



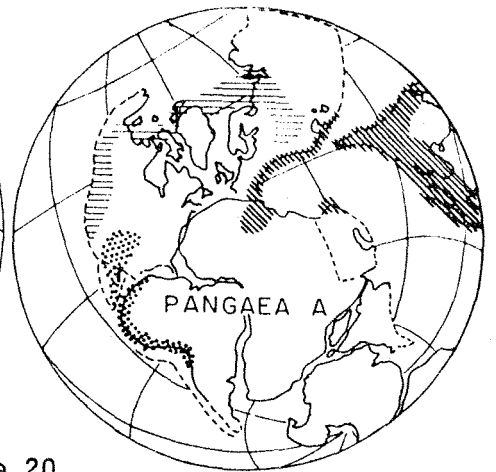
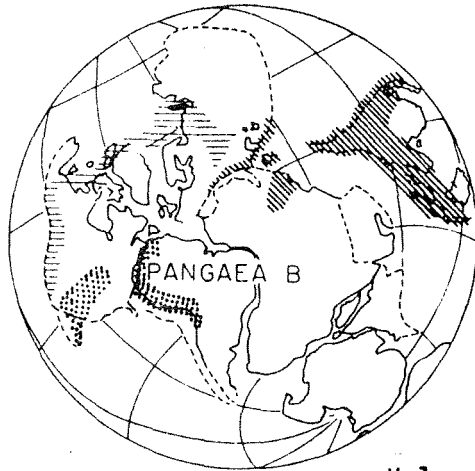
# THE PICK & SHOVEL

*highlights in this issue...*

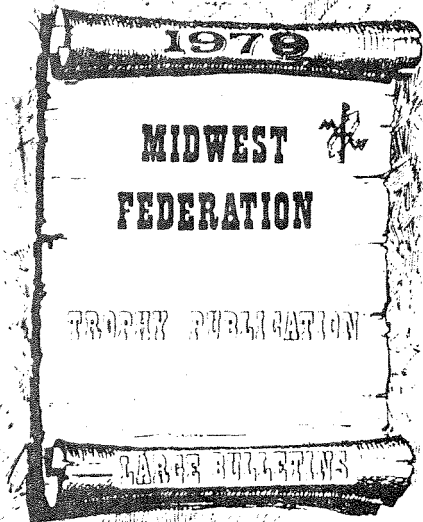
## ONYX

1980 SHOW INFORMATION

PLATE TECTONICS



Volume 20  
Issue 8  
April, 1980



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

Regular Meetings: 4th Saturday of the month, September thru May, 7:30 P.M.  
1980 - Trabert Hall, Lower Level, 2202 South 11th Street

1980 ELECTED OFFICERS

President.....	Roger Pabian	315 "D" St	Lincoln, 68502	474-2034
1st Vice Pres...	Larry Bigley	6126 Hartley	Lincoln, 68507	466-0211
2nd Vice Pres...	Edwin Johnson	1800 Pawnee	Lincoln, 68502	423-9075
Recording Secy..	Vera Lyman	420 N. 56th St.	Lincoln, 68504	464-6089
Treasurer.....	Phyllis Parks	2435 S. 19th	Lincoln, 68502	476-6798
Board Member....	Marita Bigley	6126 Hartley	Lincoln, 68507	466-0211
Board Member....	Virginia Green	6120 The Knolls	Lincoln, 68512	423-5032
Board Member....	Frank Rule	6333 Kearney	Lincoln, 68507	466-1697
Board Member....	Farel Hyland	6934 Francis	Lincoln, 68505	466-3387

Nominating Committee--3 years..Bob Walker, Irl Everett; 2 years..Wilfrid Wittman,  
Edwin Johnson; 1 year..Marita Bigley, Lynn Wells

STANDING COMMITTEE CHAIRPEOPLE:

Programs	Howard J. Taylor, Jr.	Liaison and Calling	Marie Taylor
Education	Marilyn Smits	Refreshments	Mary Walker
Hospitality	Goldie Quinn		
Historian	Lois Everett		
Librarian	Kay Graber	Scholarship	Howard Taylor
Membership	Mary Lambert	Outside Displays	Bruce Simon
Field Trips & Safety	Walt McCoy	Housing and Property	Dick Roberts
Sunshine Corner	Susan Taylor	Publications	Glen Litzenberg
NAOESCI Reporter	Evelyn Ulrich	Auditing Comm. 1980	TBA
1981 Show	TBA		

LONG RANGE PLANNING AND BY LAWS COMMITTEE

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

1980 National Show Planning Committee - Selected, 1977 General Meeting -  
Howard Taylor, John Harrison, James Marburger, Tom Simmons, Roger Pabian and  
Frank Rule. Committee selected Howard Taylor as Chairman and added Ray Lambert  
as Secretary.

PICK & SHOVEL STAFF: Chairman...Glen Litzenberg  
Editor Evelyn Ulrich, 3521 S. 48th St., Lincoln NE 68506 (488-9051)  
Club News Helena Baegl Artwork  
Sunshine Susan Taylor Publisher  
Typists Flossie Litzenberg, Marita Bigley, Linda Parks

DEADLINE 1st of Month of Issue. Articles may be reprinted by credit and bulletin copy.

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 CALENDAR

General meeting...Saturday, April 26, 1980, 7:30 P.M.  
 Trabert Hall, 2202 S. 11th St.  
 East entrance-south door.

Program.....April program is a slide program  
 entitled "The Grotto Of Redemption".

Refreshments will be served.

Board of Directors' meeting...Home of Roger Pabian, 315 D St.

Welcome New Members:

By reinstatement: Patricia F. Bury, 849 S. 34th St. 68510,  
 Telephone: 477-9778

Dr. Harold F. Kreiger (Helen), 821 No. 57th St. 68505, Tel. 464-4646.



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1980 Dates to Remember

Apr. 19-20	Hastings, Ne.	Central Nebraska Rock & Min. Soc. Show
Apr. 19-20	Sioux Falls, S.D.	Sioux Empire Gem & Min. Soc. Show Masonic Temple, 1st Ave. & 14th St.
May 17-18	Hot Springs, S.D.	Picture City Gem & Min. Soc. Show, City Auditorium
May 30-31 June 1st	Hebron, Ne.	Fort Butler Rock & Gem Club, Swap
June 6-8	Topeka, Ks.	Rocky Mountain Federation Convention and Show. Hosted by Topeka Gem and Min. Soc. Exposition Center, Shawnee County Fairgrounds
June 12-15	Lincoln, Ne.	AFMS, MWF Convention and Show, Hosted by Lincoln Gem and Min. Club, Bob Devaney Sports Center, State Fairgrounds
June 21-22	Beatrice, Ne.	Homestead Gem & Min. Club, Swap
Aug. 2-3	Nebraska City, Ne.	Arbor Valley Gem & Min. Club
Aug. 16-17	Crawford, Ne.	Northwest Ne. Rock Club Show
Aug. 30-Sept. 1	Omaha, Ne.	Nebraska Min. & Gem Club, Show
Sept. 27-28	Ogallala, Ne.	State Show, Hosted by Prairie Rockhounds

Last Month... Forty-eight adult and three Junior members were present at the March meeting of L.G.M.C. Three visitors were also present. The usual business meeting was held, and Marilyn Smits, Educational Chairman, passed out Questionnaires on Workshop Projects to determine the preferences of Club members as to work-shop activities in which Club members wished to participate. A burned-out projector light bulb prevented the showing of the slide program which had been planned, but it will be shown at the meeting this month.

