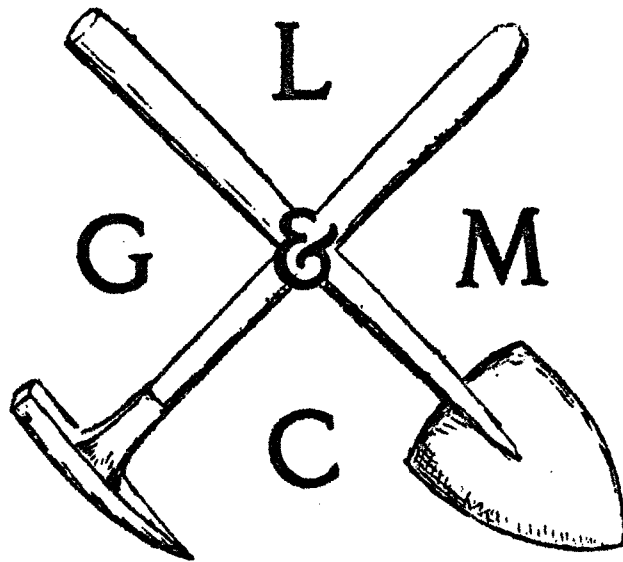


THE PICK & SHOVEL



JAN -- 1974.

OFFICIAL PUBLICATION OF

LINCOLN GEM & MINERAL CLUB

HOST OF COMBINED

MWF-AFMS NATIONAL SHOW AND CONVENTION
AND NEBRASKA STATE SHOW

JUNE 13-16, 1974
LINCOLN, NEBRASKA



CALENDAR



Somehow, not only for Christmas,
but all the long year through,
The joy that you give to others
is the joy that comes back to you.
---John Greenleaf Whittier

REGULAR MEETING: Sat., Jan. 26, 1974, 7:30 p.m.
W.O.W. Bldg., 734 S. 27th St.

PROGRAM: Dr. Carroll Moore of the Nebraska Wesleyan Physics Dept.
will present a program on comets, featuring the comet,
Kohoutek, which will be visible in January.

REFRESHMENTS: Served by Refreshment Committee.

MUSEUM VOLUNTEERS: Will resume meetings Friday, Jan. 18th,
7:30 Nebraska Hall. Go to west door. Take
elevator to 4th floor.

DATES TO REMEMBER:

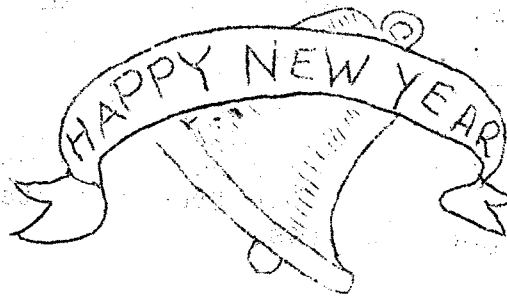
- Febr. 7, 1974 7:30 p.m., Board of Directors Meeting -
Home of Ralph Ulrich - 3909 Pace Blv
- Febr. 7-11, 1974 Quartzite, Arizona - 8th Annual Quartzsite
Pow-Wow
- Mar. 1-3, 1974 Kansas City, Kansas - Greater Kansas City
Gem and Mineral Clubs Show - National Guard
Armory
- June 7-8-9, 1974 Cheyenne, Wyoming - Rocky Mountain Federation
and Wyoming Federation of Mineral Societies
combined Convention and Show. Hosted by
Cheyenne Mineral & Gem Society
- June 13-16, 1974 Lincoln, Nebraska - A.F.M.S., M.W.F. and
NAOESCI SHOW. Hosted by Lincoln Gem &
Mineral Club - State Fairgrounds

Don't forget Betty Crocker coupons--Give to Mrs. Julius Young

If you haven't paid your dues,
be sure and get them to John Harrison,
our 1974 treasurer.

Snowdrifts are about the only problems that disappear if you
ignore them long enough.--Korn Krib News

1974



The W.O.W. Hall was the scene of a festive occasion on December 8th. There were 116 present for the Christmas dinner and the meeting which followed. Everyone enjoyed the abundance of delicious food prepared by our Club members, and the unusually good ham and turkey furnished by the Club. Art Howlett is an expert on selecting good meat.

It was a pleasure to have the children present. The carols which they sang were much enjoyed. Especially nice was their rendition of "Away in A Manger."

After dinner Rev. John Reid, pastor of the St. Paul's United Church of Christ, gave a slide lecture on archaeological research in Israel. He spent three months there, living in a tent in the barren area where the excavations were made. Diggings verified passages found in the Book of Kings concerning the battle between the Moabites and the Israelites. Pictures of the River Jordan were shown. Bottles of its water were sold to tourists with the reminder that Christ had been baptized in the River Jordan.

After the slide lecture, the 1974 officers were installed. Names of officers and committees will appear in another part of the bulletin.

A gift exchange followed. The Christmas party is always very much enjoyed by all who attend.

V A Y A C O N D I O S

May God Be With You

Cards were sent to : Kathryn Ulrich - Get Well
Dr. Stehl Family - Sympathy



CANDLELIGHT

A candle is but a little thing;
It starts with just a piece of string.
Yet, clipped and dipped with patient hand,
It gathers wax upon the strand,
Until complete and snowy white,
It gives at last a lovely light.
Life seems so like a bit of string,
Each deed we do a simple thing.
Yet day by day upon life's strand
We work with patient heart and hand
It gathers joy, makes dark days bright,
And gives at last, a lovely light.

--from The Snowbank

My lovely light was being remembered so beautifully by our friends in Lincoln Gem and Mineral Club while in the hospital. A sincere thank you for the many, many cards, books, and flowers. The red poinsettia was so beautiful, and still is, and the red azalea is still blooming--truly lovely. A grateful "THANK YOU" to all who remembered me. mjc

Kathryn Ulrich wishes to thank the members of the L.G.M.C. for the get-well and Christmas cards which she received while in the hospital at Cape Girardeau. A letter from her states that she is getting along well and is in good spirits.

IGMC BOARD MINUTES

A Board Meeting was called for December 26, 1973 by the President Roger Pabian. Board members present were Tom Simmons, Nelda Oliver, Howard Taylor and Roger Pabian. The meeting was presentation of bills to be approved. John Harrison, unable to attend the meeting, voted by phone to pay bills as read. Motion by Tom Simmons to pay bills, second by Howard Taylor and carried.

via Phone from Secretary Nelda Oliver

1974 Show and Steering Committee Meeting Report

A meeting of all 1974 Show Directors, any of their committee members who might be interested, and the Steering Committee, was called by Show Director Irl Everett for December 6, 1973, at Nebraska Hall, Room 122. The purpose of the meeting was to bring each group up to date on the progress and development of plans for the show. All committee heads were able to be present and several committeemen.

