The highway goes through Joshua Forest Parkway and also it was noted Saguaro and Juniper grow together among some of the oddest and queerest rock formations. Arizona has many queer rock formations. A stop was made at a little jumping off place called Nothing, where supplements to the supplies in our cooler were purchased. This place not only charged inflation prices but never heard or needed to compete with any other competition for their sandwiches and cold drinks.

Nine miles north of Nothing at a sign pointing to a Cattle Co., a right turn was made and we traveled 13½ miles on a good narrow gravel road which leads through some really rugged and spectacular scenery. There are many hairpin turns on the road and you only hoped you would not come nose to nose with the front of another radiator from the opposite direction. Thank goodness, not another car was met coming or going on this stretch of road. Art had told us on Friday of this area and that the road was good but he didn't mention all the other perils. Old Burro Creek Crossing was finally reached, and a nice, dry picnic and camping place was waiting. We found some nice Chalcedony and Opalite. There is much material here to be sorted and we had to be very selective in deciding what to take. I would love to go back, but the road would be a deterrent for me. A helicopter might be the answer. In the distance, I could hear the bray of the burrows and was tempted to find the source of the sound. An inner voice heeded me not to be a Jackass and loose myself somewhere in the wild yonder, so stayed near my friends.

The day was a good one and we returned to Tempe; tired, happy and regretful we would be saying goodbye in the morning, and needed to think about going back to Lincoln.

A quick trip to Quartzite found George & Glenna McGinnis sunning themselves and drying raisins. Great big raisins! They were in good shape and George seemed to be well, even though he did spend a short while in a California hospital.

We had intended to go Agate hunting at Cook's Peak north of Demming, N. Mex., but gave this up because of the steady rainfall.

FUN IN THE SUN - Continued

An overnight stop was made at El Paso, Texas with a trek across the border into Juarez, Mexico. I became so involved bartering for four pieces of minerals, I lost my head and got a \$ 112. bargain (that's what he said) for a final price of \$ 35.00.

Arizona does have many interesting facets to its geography and winter and early spring surely has to be the time to explore and search for and enjoy the beauty that is Arizona.

By Marie Wells

+++++

HIGHLIGHTS FROM HELENA

The Lewis' son David and wife are the parents of a baby girl, born October 26th. They live at Bettendorf, Iowa. Oh yes, Lillie and John celebrated their 38th Wedding Anniversary on January 16, 1981. Congratulations, and hope you have many more.

We are sorry to report that Irl Everett's mother passed away recently here in Lincoln.

Your reporter is still unable to bowl, as when she stoops to pick up her bowling ball, she gets dizzy and can't roll the ball.

Hope many of you saw "Anatomy of a Volcano" on NOVA, ETV Channel 12, at 8:00 P.M. on Wednesday, Feb. 10th. It was a fascinating program, and followed an international team of geologists in their study of Mt. St. Helens, as they sought clues on how to predict its future activity. The pictures were fantastic of the eruptions, as well as showing how the geologists work.

The December Smithsonian magazine has an alarming article about cacti. I quote: "A botanical nightmare is in progress in the American Southwest, and all jokes about "prickly problems" and "thorny questions" won't make it go away; native cacti are in trouble. . . . Some of America's more than 250 existing species are already "vulnerable to extinction," according to Dr. Lyman Benson, an authority on desert plants. He itemizes the "chief threats" to wild cacti as; commercial demand for plants, overzealous collecting for private gardens and greenhouses, growth of housing developments, particularly in Florida and the Southwest; agriculture, which has already "tended to eliminate the smaller species; grazing, usually unfavorable to small species or to the seedlings of large species. If goats are present, not much else is"; and fire, which upsets the ecosystem.

So, it isn't only unscrupulous rock hounds who leave areas in a shambles and selfishly take more than they need, but other beauties of nature are likewise endangered.

- submitted by Helena R. Baegl

Howard Taylor and Irl Everett have been at Veteran's Hospital. We wish you both a "speedy recovery" to good health.

- Your Editor

JUNIOR PAGE

Hi Juniors:

Did you know that the sun is a star and that it takes 27-32 days to rotate? The sun is gaseous and not all of it rotates at the same rate. A spot on the equator goes around in 25 days while it takes a spot on the pole 33 days to go around.

Elements present on the sun are: oxygen, hydrogen, carbon, iron, helium and many others. At the surface, they are in a gaseous state.

The average diameter of the sun is 864,000 miles, and its surface temperature is 11,000 - 12,000 degrees F. The average distance from the earth is 92,900,000 miles.