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#### Report on Results of Club Questionnaire on Workshop Projects

At the last club meeting on March 22, 1980 the Education Chairperson distributed questionnaires to the members present requesting an anonymous indication of preferences for workshop projects and new journals and book topics for the club library. Listed below, in order of preference, are the most popular workshop techniques followed by the number of club members who indicated a desire for a workshop in that craft area. The number in parentheses is the weighted sum score for each project using only the 1st to 5th place ratings and assigned weights of "5" for 1st choice, "4" for 2nd choice, ...down to "1" for 5th choice. A total of 32 club members responded to the questionnaire with 25 of these individuals offering ratings of their choices.

flat lapping - 13 (32)	
polishing - 13 (27)	
wirecraft (gold & silver; channeling) - 13 (15)	
mineral identification - 12 (35)	
casting - 12 (16)	
triplets & doublets - 10 (21)	
drilling - 10 (19)	
field trip techniques - 10 (19)	
scrimshaw - 10 (16)	
gemstone carvings - 9 (7)	
fossil identification - 8 (16)	
sphere & egg making - 7 (16)	
gemstone intarsias(basic) - 7 (7)	
faceting - 6 (15)	
arrowhead making - 6 (14)	
cutting stargems - 6 (9)	
gemstones in plastic - 6 (6)	
	Remainder of workshop projects were selected by from 1-5 individuals (receiving weightings of 0-9).
	Marilyn R. Smits, Ph.D. Education Chairperson

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Thank You... George and Glenna McGinnis wish to thank the members of Lincoln Gem and Mineral Club for their kind concern during their stays in the hospital.

## THE PRESIDENT'S MESSAGE

The results of the Education Committee's Survey are in. The results were a bit surprising. Only 32 members took time to fill in the blanks. This is a bit disconcerting since all of the forms could have been filled in during the meeting, and no postage or envelopes were required to complete it.

Most members expressed a preference for topics in mineral identification, with flat lapping following in second place. Lower preference was shown for some lapidary projects that I thought would have rated higher. At any rate, we have some ideas as to what the members would like for the workshops. One will be scheduled for the near future, and the announcement will be made at the next club meeting. The date will probably be early in May.

There is a roster of dealers, demonstrators, manufacturers, and wholesalers, as well as a complete listing of programs for the 1980 National Show in this issue. This information is provided for the benefit of club members and exchange bulletin readers. The same information will be distributed to the MWF and AFMS newsletters. Program information has already gone to the various national programs.

The Hastings show is coming up from April 18 through 20. I hope that we will have good representation there in the form of both exhibitors and spectators. The Hastings Show is one of the longest continuing shows in this region---maybe in the whole country. Their show also has many fine exhibits, dealers, programs, and many interested rockhounds to visit with.

The National Show is not too far in the future. We have much to do and we should all be working on our exhibits for this event. At this writing, Hazel Greenwade asks for more help in the information booth at the show. All of the committees can use some extra help of some kind.

Mr. and Mrs. Young need a number of tumbled, more or less, flat stones for the table favors for the banquet. The stones should be silver-dollar sized (Morgan, Barber, Liberty, or Eisenhower---not Susan B. Anthony dollar size) and tumbled. The favor will have a small Nebraska flag attached to the tumbled stone. The flags were provided by Norma Miller. Thank you, Norma!

For publicity efforts, I will be able to sue some help in placing show flyers in store windows in the early part of June. Prices for newspaper advertizing have been obtained and materials are now being placed in the hands of local editors for local publicity of the show. We will have a newspaper, radio, and TV campaign.

One thing that our members can do to help the whole show effort is to write all of their rockhound friends and solicit displays. The individual displays are still the backbone of the show, and we can use all of these that we can get. The displays should show all facets and all levels of the hobby.

The field trip season is just around the corner. We will be having the first spring trip in the very near future. It will probably be a fossil collecting trip to southeastern Nebraska. Walt McCoy will coordinate the trip and lay out the logistics of the event. We want to double up as much as possible in cars so that we can conserve gas and make the trip as inexpensive as possible for all of the participants. We will publish little guidebooks for each trip so that the members and trip participants will get an idea of the geological setting of each area. I would like to emphasize that the trips will be opened to anybody who is interested in rocks. Membership to the club is not required and the purpose of the trips, as well as all other club activities, will be to encourage new membership.

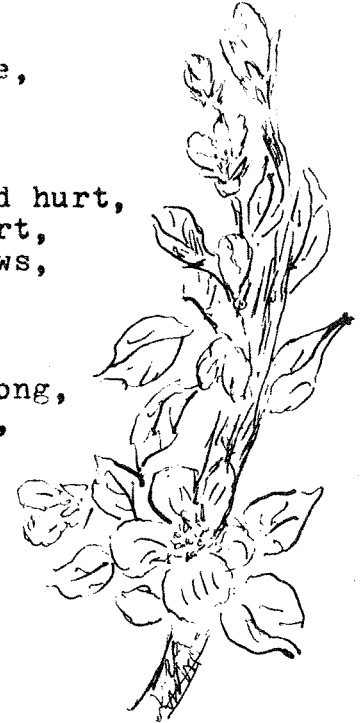
The number of members bringing rocks to the monthly meetings has been encouraging and I hope to see the census of exhibitors rise at each meeting. Thanks to those who have shared their interests.

Roger K. Pabian  
President

From the editor's desk...Here is a recipe for success-better than an editorial:

SUCCESS

Success is speaking words of praise,  
In cheering other people's ways,  
In doing just the best you can,  
With every task and every plan,  
It's silence when your speech would hurt,  
Politeness when your neighbor's curt,  
It's deafness when the scandle flows,  
And sympathy with other's woes,  
It's loyalty when duty calls,  
It's courage when diaster falls,  
It's patience when the hours are long,  
It's found in laughter and in song,  
It's in the silent time of prayer,  
In happiness and in dispair,  
In all of life and nothing less,  
We find the thing we call success.



From Peace, Salesian Missions

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Ten Years Ago...April 1970

Meeting at W.O.W. Bldg. Slide program and lecture: "Minerals Exploration on the North Shore of Alaska". Presented by a representative of the National Petroleum Association. Program Chairmen were G.W. McGinnis, Frank Marsh and Darlene Sprick.