Irl called upon each Division Director for a short report on progress and deadlines were discussed and ideas exchanged. Each Director will attempt to have some information prepared for publication in The Pick and Shovel in the near future.

It is much more stimulating to hear the actual words of each involved Director than for one person to attempt to report it all, especially since this report was to be the actual minutes taken by the Director known as Secretary - put on stencil weeks ago for use in this bulletin and the extra copies needed for the show committee. With the usual run of luck on publication day, have searched over an hour for the stencil and not found it - so will have to print it and mail to the committeemen then hopefully insert in the next publication.

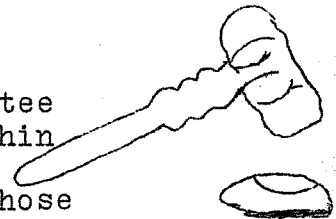
In the meantime - Did you see the terrific report prepared by Howard Taylor, Dealer Director, and typed for printing by Rosa Lee Wright? Did you catch that excellent Show Director Bandwagon? Did you have to read last month's complete report by the Registrations Director, Norma Miller. Soon we hope to have reports from some more of the Directors, like Publicity Marie Wells, Displays Roger Pabian, Special Events Hal Allen, Features Marie Taylor, Budget Ray Grabher, Recognitions Jim Parks, Security George Balke, Federation Liaison Ralph Ulrich, and especially Building and Sites Director John Harrison with the information about The Place to Go in '74.

Only five more months and it is all over but the exclamations of joy and satisfaction of having put on such a marvelous event.

Respectfully submitted - Phyllis Parks

PRESIDENT'S MESSAGE

As your Club president, I have become aware of several very real personal challenges. While I was contacting the membership to fill the standing committee appointments, I came to the full realization that within our Club is a vast and varied source of talent and enthusiasm. I really appreciate your acceptance of those appointments, and by working together we can expand our horizons in the earth science hobby. Some of you were not contacted even though you have ability and the eagerness to serve. Your energies will be needed on other projects, and you may yet be called upon.



We are planning to have a full Club program of activities in addition to hosting the National Show. You may look forward to some very exciting field trips, both short-distance and long-distance, including overnight stays. The regular programs on meeting nights are going to be unusual and topical. I have already started to look forward to them. Our educational program will include classes for the eager to learn. You can expect several offerings to be announced in January.

The National Gem and Mineral Show project will come to fruition. So much planning, so much anticipation, and so much effort has been directed to this project that even though we are faced with the uncertainties of the energy situation, we already have more requests for display space than there were total displays at the 1973 National Show in Charlotte, North Carolina. Hundreds of requests for information packets have been received and answered already.

Now, about conserving energy, I believe we should continue to follow the outline program as established by three years of diligent planning by the total Show Committee. Rather than waste our energy wondering about rumors and propaganda, I will suggest to the Board that we select a few members, say 3 to 7, to concentrate on the information that appears and to study it on the basis of practical application to our activities. They could also study possible ways to overcome some of the transportation difficulties, like chartered busses, car pools, gasoline coupon clearing centers, etc.

Yes, this is going to be a year of personal growth for our Club and its members.

--Ralph Ulrich

Dinosaur Eggs in Utah--James Jensen of Brigham Young University has discovered a bed of whole dinosaur eggs dating back millions of years. In the past, a few shell fragments have been found in Montana, Mongolia, China and France. The eggs found by Jensen measure three inches in diameter and are five inches long.--Fossils For Fun.

Use Scotch reflecting tape as backing for clear quartz or rutilated quartz cabs for 'way out' effects. Back obsidian cabs with aluminum foil for another unusual effect. Glue stainless steel strips between 2 or 3 contrasting slabs with epoxy. Then work from the smooth side to mark with a template. Pre-form and turn as if it were one solid piece. Everybody will say, "How did you do that?"--The Conglomerate,
via The Rock Box

EDITORIAL

Articles written by our Club members make interesting reading. They are not only interesting to members of our local Club, but they are appearing in many exchange bulletins. This is a real compliment to the authors. We are always happy when another editor finds something in The Pick & Shovel which he feels is interesting enough to publish in his Club bulletin. We have been fortunate in having many articles and excerpts from our bulletin printed in exchange bulletins.

The December issue of The Geode, which is the bulletin of the McDonnell Douglas Gem and Mineral Society states: "Both the September and August Journal of the Waikato Geological Society of Hamilton, New Zealand are available. The September copy reproduces "The Characteristics of Gemstones", by Roger T. Simmons, taken from The Geode." We don't exchange with any club in New Zealand, but Roger's article had appeared in The Geode. You see how an interesting, original article travels. We hope to have some more write-ups from Roger.

Roger Pabian has had quite a few contributions reproduced in other bulletins. His article on Lake Superior Agates was especially well received. Roger has promised to give us some more fine articles during the coming year.

Lefty's Tips by Frank Rule have been very popular. They have been used in Gemdrops, Emerald Gems, and several other bulletins. Let's have more tips, Lefty.

Irl Everett's "Band Wagon" has appeared in bulletins too numerous to mention, and his map of gem locations in Nebraska showed up in The Limestone Rattler, the Winterset, Iowa bulletin. Art Howlett's "Have You Thought About Your Collection Lately?" has been printed in several bulletins, including Skagit Gems, a Mt. Vernon, Washington bulletin. Glenna McGinnis' "A Visit to the Woodward Ranch" has been published in other bulletins. J. D. Young's write-up on Dr. Neihardt and The Hugh Glass Story has appeared in South Dakota bulletins, and also The Prairie Gem of Regina, Saskatchewan. Your editor's article on the '73 Kansas City Show was reproduced in Shaw-Mish Rok Tawk, Overland Park, Kansas, and her "Amber" appeared in Gemdrops, the Campbell Gem and Mineral Guild bulletin of Santa Clara, California.

This goes to show you that original articles are in demand. Do share some of your experiences, shop hints, or other ideas related to the hobby with us. You may think that what you have to offer is not worthwhile--but that isn't true. Make a New Year's resolution to write some articles for The Pick & Shovel. Happy New Year!

--Evelyn Ulrich, Editor

Good advice for the New Year! Watch Your Words

A careless word may kindle strife, a cruel word may wreck a life.

A bitter word may hate instill, a brutal word may smite and kill.

A gracious word may smooth the way, a joyous word may light the day.

A timely word may lessen stress, a loving word may heal and bless.