It has been estimated that the sun is racing toward the star, Vega, at the rate of 13 miles a second as the earth revolves around it.

\*\*\*\*\*

Can you unscramble the words which follow?

- ilnft            \_ \_ \_ \_ \_
- laderem        \_ \_ \_ \_ \_
- leryb           \_ \_ \_ \_ \_
- bury            \_ \_ \_ \_ \_
- uminuar        \_ \_ \_ \_ \_
- mettysah      \_ \_ \_ \_ \_
- literu         \_ \_ \_ \_ \_
- egy             \_ \_ \_

-submitted by Evelyn Ulrich

\*\*\*\*\*

JUNIOR CLUB MEETING

A meeting will be held on February 20, 1981. 7:30-8:30 P.M. at 3029 T Street. (Mary Walker home)

Any Juniors, ages 9-16 who are interested in the hobby are welcome to attend. Bring along ideas of what you would like to do as a Club.

- Mary Walker, Jr. Activities

# Midwest Federations NEWSLETTER

Published monthly except July and August as a service to member clubs. All news and articles should be sent to the Editor, Mrs. Betty Smith, 10607 Mary Ann, Zeeland, MI 49464. All subscription orders should be sent to Parrot Printing Service, 2125 Forest Ave., Des Moines, IA 50311.

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MARCH 1981 - Issue No. 212

## NEW SEAL DESIGNED BY ENVIRONMENT COMMITTEE



by JOHN BOLAND

MWF Environment  
Committee  
Chairman

The new seal states the goals of the Midwest Federation to promote conservation of energy and resources, and the protection of the environment through education of its members.

**TEMPORARY MERIT AWARD CHAIRMAN** by  
LARRY NAWOJSKI, Acting President MWF

It's Merit Award selection time! Due to the recent death of MILFORD SHARP, the Merit Award Committee Chairmanship was not filled. However, MRS. DIANE DARE has graciously accepted the Merit Award Chairmanship on a temporary basis. Now that continuity is assured, Merit Awards will be presented to those outstanding clubs in the Midwest Federation. Please submit your Merit Award applications and supporting documentations to: MRS. DIANE DARE,  
747 E. Blackford Ave., Evansville, IN 47713

## MGAGS ANNUAL CONFERENCE-SEMINAR

MGAGS - Michigan Geology and Gemcraft Societys annual Conference-Seminar will be held June 27 and 28, 1981, at Mott Community College in Flint, Michigan.

It will be co-hosted by Mott Community College Geology Club and Community Educational Services Fine Arts Program.

Included will be brief and intensive courses in mineralogy, lapidary, jewelry and paleontology.

For further information contact:  
KATHLEEN PORTER, 303 Smith Street, Apt.  
127, Clio, MI 48420 Phone 313-686-0307



**THREE RIVERS  
PETROLOGY CLUB** -  
from Park River, North Dakota

This club meets the third Monday of the month at Park River, North Dakota. There are thirty adult members. The current President is JOHN HOBBS, Fordville, North Dakota.

## NEWS FROM IOWA

by LARRY DESOTEL, Iowa State Director

In the State of Iowa last year there were some outstanding shows. Educational wise, the Mid-Iowa Club of Marshalltown, Iowa, was highly successful. They started in 1979 having one day set aside for "KIDS DAY". Last year they had over 1700 school youngsters attend. These youngsters in turn bring their parents and friends back for the Saturday and Sunday shows; thus increasing the attendance. At Sumner, Iowa, the Northeast Iowa Gem & Mineral Society had "KIDS DAY" on Friday and over 520 attended. The Sumner Show was termed a success.

In order for our hobby to survive we must get new members, and what better members than young people who are full of enthusiasm and ideas. The Cedar Valley Rocks & Mineral Society will have "KIDS DAY" this year at their show on April 10th. I believe all clubs who have shows should consider this. All people - young and old should be made aware of the minerals of the earth and their importance.

Pints Quarry at Raymond, Iowa, is open again to rockhounds. Keswick Quarry has advised that "no rockhounds" will be admitted.

# We're Going to the Midwest Federation Show

Neither snow nor sleet can dampen the spirits of the committees working on the plans and details of the "MIDWEST ROUNDUP OF GEMS" Show and Convention to be held July 23 through 26, 1981, at the Athletic & Convocation Center, University of Notre Dame, South Bend, Indiana.

The enthusiastic requests for dealer and display spaces promises this to be a really fantastic show.

Indiana and lower Michigan Clubs are busy making favors for all official events and have come up with most unusual ideas.