Twenty Years Ago...April 1960

Regular meeting held at Morrill Hall. Thirty members and five visitors. Dr. Gibson spoke on silver work and displayed some of his hand-made mountings. Tom Simmons showed his slides of the petrified forest, Painted Desert, and other National Parks. (Say Tom, that sounds interesting. How about getting us a program on those slides?...L.N.E.)

-From the History Files of Lois and Irl Everett

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Small boy to father reading report card: "You'll notice my grades reflect the shocking inadequacy of the school system."

MINUTES - LINCOLN GEM & MINERAL CLUB, INC.  
BOARD OF DIRECTORS, MARCH 6, 1980

CALL TO ORDER:

The meeting was called to order by President Roger Pabian at the Bigley home on March 6, 1980, at 8:00 P.M. Five Board members were present; Marilyn Smits, Glen & Flossie Litzenberg. Ed Johnson & Farel Hyland were absent. Excused were Frank Rule & Larry Bigley.

The minutes of the February meeting were read and approved.

The Treasurer's report was as follows: Cash on hand, \$ 20.00; Transmatic account, \$ 755.81; NBC Checking, \$ 119.40; First Federal Certificate, \$ 4,059.72.

Income from February 1 to March 6: Membership, \$ 27.00; Swapper Bucks, \$ 5.00; AFMS pie auction & donation, \$ 20.30; Total Income, \$ 52.30.

Total expenses were \$ 381.57.

113 Adult + 2 Life Members (77 family) 12 Junior Members

Motion was made by Virginia Green, seconded by Marita Bigley, Treasurer's report be approved as read. Motion carried.

The following bills were presented: Flossie Litzenberg, \$ 20.00 Mail Feb. Pick & Shovel; \$ 58.37 Typewriter repair; \$ 31.10 Ream of paper & 100 units address labels. University of Nebr., \$ 34.95 Pick & Shovel printing. Reynolds-Simmonson, \$ 53.00 Treasurer's Bond.

\$ 14.77 from '80 Show account to Club account.

The motion was made by Virginia Green, seconded by Marita Bigley that the Bills be paid. Motion carried.

Motion made by Virginia Green that \$ 5.00 Swapper Bucks commission received at last meeting be transferred to general treasury. Seconded by Marita Bigley. Motion carried.

The cost of patches is 98¢ each. Virginia Green moved that we order 150 patches and sell them for \$ 1.50 each. This rescinds last month's motion. Seconded by Marita Bigley. Motion carried.

Motion was made by Vera Lyman that we transfer only the monies we need from Transmatic account to Checking account at present time. Seconded by Virginia Green. Motion carried.

The following have requested reinstatements:

Rae Hedin

Marylu & Al Rogers

Dennis Roether & family

Motion was made by Vera Lyman, they be reinstated; seconded by Virginia Green. Motion carried.

Membership cards have been distributed. If you have not received your card, you may pick it up at the March meeting or you may send a self-addressed, stamped envelope to Mary Lambert, and it will be mailed to you.

There being no further business, the meeting was adjourned.

The next Board Meeting will be held April 3, 1980, at 8:00 P.M. at the home of Glen & Flossie Litzenberg.

Respectfully submitted,

*Vera Lyman*

Secretary, Vera Lyman

REMEMBER, ITS YOUR SHOW TOO!

The National Show isn't cut out for just a few of the top-notch exhibits. We are still the host club. The show is the Lincoln Gem and Mineral Club Show, and the Midwest and American Federations have elected to use this event as a medium for holding their annual meetings and for holding their annual competition. All of our members can, and are urged to support the show with exhibits, work, and any area that will help provide our many guests with a very memorable event.

SHOW DIRECTORS MEETING

April 23rd, Home of Howard Taylor, 910 New Hampshire, 7:00 P.M. If any committee members have problems, please address them to the chairman before this day.

SHOW COMMITTEE MEETING

May 12th, Trabert Hall, 11th and South Street. All committee members should attend this meeting and have reports ready on their area.

MANY THANKS

Many Nebraska Clubs have been very helpful with favors, displays, and programs, and all of the things that help put a show together. Our deepest thanks to the many Nebraska Rockhounds that have so graciously assisted us.

ADMISSION POLICY FOR LINCOLN GEM AND MINERAL CLUB MEMBERS

Work, display, or pay.

HELP WANTED

Hazel Greenwade needs help at the information booth. Roger Pabian needs help in putting up flyers in various stores in early June. Jim Marburger needs help on the floor. Many other jobs need filling. Call the committee members above if you can help.

## 1980 National Gem &amp; Mineral Show - RETAIL DEALERS

Rolene Rock Shop	Wabasso, Minnesota
Phil & Joni Andrist	Bandon, Oregon
Wonder World of Rocks	St. Joseph, Missouri
Mineral Kingdom of Woodmere	Woodmere, New York
Syringa Gems	Lewiston, Idaho
The Rocksmiths	Tombstone, Arizona
Johnson Agate Company	Mankato, Minnesota
F. Geo. Topham Gems & Minerals	Tucson, Arizona
Hobbies Unlimited	Camarillo, California
Eola Tree Lapidary	Hot Springs, South Dakota
Alsup's	Wenden, Arizona
Century West Gemstones & Minerals	Sacramento, California
West Coast Gemstones, Inc.	College Place, Washington
Brown's	Bellevue, Nebraska
Bill Myers	Keller, Texas
Gali's	Lebanon, Oregon
Lowell W. Fields	Gooding, Idaho
Australian Mining & Exploration Company	Acme, Pennsylvania
Pony Gem Case Company	Martinez, California
L. C. Turner	Provo, Utah
Everett Lapidary	Lincoln, Nebraska
High Country Minerals	Denver, Colorado
Caveny Creations	Pineville, North Carolina
Wicks Lapidary	Springfield, Oregon
Stewart's Gem Shop	Boise, Idaho
Imperial Gems	Croville, California
Andria Bree Gem Company	El Cajon, California
The Getz's	Buffalo, New York
Sempert's	Benton Harbor, Michigan
Maynard's Rocks & Jewelry	Grand Meadow, Minnesota
Geodon Agates & Gems	Aurora, Illinois
Bergsten Jade Company	Castro Valley, California
Jim's Gems	Wichita Falls, Texas
Rock Art	Yermo, California
Artrox, Inc.	El Paso, Texas
PGR Rock Shop	Waynesboro, Virginia
Gemstone Creations	Belleville, Michigan
Richter Rock Shop	Omaha, Nebraska
Gemblade	Los Angeles, California
Westwood Lapidary	St. Louis Park, Minnesota
A & A Gems & Minerals	Monroe, Washington
Hinshaw Rock 'N Gems	Winchester, Indiana
Flying Pan Mineral Center	Littleton, Colorado
E. J.'s Pebbles	Harbor City, California
House of Lapis	Venice, California
Daybright Gems	Lewiston, Idaho
Miller's Fossils	Wilmington, Delaware
Baskin & Sons, Inc.	Middlesex, New Jersey
Simons - Minerals of The West & Mexico	Lincoln, Nebraska
Robert's Minerals	Twain Harte, California
J J & L Rocks & Minerals	Hickman, Nebraska