--Granville Kleiser



Get on the
1974 SHOW
BANDWAGON

Well, it's now January 1974, and that means we are approaching the time when we have to get things done. As we all get ready for the National Show there are some things to be taken into consideration.

Number 1--I think this is the time to start on the cases you will display. I have talked to quite a few who are building, or having built, new show cases. This is a very nice idea. If you do not have a case, then you should build or buy one. Along this same vein of thought, what will you display? I think back on the articles written, and it seems like I have spent a lot of time discussing cases. But it is a very neglected thing.

I feel that you should take the time to pretty up your case. Line the front, back, sides, and bottom with a nice showy material. Arrange and rearrange the specimens so that you can get a real good idea for the layout. Use risers--shelves or blocks to get the most presentable display. If your case is lighted, use this to the advantage of the specimens. Also, get your labels ready and neatly done, so when you set it up all you will have to do is lay in specimens and labels.

Also, if you haven't written Roger Pabian for a display form, do it today--he has to know if you are displaying and what.

Number 2--Now that we have covered cases and displays, the next item is to keep in mind that we are having a National Show and talk about it. I have heard so much negative talk about this and that till I wonder if we should not take time to have a quick course in Enthusiasm!

We all need to talk Show at every opportunity. Rather than discuss the bad points of the gas shortage, the energy crisis, and world problems, let's talk up the Show.

Number 3--We need now to take inventory of what we have to do--what can be done--and how we can help. I still need a Swap Chairman, so if you would like this job, please let me know.

We are in good shape as far as our budget, expenses, and the cash outlay goes. We have stayed well within the framework of the overall Show expense.

NOW IS THE TIME FOR ALL L.G.M.C. MEMBERS TO COME TO THE AID OF THE SHOW DIRECTOR.

If you can help, please let me know, and I'll assign you a job!

--Irl Everett

1974 National Show Director

NATIONAL GEM AND MINERAL SHOW, June 13-16, 1974
"The Place to Go in '74"

Our dealer lists are about completed. The deadline is set for February 15, 1974. So far, we have had applications from 274 dealers. From this fine assortment of dealers, we have selected 50 retail dealers and they are all under contract.

To date, we have signed 26 wholesale dealers and have six machinery dealers. We do have room for two more wholesale dealers and about four machinery dealers.

In our selection of these dealers, we feel we have a good representation from all across the country and Canada.

--Howard Taylor,
Dealer Chairman

WHOLESALE DEALERS

Ludlums Minerals
87 Cherrington Rd.
Westerville, OH 43081

Davis Minerals
3200 East Linden St.
Tucson, AZ 85716

M. P. F. Wholesale
P. O. Box 98
Flora, MS 39071

Imperial Gems
P. O. Box 1422
Riverside, CA 92502

Bruce W. Osborne
1363 Helix View Drive
El Cajon, CA 92020

Duncan's Minerals
P. O. Box 4665
Yuma, AZ 85364

Oceanside Gem Imports, Inc.
426 Marion Street
Oceanside, NY 11572

Equatorial Imports
504 N. Bishop
Richardson, TX 75080

Artrox
Rock of the Month Club
700 N. Copia
El Paso, TX 79903

Wheeler Manufacturing Co. Inc.
Lemmon
South Dakota 57638

Royal Gems
6305 Reid Dr. N. W.
Gig Harbor, WA 98335

Eckert Mineral Research
5818 East Colfax Ave.
Denver, CO 80220

Bader's Minerals
15820 Park Ave.
Colorado Springs, CO 80908

Oregon Gem Stones
P. O. Box 189
Sherwood, OR 97140

Howard Wheeler Co.
Grand Rapids, Michigan
Mailing Address:
P. O. Box H
Comstock Park, MI 49321

Pacific Test Specialties
13445 Beach Ave.
Marina Del Rey, CA 90291

Lyko Mineral & Gems Inc.
5226 Doniphan Dr.
El Paso, TX 79932

'74 SHOW, WHOLESALE DEALERS, continued

Unique Botique
Lt. Col. Don Lair
P. O. Box 20332
Orlando, FL 32841

E. F. C. Lapidary Co. Inc.
P. O. Box 6517
Denver, CO 80206

Trans-American Gems & Minerals
40 Milton Avenue
Jersey City, NJ 07307

Robert R. Dye Minerals
P. O. Box 2375
Warner Springs, CA 92086

Gates Rocks & Minerals
Route #2, Box 167 X
Alma, AR 72921

Ned Hutter
4253 Hampshire Lane
El Paso, TX 79902

Evco Enterprises
2941 No. 65th St.
Lincoln, NE 68507

Gems Australian Opals & Minerals
John J. Scott
6274 Trancas Cyn Road
Malibu, CA 90265

The Mineral Kingdom of
Woodmere Long Island
769 Arbuckle Avenue
Woodmere, NY 11598

S and H Casting Co.
985 Winter N.E.
Salem, OR 97301

MANUFACTURERS &/OR DISTRIBUTORS

Facetron
17811-C Sky Park Circle
Irvine, CA 92707

Pacific Test Specialties
13445 Beach Ave.
Marina Del Rey, CA 90291

Fac-Ette Mfg. Co.
3253 South 162 St.
Seattle, WA 98188

Diamond Pacific Tool Corporation
24063 W. Main St.
Barstow, CA 92311

Beacon Engineering Co.
Rothsay
Minnesota 56579

Posten & Myers
2926 N 53 St.
Kansas City, KS 66104

RETAIL DEALERS

Henry B. Graves Co.
1190 So. Old Dixie Hiway
Delray Beach FL 33444

Eastins Lapidary
Rt. #6, Box 1079
Eugene, OR 97402

Lidstroms
P. O. Box 518
Prineville, OR 97754

Pony Gem Case Co.
P. O. Box 862
Martinez, CA 94553

Cascade Trading Post
C.C.C.A.
Star Rt., Box 601
Loveland, CO 80537

Opals Via Australia
26391 Plymouth St.
Hemet, CA 92343

Colorado Geological Ind. Inc.
5818 Colfax Ave.
Denver, CO 80220

Lentz Lapidary
R. R. #1, Box 24
Mulvane, KS 67110

'74 SHOW, RETAIL DEALERS, continued

The Road Runners
P. O. Box 267
Quartzite, AZ 85346

David P. Wilber
P. O. Box 47
Carson City, NV 89701

Stan's Shop
123 West 500 North
Provo, UT 84601

Hilitary Trading Post
Elliott J. Glasser
P. O. Box P
Scottsdale, AZ 85252

Black Hills Artcraft
603 Main St.
Spearfish, SD 57783

William B. Givens
Jewelry Manufacture
P. O. Box 158-207 "B" St.
Needles, CA 92363.