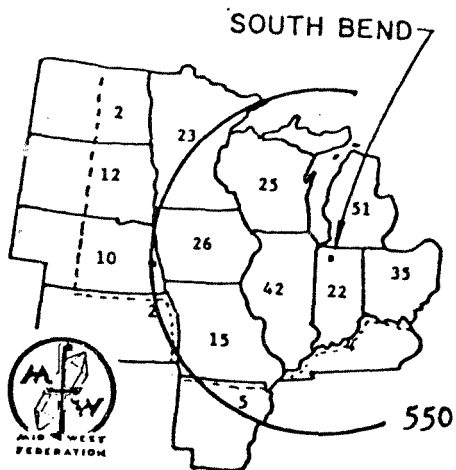
Many outstanding displays, demonstrations, as well as museum pieces are already completed.

Make plans for your summer vacation that includes the Midwest Federation Show on the beautiful Notre Dame Campus.

There is parking area for 20,000 cars, camping with electricity for 200 campers, lodging and meals on the St. Marys Campus next to Notre Dame at a reasonable price. Last, but not least, there is a special discount on tickets for clubs coming in buses.

CATHERINE MCHUGH, Publicity Chairman, Midwest Federation Show & Convention.

## SHOWS --- FIELD TRIPS --- CONSERVATION



Conservation of gasoline is improving with the national average over 9% since last Fall. Since the average motorist is still driving a 14 mpg car, this means less miles travelled. As gasoline price decontrol continues to raise prices over the next few years, those mobile Americans will switch to higher mpg cars and increased travel will resume.

Ingenuous rockhounds are finding a low cost way to go on field trips and to regional shows, have more fun, and be completely covered by insurance. They are hiring an air conditioned bus.

Some groups traveling to the 1980 Lincoln Show, planned their trip to stop at least at one collecting location enroute each way. By advance planning, assistance can be obtained from area clubs so no time is lost in locating the right collecting spot.

Charter bus drivers can usually drive 550 miles in one day so an early start will permit most clubs in the MWF to make South Bend in one day. Start planning NOW and contact nearby clubs to help fill your bus. ITS SOUTH BEND IN '81.

## AUCTION

### ENVIRONMENTALLY SPEAKING

We are pleased to have been asked to chair the AFMS Scholarship Silent Auction in 1981 at the Midwest Federation Convention and Show.

July 23 through 26, 1981 will be the time for all good Rockhounds to come to the aid of the American Federation Scholarship Foundation at the Midwest Federation Show.

REMEMBER you will have a three-fold opportunity:

- 1) To help a geology student secure an Advanced degree via the National Scholarship Foundation.
- 2) Help YOUR club build its Scholarship Fund.
- 3) Obtain a nice specimen at a reasonable price, and have a lot of fun doing it.

Polished specimens, minerals, fossils, gemstone jewelry, and books or back issues of rock magazines will all bring good returns. Be sure to include the name of the material, where it was collected, the Period, or age, in the case of fossils and any other pertinent data. All material should be clearly labeled with the Club's name, address and the Federation to which you belong, so that proper credit may be given.

We've got some new ideas we want to try!! Come join the fun!! If you haven't attended a MWF SILENT AUCTION before, try it. YOU'LL LIKE IT!!

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Read your bulletin to spot *new materials* or *specials* of the above advertisers.

Advertising by a rock-hobby business or interest is permitted with approval of the Board, at a rate now set at \$10.50 per full page per insertion, paid in advance.

1/2 page \$5.25, 1/3 page \$3.50, 1/4 page \$2.75 (min). These ads will be placed throughout the bulletin as space permits.

Subscriptions to THE PICK & SHOVEL are \$3.00 per year mailed.

Dues to LINCOLN GEM & MINERAL CLUB are as follows:

Adult membership fee \$5.00 (age 16 and over)

Junior membership fee \$1.00 (age 12-16)

Family membership fee \$11.00 (husband, wife and all children under 16 - permanent residents of household)

*New membership* must be approved by the Board, after applicant attends at least one (1) regular meeting of the club, and pay the above dues plus \$1.00 registration fee.

PLEASE NOTE:

The regular Club meetings are held on the fourth Saturday of each month, September through May, at the Nebraska Center for Continuing Education, 33rd and Holdrege.

The Business Meeting begins at 7:30 P.M. followed by a program.

Anyone who is interested in our hobby is welcome to attend.

REMEMBER:

Our 23rd annual Show is coming up soon. The dates are April 11-12, 1981; and it will be held at the Agricultural Hall, Nebraska State Fairgrounds.

PLAN TO ATTEND.

Lincoln Gem & Mineral Club  
Box 5342  
Lincoln, Nebraska 68505



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