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 1980 National Gem & Mineral Show - WHOLESALE DEALERS

Thunderbird Gems, Inc.  
 J. R. Rodgers LTD.  
 Eastern Mineral Company, Inc.  
 Uncle Tom's Rock Shop  
 The Gordon Company  
 Julian Fabian  
 Oceanside Gem Imports, Inc.  
 Lovelace Lapidary  
 Miller Mining & Mineral  
 California Rock & Mineral Supply  
 Bead Vault  
 Custom Gems, Inc.  
 Adris Oriental Gem & Art Corp.  
 Dowell's  
 The Gem Shop  
 Jackson Pacific  
 Rockyland Gems & Jewelry  
 Arizona Case, Inc.  
 Jewel Tunnel Imports  
 Wheeler Manufacturing Company, Inc.  
 Crystal Cavern Minerals  
 Interstate Lapidary  
 Duncan's Minerals  
 Dorel Gems  
 Tim Roark Imports  
 Kripps for Gems, Inc.  
 Trans-American Gems & Minerals, Inc.  
 MPF Wholesale  
 E & W Imports  
 Gem Materials, Inc.  
 Royal Gems  
 Rocky Mountain Minerals, Ent., Inc.  
 Geo-Aids International  
 Nokomis International  
 John J. Scott  
 Jeweler's Mart  
 Australian Opal Supplies  
 Gene Hardgrove Gemstones  
 John Whitmire

El Paso, Texas  
 Tualatin, Oregon  
 New Rochelle, New York  
 Cwatonna, Minnesota  
 Long Beach, California  
 Great Neck, New York  
 Oceanside, New York  
 Wichita Falls, Texas  
 Sweet Home, Oregon  
 Duarte, California  
 Scottsdale, Arizona  
 Omaha, Nebraska  
 New York, New York  
 Edinburg, Texas  
 Cedarburg, Wisconsin  
 Jackson, Wyoming  
 El Paso, Texas  
 Glendale, Arizona  
 Arcadia, California  
 Lemmon, South Dakota  
 El Paso, Texas  
 Sturtevant, Wisconsin  
 Yuma, Arizona  
 Temecula, California  
 Atlanta, Georgia  
 Washington D. C.  
 Elmwood Park, New Jersey  
 Elmwood Park, New Jersey  
 Tampa, Florida  
 Hialeah, Florida  
 Gig Harbor, Washington  
 Fort Morgan, Colorado  
 Richmond, California  
 Winter Park, Florida  
 Orlando, Florida  
 Fort Collins, Colorado  
 Tequesta, Florida  
 Yermo, California  
 Yuma, Arizona

## 1980 National Gem &amp; Mineral Show - MANUFACTURERS

Crystalite Corporation  
 Diamond Pacific Tool Corporation  
 Graves Company  
 Geode Industries Inc.  
 Industrial Diamond Tool Company Inc.  
 Lortone Division - Carborundum Company  
 Beacon Engineering Company  
 Raytech Industries Inc.  
 Gem-Tec Diamond Tool Company  
 Johnson Brothers

Marina Del Rey, California  
 Barstow, California  
 Delray Beach, Florida  
 New London, Iowa  
 Cedar Rapids, Iowa  
 Seattle, Washington  
 Rothsay, Minnesota  
 Stafford Springs, Connecticut  
 Buena Park, California  
 Huntington Beach, California

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1980 National Gem & Mineral Show - WORKING DEMONSTRATORS

Red's Rock Shop  
Clovis, New Mexico

Marble making

McNamar Originals  
Des Moines, Iowa

Gold wire twisting

Ed & Peggy Cobb  
Vidalia, Louisiana

Sand art

A. C. Henry  
Plattsmouth, Nebraska

Rock painting

Barbara Frost  
Warrensburg, New York

Faceting

Dev Carroll's Originals  
Fort Dodge, Iowa

Gemstone pictures and trees

Randall Cornelius  
Gretna, Louisiana

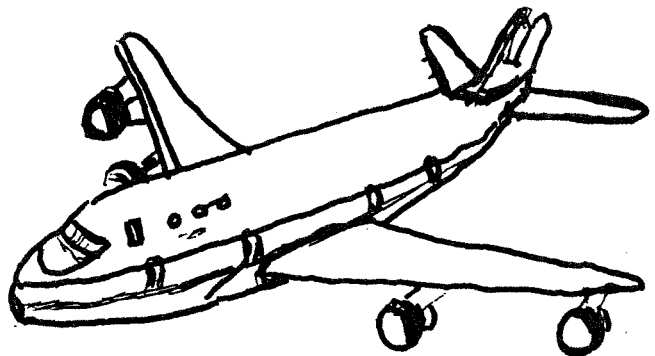
Gold wire jewelry

Midwest Manufacturing Jewelers  
Lincoln, Nebraska

Gold casting

LINCOLN, NEBRASKA'S THE PLACE  
TO GO

FOR THE 1980 NATIONAL SHOW!



HIGHLIGHTS from HELENA

The Litzenbergs and Bigleys were at Chadron State College a recent weekend. The Earth Sciences Dept., put on a rock show at the college. We'll probably have a detailed account of it-- how about it, Flossie?

The Messelheisers spent two months at Harlingen, Texas, this winter, living in their camper, and enjoyed it very much.

Young Greg Lyman won a trophy on music theory in an organ contest Saturday, March 22nd. Congratulations, Greg!

I understand that George McGinnis is now home from Bryan Hospital, where he was in for a blocked carotid artery repair. Hope you are much improved, George.

Florence Boring will be taking early retirement at the end of this school year, primarily to finish editing for publication the collection of Dr. John G. Neihardt's critical essays, which he set her to work collecting for that purpose a couple of years before his death. Dr. Neihardt was literary editor of the Minneapolis Journal from 1911 to the early 1920s (with time out during WW I, when the German people were in disfavor); of the Kansas City Journal-Post in 1926, and then of the St. Louis Post-Dispatch under the famous Pulitzer from October 1926 to the later 1930s. Fortunately, he was able to help Florence with the early part of the collecting.

Florence will be completing 41½ years of teaching, having begun in small high schools in Nebraska; moving on to Gothenburg, McCook, and Loup City; then coming to Lincoln to teach in Everett Junior High in 1952. After a year of teaching and flying on the island of Okinawa in 1960, she was assigned to Millard Lefler Junior High School, and has "lived" there since April 1961.