Alsup's
P. O. Box 145
Wenden, AZ 85357

Keller's
138 Hawthorne
Bend, OR 97701

Murphy's Gems & Minerals
P. O. Box 256
Helotes, TX 78023

Sherman's Rock Shop
P. O. Box 520
Onawa, IA 51040

Crown Gems Company
P. O. Box 5536
Sherman Oaks, CA 91413

Stewart's Gem Shop
2620 Idaho St.
Boise, ID 83706

Geode's
P. O. Box 224
Portage, MI 49081

Claude B. Dawson
Gems & Minerals
1199 Semmes St.
Memphis, TN 38111

Dowell's Rock Shop
2205 Highway 281 South
Edinburg, TX 78539

Ebersole Lapidary Supply Inc.
11417 W. Highway 54, R.R. 8
Wichita, KS 67209

Wright's Rock Shop
406 Airport Rd. Hwy 70
Hot Springs, AR 71901

Bergsten Jade Co.
P. O. Box 2381
Castro Valley, CA 94546

L. O. Turner
355 West 100 North
Provo, UT 84601

Greifenberger International Ltd.
88-33 161 St.
Jamaica, NY 11432

Markerts Rock Shop & Motel
Rt. 1, Box 620
Ishpeming, MI 56293

Bruce Simon
3922 South 20th St.
Lincoln, NE 68502

Gali's
1935 So. Ferry
Albany, OR 97321

The Prospect Hole
Box 447
Silverton, CO 81433

Hutsells Rock Shop
606 South 16th
Blue Springs, MO 64015

Chas. J. Hansen
145 Naples St.
Chula Vista, CA 92011

'74 SHOW, RETAIL DEALERS, continued

Bryan Lovelace Rock & Mineral Shop
2610 Armory Rd.
Wichita Falls, TX 76302

M. & J. Rock Shop
2105 So. Pershing
Wichita, KS 67218

Dennis & Marc Johnson
305 West 7th St.
Mankato, MN 56001

Howe Lapidary
1080 Sheridan Road
Kenosha, WI 53140

Rock & Gem Jewelry Rock Shop
703 N. Main St.
Adrian, MI 49221

Gordner's Gem Warehouse
4306 Richey Road
Yakima, WA 98902

Pala Properties International
912 So. Live Oak Park Rd.
Fallbrook, CA 92028

Gaveny Creations
Gems & Minerals
5411 D Albemarle Road
Charlotte, NC 28212

Lowell W. Fields
229 Wyoming St.
Gooding, ID 83330

Bellevue Rock Shop
2216 Lloyd St.
Bellevue, NE 68005

Everett Lapidary Shop
2941 North 65th St.
Lincoln, NE 68507

San Juan Gems
Box 1077
Cortez, CO 81321

South Bend Rock Shop
50552 U. S. 31 North
South Bend, IN 46637

Koala and Associates
Australian Opal Importers & Cutters
Box 7381
Toledo, OH 43615

Apex Minerals Int. Inc.
P. O. Box 4731, Sta. C
Vancouver 10, B. C. Canada

Rolene Rock Shop
Wabasso
Minnesota 56293

T H I N G S T O R E M E M B E R :

The value of time.

The necessity of perserverance.

The pleasure of working.

The worth of character.

The dignity of simplicity.

The power of kindness.

The wisdom of saving.

The virtue of patience.

The joy of originality.

The beauty of cheerfulness.

The influence of example.

The obligation of duty.

NELDA'S NEWS



Can you believe our 'great hunter' Tom Simmons went Duck hunting in January?. He said he 'only' got ten.

Glen Litzenberg recently retired from the post office after 53 years service, just in time to take a job as 'snow shoveler'.

Sorry to hear our friends Mr & Mrs Cliff Bigger lost their Hilltop Rock Shop in Crawford, Ne. to a fire in January.

Roger Simmons is in Gulf Port, Miss. with the Seabees. He leaves Jan. 11 for three weekends.

Marie Wells reports Zee Urdil dropped in the other day and will be spending time in Lincoln visiting.

Stan & Hazel greenwade had a nice trip to Indiana. While there they stopped to see Paul & Dorothy Bendall of Ft. Wayne. Dorothy had surgery so plans to field trip were cancelled at this time. Hazel reports no gas problems.

Mrs Linnie Smith, mother of publisher Phyllis Parks is having trouble with her leg infection again. Keep taking those antibiotics Mrs Smith.

Norma Miller can't seem to stay away from editor. She will be the new editor of NASOCI. Good luck Norma.

The Rev. Norman Sincebaugh accepted the position as executive secretary of the North Dakota District of the Lutheran Church, Missouri Synod. He is the son of Ray & Dorothy Sincebaugh.

The Legislature honored the late Dr. John G. Neihardt in a brief ceremony Tuesday, January 8, members of the Neihardt family were present. The ceremony was the end result of a resolution approved earlier by the Unicameral.

PLEASE help your new officers. DUES ARE DUE NOW. Bring your dues to the meeting January 26, 1974. The treasurer will be there to collect them. If you are unable to attend the meeting, mail dues to John Harrison, Jr., Hickman, Nebraska 68372. Renewal dues are \$7.00 Family, \$3.00 Per Adult, \$1.00 Jr Member with adult sponsor. Till next month, Nelda

LATE NEWS ITEM; We're sorry to hear of the death in Michigan of Clubmember, Dr. C.H.L. "Carl" Stehl of 3725 H St, Lincoln. Our sympathy goes to his family.

TOM AND LEFTY'S ROCKSHOP

6333 KEARNEY STREET

PHONE 466-1697

We welcome the New Year with tons of fine materials for your selection and would like to share ideas for spending the long winter evenings and week-ends.

Come chat with us over coffee.

FROM THE EDUCATIONAL DEPARTMENT:

We will try something new in the club for an educational project this year. The project will be a study of Geologic Time. The emphasis will be on the use of fossils in the scientific and logical development of a geological time column. We will study many of the important groups of fossils and their implications in developing the geological time column. Not only will we study how various species have influenced the development of the geological time column, but how evolution of various species also plays a role. Stratigraphy and paleontology will be the thing that will be stressed, although we will digress at least once to study the implications of radiometric and fission track dating in developing a time scale, as opposed to a time column or chart. What we hope to do, then, will be to make an interpretive rather than descriptive study of fossils and rocks.

Current plans call for bi-weekly meetings of the study group. The first of those meetings will be scheduled for early in February, Sunday, February 3, to be exact. We will meet in various members homes. The time and place of the February 3 meeting will be announced after the next meeting. If you want to study a bit of geology, let me know at the next meeting so we can get the project going.