Until she came to Lincoln as a science teacher, her teaching time was divided between English and Science. Of course, teaching Aviation and Space Science here at Lefler has been Florence's favorite assignment.

Good luck in your new project, Florence, and happiness in your up-coming retirement. The public and school children are heavily indebted to such dedicated teachers as Florence Boring.

Until next month. . . . . HRB

"PROGRAMS AND SPECIAL FEATURES"

It's getting closer & and closer; that week for the "big show"! Naturally, all those working to make it a success are getting busier & busier!

There are 28 different programs set up during the four-day Show; and two outstanding people for Banquet Speakers have been confirmed.

Some of the Special Features are an outstanding Lavender Jade Display; fantastic Amber Display; Carvings; Several Silver Displays and Rock carvings; plus a display from South Africa.

Among Demonstrators will be Silversmithing, Star Ruby cutting and polishing, and Sand casting.

These are only a few of the features I have scheduled. I know other Chairpersons who have many more outstanding features scheduled.

All in All, it will be fantastic!

Chairperson: Vera Lyman  
Assistant: Marie Taylor

-----  
 Following is a letter to Club members from Irl Everett, your  
 Non-Competitive Display Chairman for the 1980 National Show:

Hi Club Members:

Lois and I are in charge of non-competitive displays and we need your help. So far ours is the only case committed to the Show from the L.G.M.C.

I know there are more who plan to display, but as yet we have no form from them as to their desires.

This will be a chance of a life-time displaying in a National Show and we want all of you to have this honor.

We do need to know by your indicating, by filling out the Non-Competitive Form. Also we need your help in so many areas. So if any Committee Head calls you, or asks you to help, please do so.

Here is a list of those who have written us and their desires to display:

Dowell's	Edinburg, Texas
Large topaz crystal	
Vern Livingston	Nebraska City, Ne.
Pictures in Rocks	
Norman Brown	Hiawatha, Ia.
Cordoites Clock Book-ends	
Cordoites Wood Rounds	
Earl Campbell	Bismark, S.D.
Assorted Items	
David Rush	Lebonan, In.
Geode with Mineral Inclusions	
Milford Sharp	Fairview Park, Oh.
Framed Picture Rocks	
Dick Edwards	Cheyenne, Wy.
Petrified Palm Wood	
Century West	Sacramento, Ca.
Petrified Wood and Hand-crafted South American Silver Case	
Geode Industries	New London, Ia.
Assorted Gems	
Rocksmiths	Tombstone, Az.
Mining Relics	
Bergstrom Jade	Castro Valley, Ca.
Jade	



## ROCK OF THE MONTH: CALCITE ONYX (MEXICAN ONYX, MARBLE)

Calcite onyx is a popular gemstone that is found in massive deposits in many world locations. Chemically it is composed of calcium carbonate. It is fine-grained with rhomboidal crystallization and adequate toughness. The mineral has a Mohs scale hardness of 3; it is very easy to shape and carve. The vivid colors with beautifully contrasting bands provide an attractive cutting material for many Mexican artists.

"Calcite" comes from the Latin word "calyx" meaning "lime" and originally the name comes from the Greek "chalx" meaning "burnt lime". The "onyx" part of the name is misleading because onyx is properly a form of chalcedony. As Mexico has abundant quantities of this mineral that are distributed widely as finished articles, this gemstone is commonly referred to as Mexican onyx. Onyx marble is another name applied although Webster (1977) describes that material as the stalagmites or beds in caverns rather than quarries. Coloring has made the name honey onyx frequent too.

The calcium carbonate deposits precipitated by water include calcite onyx, cave or stalactitic onyx, and travertine. Webster (1977) describes the formation of onyx marble: water solutions that are saturated with calcium bicarbonate lose carbon dioxide through variations in heat and pressure; calcium carbonate precipitates out as "beds or stalagmites in caverns through which the mineral-charged waters have percolated" (p. 93). Cave onyx is found in the caves of the eastern and midwestern United States, e.g. in 1969 the largest known limestone caverns in Iowa were discovered and explored by amateurs. The raw material becomes available when new cave entrances are cut or passageways are widened. Colors include beige, tan, or pale brown with common banding with an off-white brownish hue. Travertine consists of a variety of limestone that is precipitated from hot or cold springs or rivers; it is more or less porous. Cave onyx and travertine are sometimes tinted with mineral impurities yielding colors of pink, green, blue, yellow, and orchid.

Mexico is the leading producer of calcite onyx. Baja California, Mexico has the Pedrara quarries; this white, rose, and green onyx is commercially processed in Tijuana, Mexico, San Diego, California, and El Paso, Texas. Zacatacas, Mexico has onyx yellow to white to green in color that is processed in Texas as table and counter tops. Puebla, Mexico yields honey, yellow, brown, white, green, red, and pink.

The western United States has a variety of sources of calcite onyx also. Southwest Utah has green and cream onyx. Lehi, Utah produces an intense translucent lemon yellow material. Zeitner (1970) reports that Montana and Wyoming have large quantities. Mayer, Arizona produces brightly colored orange and gold onyx with patterns that resemble banded agate, crazy lace agate, and eye agate. A peach colored rock is found off Black Canyon Highway north of old Mayer on Big Bug Creek. Yavapai County, Arizona rock is named for the area: "yava onyx". Other Arizona sites are in Gila County, north of Globe and at Onyx Peak where cream colored onyx contains narrow black dendritic bands that occasionally form interesting picture rock scenic effects. The Onyx Peak material contains iron and manganese among its impurities and some of the stone is white with green banding. McMackin (1979) described the latter two locations

## ROCK OF THE MONTH continued

and also found the "rainbow marble" onyx sold near its currently off-limits collecting site close to Radium Springs, New Mexico — much of this variety is fluorescent. Pastel onyx of good quality is produced in San Luis Obispo County, California, and "silver" onyx of fine lapidary grade comes from Mule Canyon in San Bernardino County, California. (Zeitner, 1970). A quarry on the outskirts of Barstow, California offers rough material of either cream and pink or dark brown with old gold coloration. (McMackin, 1979).

Other parts of the world contribute to our store of attractive and interesting calcite onyx. The commonly known "Brazilian onyx" comes from San Luis province in Argentina. It is white or green and marked with veins of dark orange, amber, or brown. Pakistan onyx is green with straight bands of orange-brown. Webster (1977) states that the richest yellow onyx is located in South-West Africa near Karabib and he also mentions Algerian onyx. This club writer has four eggs sold as "Italian onyx" with banded green, green with reddish-brown, aqua, and aqua with brown bisected by a white band coloration; these eggs seem to have a more outstanding glassier look in comparison to the Mexican onyx.

Since calcite onyx is so soft, it can be carved with ordinary steel tools. Medium-fine wheels can be used, kept well wet as the material is fairly sensitive to heat, with the stones constantly rotated to avoid flat spots and with a minimum of pressure. Lapidarists can smooth the stone with medium and fine sandpaper (wet!) or with 4/0 steel wool with 600 grit. Polish with cloth/canvas buffs and tin oxide to produce a high luster. It is frequently recommended that dilute oxalic acid be added to the polishing mix. (Remember oxalic acid is poisonous.) Calcite onyx will burn readily and the craftsman must be very careful not to overheat the mineral. The dry dust should not be inhaled and caution is required here, also. A lap of velvet, velour, or long nap carpeting is excellent for a good polish. A small quantity of calcite onyx is dyed but the colors look very artificial and are usually fruit or heart carvings.

In classic times calcite onyx was used to make vases containing ointments as well as boxes, jars, jewel cases, vessels, and other objects. Today carvings range from the very crude to reproductions of exquisite Toltec and Aztec designs. Sometimes objects such as boxes are inlaid with other ornamental stones of contrasting colors. Miniature human and animal figures are distributed world-wide to gift and souvenir shops. Decorative home items include ash trays, book ends, paper weights, pen bases, letter openers, cigarette boxes, clock cases, spheres and eggs, and candle holders. Beautiful onyx goblets, trays, plates, and bowls add charm to dining tables. Onyx jewelry is made from the best quality stones and is often set in silver mountings of striking originality (Zeitner, 1970). Onyx beads, either round, oblong, or spiral in shape, make up attractive necklaces, and are worn with wide circle bracelets. Earrings, tiki pendants, and bola ties are also available. This writer found a pair of faceted rounds in a findings shop in London, designed for cuff-links. However, onyx is not sufficiently hard to be suitable for rings or any articles submitted to much wear. Chess boards and pieces are very popular. The most unique objects made include a wall mask and an engraved table top in the well-known Aztec calendar design.

## ROCK OF THE MONTH continued

An Omaha rock shop carries small polished slabs from a local marble company which offers slabs of Mexican Pedra onyx and Pakistan onyx for \$25 and \$30 per square foot respectively. The company showroom displays a large cut-off-oval table top of Pakistan onyx with two wide slabs as side supports as well as a bathroom sink cabinet of the same mineral. Their beautiful green shiny surfaces and the size of their single onyx pieces make them a pleasure to view and touch.

Remember to bring your collection of calcite onyx favorites to the April club meeting to share with other members.

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Zeitner, J.C. Calcite gems. Lapidary Journal, 1970 (June), pp. 449-458.

Marilyn R. Smits, Ph.D.  
Education Chairperson

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HELPFUL HINT--If you are having trouble with rock specimens scratching your glass or wood display shelves, try putting three or four dabs of G.E. Silicon Rubber cement on the bottom of the troublemakers. Then place the object on a piece of waxed paper to cure, about twenty-four hours. Large amounts of cement will take even longer, be patient, as the results are worth it. This method will produce a nice smooth rubber-like cushion which will protect both the shelf and the specimen.

-Bill McGrath - The Opal - via Gem City Rock News (10/79)

Handy files for trimming cabs can be made from popsicle sticks. Coat one half of the stick with epoxy and sprinkle with 100 or 180 grit. Allow to dry and repeat on the other side. Mark the handle with the number of the grit used.

Don't throw away that anti-freeze you drain from your car radiator. Save it and use it instead of water to mix with the grit for your lap wheel. It will hold the grit in place much better than water.

via The Golden Nugget from Black Hills Prospector  
via Moraine Rockbusters, Inc., Glacier Gravel

SNOW, THEN MORE SNOW

-by Flossie Litzenberg

Larry Bigley picked Glen and me up around 9:00 A.M. Thursday March 27 to take us to Hay Springs and then he was going on to Chadron. It was foggy until we got past the Milford turn-off, otherwise the weather was quite nice. I didn't even take along a pair of galoshes, but I did wear my heavy coat and took a lap robe. Glen took his shorty wind breaker.

Between Grand Island and Kearney we saw thousands of sandhill cranes feeding in the corn fields beside the highway, but not as many as I had seen the Saturday before. I think the time of day made the difference. Saturday it was around 8:00 A.M. but Thursday it was around 10:00 A.M. We ate lunch at North Platte and from then on it rained and then turned to snow. It quit snowing by the time we got to Alliance. From Alliance to Hay Springs we saw ever so many pheasants. We arrived at our friend's, the Barths, around 5:30 P.M. Larry wouldn't stay for supper because he wanted to get on to Chadron to set up his shop at the Chadron College right away.

It snowed Thursday night and all day Friday. Saturday it warmed up and the sun shown for a bit and then it started to snow again and snowed all day again, and winds blew and caused drifting. Highways were closed. Larry's business in the Earth Science building was slow because of the weather and the bus loads of students, that come in from all over, were unable to make it. They expected at least 2,000 students on Scholastic day, Friday. Larry did have a student watch his shop and he attended Dr. Robert Willard's first lecture. Dr. Robert Willard was from the South Dakota School of Mines in Rapid City.

We were unable to go visit any of our friends around Hay Springs, because the snow was too deep, so we played cards (Pitch) and visited with our hosts.

Sunday the sun shone and it thawed and the highways were opened. Two families of ranchers drove their trucks in and we had a big dinner together. Larry had a good sales day. The students help him a lot. He came by and picked us up to go home at 6:00 P.M.

It was still light enough we saw a lot of pheasants again between Hay Springs and Alliance. We ran into dense fog which did not lift until we got past Ogallala. We drove straight south to Sidney and then headed east on highway 80, because that was the best road. It had been plowed, but in spots it was still snow packed and icy. We saw some trucks in the ditches yet. The snow banks on the south side of the road were higher than the car. We stopped at Ogallala for coffee and the boys had hamburgers. There were three buses of highschool students headed west to go skiing on spring break, parked at the cafe, but they just allowed one busload at a time to come in to eat, to keep from swamping the cafe. Trucks were parked everywhere. Every rest area, on the way home was parked full of trucks. We got home at 5:30 A.M. Monday.

Another snowstorm hit the west Sunday night. We are glad we came on home.

We sure enjoyed our visit with our friends in Hay Springs.

## PLATE TECTONICS and RIFT VALLEYS

- by J.D. Young

"All I know is what I read in the papers."-- Will Rogers. That is my feeling about my current topic. When I studied geology and related subjects in high school and in college there was little if any mention of it, though there was already a vague idea about "continental drift". The more sophisticated term now is "plate tectonics", and rift valleys seem to be geologically related; I make no claim to have expertise in the subject.

Recent T.V. programs have featured this idea, and many publications have focused attention to it. I have a number of books and magazines with articles relating to this rather theoretical, but intriguing subject. A few examples are: Larousse Encyclopedia of the Earth (1961), Prometheus Press, New York; The Magnificent Foragers (1978), Smithsonian Institution; Powers of Nature (1978), National Geographic Society, and Africa's Rift Valley (1978), Time-Life Books.