In addition to the geologic time classes, we will have a monthly rock feature. For January, the rock feature will be agate. Any one wishing to participate may do so simply by bringing an agate, or several agates. We have club cases that may be used to display your braggers. Bring some agates so we can all see them.

Some facts and speculations about agate:

Composition: Silicon dioxide, SiO_2

Hardness: About 7

Toughness: Variable, some may be weak (e.g. Nebraska Blue Agate); some may be brittle (e.g. Lake Superiors) or some just plain tough (Montana Agate).

Specific Gravity: 2.60 - 2.64

Refractive Index: $1.543 \pm .0005$; $1.543 \pm .0005$; Birefringence = .008

Crystal System: Cryptocrystalline (May be Orthorhombic, Monoclinic; See F.T. Jones, 1952, American Mineralogist, p. . . .)

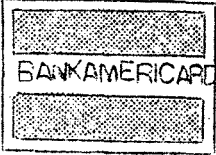
Mode of Occurrence; Igneous (basalts) Canadian Shield, Precambrian (Keweenaw); Sedimentary (marine) in limestones, Pennsylvanian, Wyoming, South Dakota; Sedimentary (Continental) in siltstones, Oligocene, Nebraska; Metamorphic, in chlorite schist (may be an altered basalt), Precambrian, Canadian Shield; Igneous (Welded Tuff Ash Flows, Rhyolitic Compositions) Pacific Northwest, Miocene, Northern Mexico, Miocene, Southwestern United States, Miocene. Agates most commonly occur in welded tuff ash flows. Agates listed above are all from in place occurrences. Agates may be found in stream gravels (e.g. Fairburns in Oligocene and Pleistocene Gravels of northwestern Nebraska; glacial gravels (e.g. Lake Superiors in glacial tills over a dozen midwestern states).

Geological Significance: In ash flows, agate formation is related to devitrification of welded tuffs. In this environment, as well as other geological environments, the formation of agates may also be related to the development of soils and unconformities.

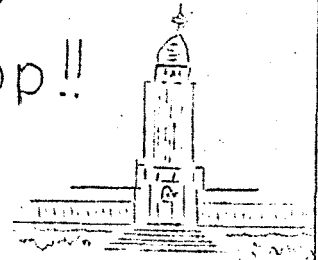
Myth about agates to be debunked: No two agates are alike. Many different agates show identical sequences of banding. This is especially seen in Coya Mito and Moctezuma Agates from Mexico. Agates forming under similar conditions in the same environment should be identical. Field data shows that they are identical so not only will two agates be alike, but several million forming in the same environment will be identical. Throughout geological time, agates have formed in perhaps several million different physical systems at several million different times. Each system may form a uniquely banded agate, but each system may contain several million identical agates. Several million in several billion isn't a very big percentage so a collector may see 10,000 agates before he sees two identical patterns.

Everett Lapidary Shop

capitol city's first rock shop!!



2941 NORTH 65th STREET - PHONE 466-6204



This is the start of a New Year.

Please call us for any of your
needs for the "Big" Show.

"SATISFIED CUSTOMERS ARE OUR BEST ADVERTISEMENT"

Club Member Exhibits at Western Electric Hobby Show

Mrs. Hazel Greenwade received many compliments on an exhibit which she made at the Western Electric Pioneer Hobby Show November 30th. One of her cases contained mineral specimens, while the other displayed jewelry. The cut stones consisted of smoky quartz, amethyst, obsidian, rhodochrosite, Australian tiger-eye, and petrified wood. Such exhibits direct favorable attention toward the activities of the members of the Lincoln Gem and Mineral Club.

SCHOLARSHIP STUDENT AWARDS

"Honorary award winner for the M.W.F. was Professor Stuart Struever, Professor of Archeology, Anthropology Department, Northwestern University, Evanston, Illinois. Professor Struever was chosen for his leadership in bringing modern scientific methods from other disciplines to bear on archeological research.

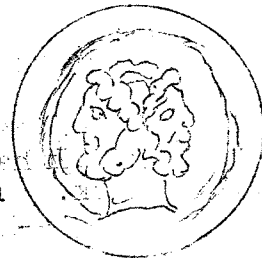
Miss Lynne Goldstein will receive the Scholarship Foundation Scholarship awarded by Prof. Stuart Struever of Northwestern University. She was the Honor Award winner of the M.W.F. for 1973. Miss Goldstein is a graduate student in archeology at Northwestern University. She is seeking her doctorate and has been with the archeology program at the project at Kampsville, Illinois for four years. She has been a teaching assistant in the Northwestern University Archeological Field School for the last two summers. She is in the second year of the four year doctoral program and is the co-author of a monograph published by the Illinois State Museum on an Indian cremation site in the lower valley of the Illinois River." --AFMS Newsletter

Time
FLIES

DUES ARE DUE

JANUARY

The first month in the modern calendar. The name is derived from the two-faced Roman god, Janus, to whose care the month was dedicated as looking both into the past and the future. The consecration of the month took place by an offering of meal, salt, frankincense, and wine. The Anglo-Saxons called January Wulfmonath, in allusion to the fact that hunger made the wolves bold enough to come into the villages.



The natal stone is the garnet - the zodiacal sign is Aquarius, and the flower is the Snowdrop.

No gems save garnets should be worn
 By her who in this month is born,
 They will insure her constancy
 True friendship and fidelity.
 The gleaming garnet holds within its sway
 Faith, constancy, and truth to one alway.

GARNET

Garnet is a general name applied to a group of specific silicate minerals having similar crystal structure. The name is derived from the Latin granatum, meaning "pomegranate", and alludes to the resemblance of some of the red varieties to pomegranate seeds.

Garnet is an important rock-forming mineral composed of some of the principal elements comprising the earth's crust. It is found practically everywhere in the world. Garnets occur usually in metamorphic rocks--schists and gneisses, but are often found in igneous rocks in volcanic diamond-bearing pipes."

They crystallize in the cubic system--12 sided rhombic dodecahedron or 24 sided trapezohedron. The luster is vitreous - hardness ranges from 6½-7½ Mohs - the specific gravity in gemstones is 3.60-4.30.

There are six types of garnets. They are as follows:

Amandine - dark red to brown - Principally used as an abrasive, but sometimes used as a gem.

Pyrope - deep red - When perfect is highly prized as a gem. They can be found in California, Colorado, Kansas, Kentucky, New York, South Carolina, and Utah. An excellent variety is found in Utah.

Spessartite - dark red, sometimes has a violet tinge - They are less common. Are found in Virginia.

Grossular - varies in color - May be pink, green, or brown. A green variety was found in Siberia and was given its name because it resembled gooseberries. The Latin for gooseberry is Grossulariaceae. A reddish-brown grossular is known as "cinnamon stone."

Demantoid - is a green type of garnet.

Unarovite - is rare. It is emerald green. It may be found in Montana, Arizona, and New Mexico.

The hardness of garnets and their sharp fracture make them suitable as abrasives for wood, leather, and plastics. They are also used for lens grinding and metal and glass polishing. Garnet coated paper and cloth are produced by several manufacturers.

continued next page

GARNET, continued

Use of garnets as gems began with ancient Egyptians, if not earlier. It has been said that huge garnets were the only light in Noah's Ark.

--Material for this article was found in the Encyclopedia Britannica, Lapidary Journal, and "The Curious Lore of Precious Stones" by George Frederick Kunz. Copyright 1913 by J. B. Lippincott Company. Renewal 1941, by Mrs. Ruby Kunz Zinnser. Used by permission of J. B. Lippincott Co.

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THE COPPER INDIAN

Centuries before the Spaniards came over to raze, rape and destroy a civilization, the Indians throughout the South American mountains had discovered how to work with copper, and make a metal we call bronze. These Incas and pre-Incas were not miners; they gathered from the surface, digging pits. Eventually, they dug individual tunnels barely big enough for a man to crawl into, and they used these to dig for that most prized of stones, the blue-green turquoise, as well as small pieces of copper.

In the village of Chuquikuma, this was the main way of life for all the male Indians, burrowing into the mountainside and using their stone tools to gather the copper and the turquoise and take it back for all to work with and to share.

One Indian did not return home at the end of the day. His tunnel had caved in.

Centuries passed. The white men (the Conquistadors) came with their fearful weapons. The Inca, the Atahualpa were put to death. They found the valley of Chuquikuma and laid it to waste and ruin. The little village lay open to the erosion of the weather.

Years and years passed by. The valley was a wasteland. One day more white men entered the valley. Instead of weapons they carried tools and machinery, and the valley sprang to life with mills as the machinery tore into the mountain sides.

One day one of the workers called for the boss to come quick. They had unearthed a man's foot and leg. Carefully they unearthed the rest of him. His braided hair still lay over his shoulders. He was clad in his breech-cloth, and in his hand was his heavy stone hammer. He lay on one side with a knee drawn up just as he was lying when the earth fell in on him. His sack lay by him half filled with ore. Over the centuries his body had been replaced with copper.

They took a picture of him with his tools. He lies today in a glass case in the American Museum of Natural History in New York City. In the case is also a picture of an X-ray picture, and it shows the bone structures. The guide will tell you that some days he still weeps for the great tragedy that befell him. Sure enough, he was weeping as your editor stood by the case.--via The A.F.M.S. Newsletter

News from the Black Hills of South Dakota

NEW MINERALS DISCOVERED IN BLACK HILLS OF SOUTH DAKOTA-Maybelle Wilcox

William Roberts, curator of mineralogy at the South Dakota School of Mines and Technology, has discovered three totally new minerals. They have been named Robertsite, Segelerite, and Jahnsite. All were found in the Tip-Top Mine near Custer, South Dakota.

The minerals were x-rayed, chemically analyzed at the Tech Experiment Station and the data mailed to Dr. Paul B. Moore of the University of Chicago for further research. The findings have been mailed to members of the International Committee on Minerals and New Mineral Names in several countries.

The International committee has approved the description and names of the new minerals as follows:

Jahnsite - minute crystals (under $\frac{1}{4}$ " in size) of nut brown, purplish brown, yellow-orange, or greenish yellow colors. Named for Professor Richard H. Jahns, Dean of Earth Sciences, Stanford Univ.

Segelerite - microscopic crystals, pale yellow to chartreuse to colorless. Named for Curt Segeler, an amateur mineralogist, of Brooklyn, New York. Mr. Segeler has done extensive work with micromounts.

Robertsite - crystals up to $\frac{1}{4}$ " across, which cover areas as large as three to four inches in size. Named for finder, Wm. Roberts, curator of mineralogy at South Dakota Museum of Geology.

--via Points of Interest

HOW OLD ARE FAIRBURN AGATES?--by Larry F. Schofield

Last month I visited the meeting of the Black Hills Mineral Society in Rapid City. At that meeting, Dr. John Mickelson, on the faculty of the School of Mines, demonstrated a fairburn agate with microscopic foraminiferan inside. These are tiny one-celled fossils that are used by the paleontologist as index fossils for dating rocks and fossils. They are similar to the amoeba, except that they have shells made of silica. Dr. Mickelson hasn't identified the species for sure but feels they are at least 230 million years old.

The significance of this find is that the agate can be dated as to its formation and as a result can be traced to point of origin in the Black Hills. Dr. Mickelson would like to examine other polished fairburns in an effort to find other foraminiferans. He would then photograph the fossil and return the agate unharmed. Perhaps someone in our club can be of help. After he has identified a number of specimens he will publish a paper describing the find.

--via "The Cycad"

It's funny but it works! Take your house number and double it, add 5, multiply by half a hundred. Then, add your age, the number of days in a year, and subtract 615. The last two figures will be your age; the others will be your house number.

--via Spring River

It really works!--E.U.



JUNIOR PAGE



ADD 'EM UP Here's a little puzzler that rockhounds should enjoy. Just put together the words called for to form the names of minerals, gems and other words associated with the rock hobby.

1. A flower + a liquid measure = _____
2. What a rolling stone won't gather + an exit = _____
3. A chopped down tree + a ship's mast = _____
4. The source of all energy + another name for rock = _____
5. A jungle beast + an ego = _____
6. A cooking utensil + residue of fire = _____
7. A cheat + the total = _____
8. A fountain drink + illumination = _____
9. A small citrus fruit + sculptor's material = _____
10. Fifteenth letter of alphabet + a buddy = _____
11. Front of the head + a small, sharp sound = _____
12. Race length + myself + a milk depot = _____

ANSWERS:

- | | |
|--------------|----------------|
| 12. Lapidary | 6. potash |
| 11. faceting | 5. tigers eye |
| 10. opal | 4. sunstone |
| 9. limestone | 3. feldspar |
| 8. sodalite | 2. moss agate |
| 7. gypsum | 1. rose quartz |