Alfred Wegener's (1880-1930) theory that the continents drift about the face of the earth is being taken more seriously, but some authorities disagree. Wegener theorized that the continents once were a united mass concentrated in what is now the southern hemisphere. He named it Pangaea— Pan-all, gaea-earth (Greek).

He supposed that at the beginning of the Mesozoic period Pangaea divided, the continents moving about something like parts of a broken ice sheet. The Americas moving westward shoved up a ridge of sediments, forming the Rockies and the Andes. Australia moved **east** and formed the Great Dividing Range near its **east coast**. Europe later moved farther north and the Mediterranean formed. Antarctica took off toward the South Pole.

Shore lines of lands across the Atlantic today seem to have fitted together, with a few discrepancies due to many factors and forces involved. There is evidence of physical and biological relationships between corresponding parts of these masses. This suggests their contiguity at some remote time. The Americas may have separated and then reunited again later.

First attempts at measuring continental drift were found to be inaccurate or exaggerated, but better methods are used today. Greenland and Europe seemed to be a mile farther apart, from 1823 to 1933. Washington, D.C. seemed to be 15 ft. farther west from Paris each year, and San Diego seemed to be six feet nearer to Shanghai. Even though some errors have been made there is evidence that the solid portion of the earth is not in a permanently fixed position, being affected by many forces. This results in orogenesis (mountain building), volcanoes and earthquakes, the latter often causing ocean waves of unbelievable height. (tsunami, not tidal.)

Tectonics is the science of earth crust movements. They may be vertical or horizontal and may involve large "plates" that move entire continents and disturb the ocean floor. This process never ends. No one knows when a major earthquake may occur in susceptible areas as underlying stresses form and are released.

The Great Rift Valley crosses beneath the Red Sea and extends almost

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PLATE TECTONICS and RIFT VALLEYS continued

to the southern tip of East Africa. This great scar is like a huge trench, usually less than 30 miles wide, rising and falling to the contour of the land traversed. There are several cross-fractures near both ends of its path. Many of these are marked by lakes and streams, some of which are highly charged with minerals from below ground. About 30 active or semi-active volcanoes relieve the pressure from the earth's interior. Famous Kilimanjaro, nearly 20,000 ft. high, in northern Tanzania, is almost within this rift. Olduvai Gorge, famous for Louis Leakey's discoveries of early man's habitat, is also nearby in Tanzania. Some geologists believe much of the Rift's activity has occurred since early human beings lived there.

J.W. Gregory, who is thought to be the Rift's "discoverer" remarked long before the "space age", that it would be visible from the moon. Apollo 17 space men took a picture of earth from about 90,000 miles and it shows the Saudi Arabian peninsula, the Red Sea and the Y-shaped Danakil Depression where the Great Rift begins its slice down toward S.E. Africa. This would have thrilled Gregory. He had made such a study of the valley, having braved many physical hardships and hostile native tribes. He died in a canoe accident in Peru, South America, 1932.

J.D.Y.

P.S. Gregory's men called him "Bulging Pockets" because he stuffed them with many rock specimens. (Agates?) Rockhounds would have loved him! Loyal Californians believe that when their San Andreas Fault "lets go" then everything east of it will fall into the Atlantic Ocean. It is America's Great Rift.

J.D.Y.

P.S. Again: Volcano Mt. St. Helens has recently attracted scientists and laymen with its first eruption since 1857. How long or severe this one may be cannot be predicted. It is now emitting steam and dust, with much earthquake activity. Lava flows from the crater and fissures are possible, which could melt the snow cap and cause mud slides. St. Helens, about 80 miles southeast of Seattle, is one of the Cascade Range's youngest, only 37,000 years old, and the first to erupt in the U.S. mainland since 1914 when Mt. Lassen in northern California became active for awhile. About 80 percent of the active volcanoes occur along tectonic plate margins. Rockhounds already hope for a new spawn of thunder eggs!

J.D.Y.

# Midwest Federations NEWSLETTER

Published montly except July and August as a service to member clubs. All news, articles, subscription orders and requests for information should be sent to the Editor, Haydon Peterson, Parrot Printing, 2125 Forest Ave., Des Moines, Iowa 50311

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April 1980 - Issue No. 203

## KNOW YOUR FEDERATION DIRECTOR

By Bernice McCloskey, MWF President

You should know your State Director. He represents the Federation and Executive Committee to the clubs of his state, and also represents the clubs of his state to the Federation and Executive Committee. It is his duty to know the clubs, meet with them and take part in as many club activities as possible, furnish help for state events, etc. He normally has an assistant for each five clubs to cover the geographical area of the state.

Your Director determines if Newsletters, Directories, etc. are reaching the club officers and if club officers are informed of all Federation projects. He attempts to improve relations with quarries, mines and other collecting sites. He keeps his clubs informed about Federation activities and encourages participation in Council meetings, participation in competitive displays, participation in the Bulletin and Merit Award contests and in safety and anti-litter programs. He may send out a state newsletter, be a leader in such activities as state swaps, etc, and may organize multi-club field trips, meetings and shows.

He may also set up a MWF table at your show with material and publications distributed by the Director of Supplies, talk to your club about the Federation, maintain a calendar of club activities in the state, help to form new clubs and to assist, if requested, in improving existing clubs.

He watches for unusual events, club programs, etc. which would be of general news interest and notifies the Newsletter editor. He also is called upon for advice in selecting new people to assist on Federation committees.

He would appreciate receiving your bul-  
Director... con't on back page

## UNIFORM RULES BOOKLETS READY

Copies of the new AFMS 1980 Uniform Rules booklets are now ready for distribution to clubs and individual members.

These are the rules that will govern the judging of competitive exhibits at the 1980 American-Midwest combined show in Lincoln, Nebraska, June 12-15.

Individuals may order copies at \$1.00 each, plus 40¢ postage, or clubs may order them at \$1.00 each plus postage, in quantity. Quantity orders save shipping costs for you.

All orders should be sent to *Director of Supplies and Information, Clinton Heckert, 725 Stewart Ave., Elgin, IL 60120.* Be sure to say where you want your copies sent, giving complete address and don't forget to include your check to cover the cost of the booklets and postage in full. *On quantity orders, write to Heckert telling him how many you want and he will advise you the postage charges.*

## SLIDE PROGRAM IN PREPARATION

The Mid-America Paleontology Society has a color slide program in preparation titled "An Introduction to Fossils" The program will be ready for showing at the American-Midwest combined show in Lincoln, Nebraska, June 12-15.

*MAKE YOUR PLANS NOW..... time is growing short. Attend the American-Midwest Federation combined show in Lincoln, Nebraska, June 12-15.*

Director... con't from front page

letins, being invited to your meeting, being asked to man a MWF table at your show, being included in your activities and being made aware of your needs.