--Submitted by Maida McGrew,
via Rock Express

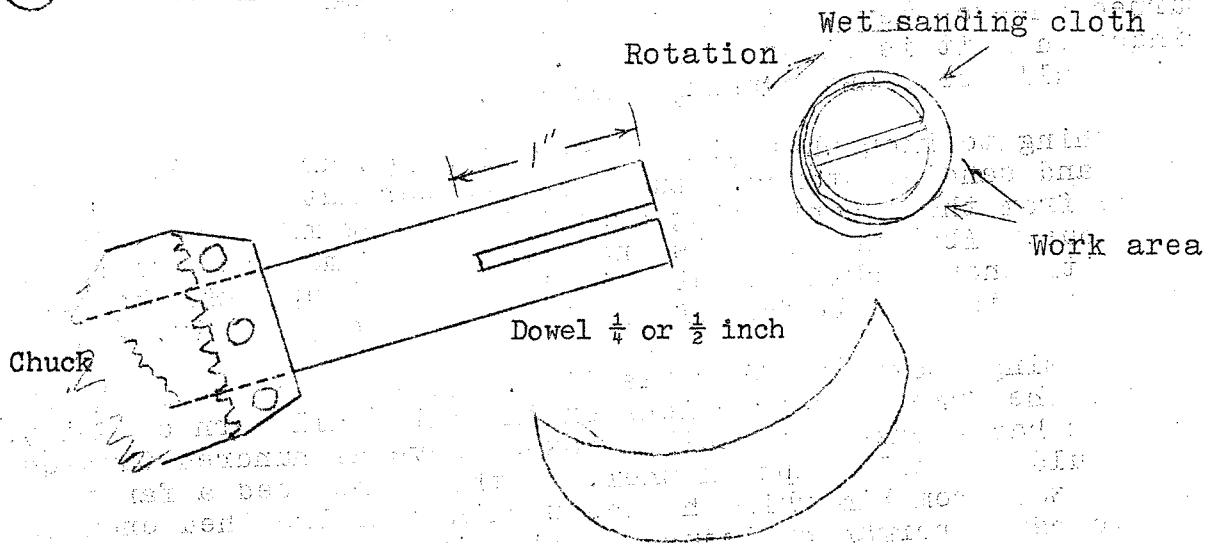
YOUNGSTER'S PET ROCK ALMOST TAKES PRIZE. Mike Tollaksen, 14, of West Lampeter, Pa. entered an unusual pet in a contest at a farm fair-- a rock. He had placed the rock in a hamster cage with a saucer of water, bubble gum, and cough drops. The judge liked the idea of a "pet" that caused no trouble so much that he awarded Mike first prize. But the judge took the prize back when other contestants protested.

--via Lapidary

SMALL SANDERS AND POLISHERS THAT YOU CAN MAKE
From the Rockpile--via The Calumet Gem



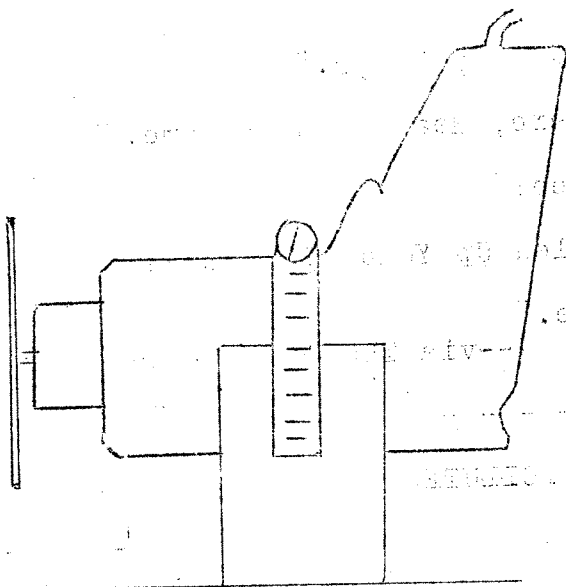
Occasionally, in the lapidary treatment of a cab with inside curves or carving, one runs into trouble sanding and polishing these spots. We find the tool shown below to be of great help in this matter.



The length or size of the tool is up to you or your equipment. We use a $\frac{1}{2}$ " chuck mounted on a $\frac{1}{4}$ hp motor. The preparation is quite simple. Slot the dowel 1" deep with a thin saw blade. Insert your sanding cloth into the slot. Watch the rotation. We find about $1\frac{1}{4}$ " widths of the cloth work well. Wrap the cloth tightly around the dowel and fasten with plastic electric tape wrapped in the same direction as the cloth.

All grit sizes may be used and should be from 120 progressively to 600.

Leather from soft to hard may be substituted for the cloth and used with your favorite polish. Work wet at all times and rig up some type of splash and shield protective device. We work facing the dowel and use the lower quadrant. These sanders and polishers are also useful in metal work.



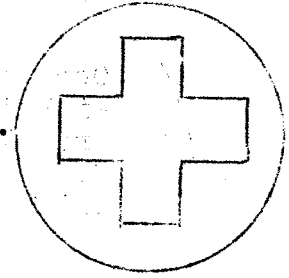
It is possible to use your electric drill with the above tools. In fact it can also be used for a small but complete lapidary unit. Just think about it. At the Midwest show in Mansfield we saw complete carvings made with a drill as the only source of power, from sawing thru polishing.

--Hazel and Pete Feilen

REMEMBER---water and electricity do not mix.- Use non-metallic string pull switches and some type of shield for your motor.

SAFETY PAGE

HELPFUL HINTS Always start your grinder before turning on the water, and always turn the water off before stopping the grinder. Let it run a while to dry it off. The water sinks to the bottom of the grinding wheel when it sets a while wet. This tends to throw the wheel off balance, and wheels have been known to break up when turned on--so--never stand directly in front of the grinder when it is first turned on. Wait until it is running full speed and running smoothly.



It is a good thing to know what kind of material you are working on when grinding and sanding stones. Dust from copper materials, such as malachite, and from those containing arsenic, such as mohawkite, can be very poisonous. Abalone shell is another kind of material to be very careful with when working. Wet grinding helps keep down the dust, but even the damp mist can be bad if one breathes enough of it.

Take care when using epoxy or other plastics. Do not get it on the skin or breathe the fumes (instructions on the tubes all warn of this). A friend of ours had a chance to sell a box of several hundred tumbled stones if he would put bell caps on them. Although he used a fan to blow the fumes away from him while he was working, he breathed enough of the fumes to cause permanent injury to his sinuses and lungs.

--Achates, via Shaw-Mish Rok Tawk

NOTICE ON SILVER SOLDER Improper use of silver solder containing cadmium metal poses a danger for Amateur Jewelry Hobbies, according to the U.S. Public Health Service. When overheated, Cadmium vaporizes and produces a virtually odorless and potentially lethal cadmium oxide. Cadmium poisoning can also result from the use of refrigerator racks for cooking on barbecue grills.--via Rock Dust

SING WHILE YOU DRIVE

At 45 miles per hour, sing - - "Highways Are Happy Ways."

At 55 miles, sing - - "I'm But a Stranger Here, Heaven Is My Home."