Directors are reimbursed only for actual expenditures for such items as postage, supplies, phone calls, duplicating expense, etc. They are not reimbursed for travel, lodging or meals. The reward is in personal involvement and making new friends... in being able to go to the Federation and say, "Here's what our members need", and to go to the clubs and say, "Here's what the MWF is doing for you."

Here is the up-to-date list of Midwest State Directors and Assistants:

ILLINOIS: James Edwards, 306 Samonauk Ave., Park Forest IL 60466. Assistants: Leo J. Boushka, Jerseyville; Marie Burgin, Danville; Charles Hodgson, Park Forest; Lester Petery, Zion; Edna Woodbury, New Windsor; Kay Yankala, Lockport.

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## ENVIRONMENTALLY SPEAKING.... IN THE MIDWEST

By John Boland  
MWF Environmental Committee

In a new policy, OSHA will soon publish a list of about 500 substances as potential carcinogens. These will be listed in two categories; substances where scientific evaluation indicates grave danger of cancer, or those of "suggestive danger" of cancer.

The knowledge of these substances in the form of solvents, cutting solutions, glues, dusts, fumes, chemicals, and dyes, will help us to pursue our hobby without peril.

Mrs. Charles Noel, Raytown.

NEBRASKA: Marie Taylor, 910 New Hampshire, Lincoln, NE 68508.

OHIO: Peg Johnston, 4 Baker St., Berea, OH 44017. Assistants: Vicki Bobofchak, Parma; Walter Calendine, Dover; Hal Cranford, Toledo; Paul Clifford, Cleveland; Richard Iuen, Cincinnati; Leo Learned, Columbus; Eleanor Losiewicz, Lorain; Helen Murray.

SOUTH DAKOTA: Dell Milbrandt, 1301 N. 4th, Aberdeen, SD 57401. Assistants: Vivian Andrews, Madison; Don Ormesher, Valentine; Richard Sunde, Vermillion.

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### NEBRASKA SURVEY PUBLISHES EARTHQUAKE BOOK

For only \$1.00 you can order a 20 page booklet from the Nebraska Conservation and Survey Division, University of Nebraska, Lincoln, NE on the Earthquakes of Nebraska. The author, R. R. Burchett, says that although some of Nebraska's earthquakes can be traced to known structural faults, others can not.

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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:

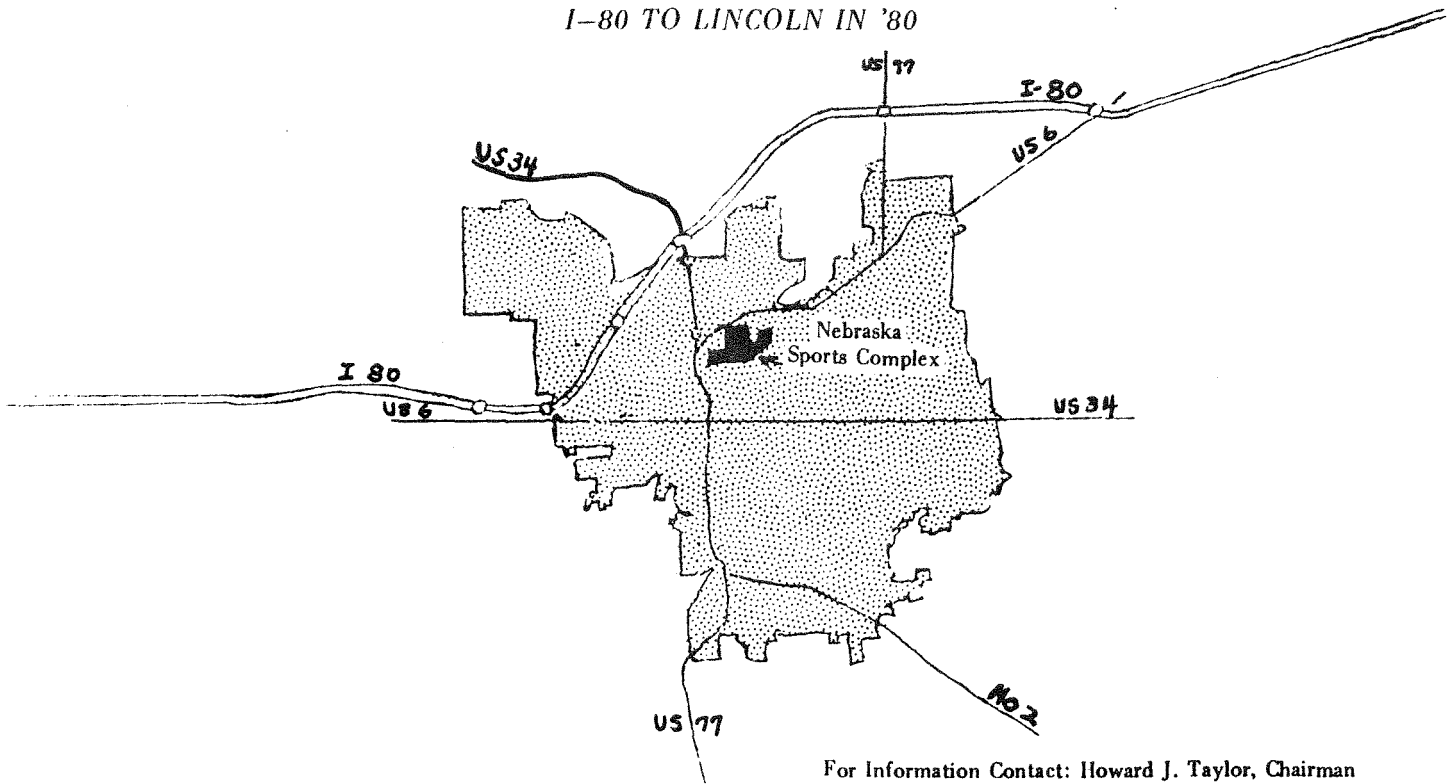
Adult membership fee **\$5.00** (age 16 and over)

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

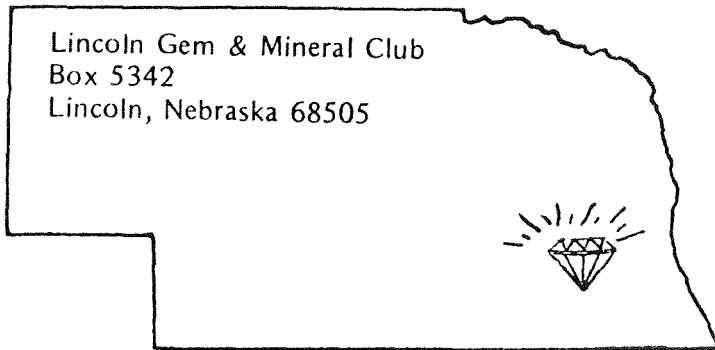
Family membership fee **\$11.00** (husband, wife and all children under 16 - permanent residents of household)

*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.

HOST TO  
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