At 65 miles, sing - - "Nearer, My God To Thee!"

At 75 miles, sing - - "When the Roll is Called Up Yonder, I'll Be There."

At 85 miles, sing - - "Lord, I'm Coming Home."

--via The Crystal Gazette

GIVE A HOOT

DON'T POLLUTE

YTTRIUM - - - By Geo Vacik

Yttrium is always associated with the rare earth elements in nature. Pure yttrium compounds have been available only since the late forties.

Johann Gadolin, a Russian chemist, isolated a new "earth" or metal oxide in 1794 from a mineral found at Ytterby, Sweden. The mineral from which the earth was extracted was later named gadolinite in his honor. In 1797 a chemist named Ekeberg suggested the name yttria. Large scale separation of pure yttrium was not possible until 1947 at which time an ion-exchange process was developed by F. H. Spedding and his associates at Iowa State College.

Yttrium oxide prices range from \$45 to \$500 per pound for material of 99% to 99.9999% purity.

Yttrium oxide, Y_2O_3 , or yttria, has a cubic crystal structure, a density of 4.84, and a melting point of 2410°C. It is a poor conductor of electricity and is fairly stable in air.

Some of the commercial uses of yttrium are in yttrium-iron garnets, called "yigs" in the electronics industry; "yags", yttrium-aluminum garnets, used in lasers.

Recently, a yag crystal was cut in such a manner as to make the material sparkle with the lively color of a diamond. Companies found a new market for a product meant for other uses. Giant size gems have been cut from yag boules.

Yag is normally colorless but compounds may be added to make it any color. With modern technology, crystals may be grown in large numbers to keep up with the demand. With a hardness of 8.5 and a refractive index of 1.833, it is fast becoming a substitute for diamond in the gem field.

Minerals containing yttrium and rare earth elements are found disseminated and in veins in alkalic rocks, granites and syenites, granitic and syenitic pegmatites, gneisses, carbonatites, and contact metamorphic rocks.

The recovery of yttrium requires complex chemical processing.

--via Rockhound Tales

"SECRETS"

Two rockhounds met and the following conversation took place:
 "Joe told me that you told him about that secret agate hunting place you promised not to tell anyone about if I would tell you how to find it!"

"Joe has a lot of nerve. He promised if I told him he wouldn't tell you I told him."

"Well, don't tell him I told you that he told me that you told him because I promised him that I wouldn't tell you that he told me that you told him." P.S. Forget it, it is all hunted out anyway!!!

--via Rock Dust

GEMS OF THOUGHT -- Northeast Rock Club News, February, 1973

"Experience is a hard teacher -- it gives the test first, the lesson afterwards."
 "Conscience: A small inner voice that frequently doesn't speak your language."
 "Man's mind stretched to a new idea never goes back to its original dimensions."

The Washington Scene

By Kenneth Zahn

MOST IMPORTANT BILL

The Land Use Policy Act of 1973 (S. 268) is the most important bill before Congress at this time - far more important than the Watergate issue - but has received very little publicity. One excellent analysis is in the Christian Science Monitor by Robert Cahn.

At his speech introducing the legislation almost a year ago, Senator Jackson said, "Between now and the year 2000, we must build again all that we have built before. We must build as many homes, schools, hospitals, etc. in the next three decades as we have built in the past three centuries. In the past, many land-use decisions were the province of those whose interests were selfish, short-term and private. In the future - in the face of immense pressures on our limited land resource - these land-use decisions must be long-term and public."

Another reason that the land-use decision is as important as Watergate is that, like Watergate, it raises questions whether our institutions of self-government are fulfilling or subverting the public will. A citizen may vote for representation but neither he, nor his elected public officials participate in the decision making process. As citizens we are not even aware of the plans being made at all levels of Government and State to do something with our lands. Every person able to get out and enjoy the outdoors should read and study S-268 and the Report on it. Let your Congressman know that you support it. The Bill has some bugs but it is still a good bill. A subcommittee on environment of the House of Representatives is expected to finish the final mark-up of S-268 by the time you get this message. The bill passed the Senate in June. Outlook for some bill on land-use is expected to be sent to President Nixon for his signature by the end of the year. Let us hope the bill will be passed with most of the good provisions intact.

STRIPPING OR NON-STRIPPING

Strip-mining legislation is receiving executive attention in the mark-up and has been passed by the Senate. Strong pressures are being exerted to emasculate provisions to protect recreationists and the land reclamation, using arguments of necessity to use full capability to meet the energy crisis. A vote will be taken to test the phase-out of strip mining. Congress has been furnished a report by the National Academy of Sciences in which they express concern that the now major water supplies may be further taxed and may be more of a problem than the reclamation of the land. So much talk and so many reports have been presented by the National Coal Association and the Coalition Against Strip Mining, who contend that the Government should encourage deep mining of coal, that the average layman finds it exceedingly difficult to separate the chaff from the grain. We need coal, but we deserve something better than the denuded land which is our legacy of the past.

This is a very small portion of the fine report by Mr. Zahn in our last American Federation Newsletter.

Do you dare?

by LaDocia Ellis, Education Chairman

"Opportunity," it is said, "knocks at your door!" Someone else added, "but it will not knock the door down." Then Mr. Arnold H. Glasow said: "Opportunity isn't a door at all. It is a dare!"

In this, our hobby, we have many opportunities - opportunities to explore a world of wonder with beauty almost beyond belief. We have the opportunity of sharing the results of our study and exploration with others in our hobby, with people outside of the hobby and, especially, with all the young people in our communities. We have the opportunity of enlarging our education in the fields of mineralogy, crystallography, fossils and the lapidary arts, and again of sharing this knowledge through the many avenues available to us in our communities, especially through our clubs and societies.

The opportunity is there, but we must open the door, take the first step. We must knock the door down, if need be. We must accept the dare.

"To promote education in the earth sciences..." is a phrase familiar to most of us. There are many scientists in this field, a great many. But all of these people are busy teaching, researching, exploring and furthering the education of earth sciences on a high level. They do not, however, have the opportunity that is ours - that of furthering the education of earth science through our special knowledge of it, and in our own way. We may share this knowledge, gained the hard way for most of us. We may promote through programs, both in our organized groups and to the communities where we live. We may sponsor and take part in shows, demonstrations, field trips for exploration; the preparation, publication and distribution of articles and studies, geared to our level. We may support our museums. Also, we have an opportunity we should cherish - that of encouraging interest among young people, and helping them to keep that interest until such time as they may share our place or, who knows, take their place beside the scientists. But none of this is possible unless we dare.

Let us dare to send speakers and programs into our communities. Let us dare to furnish exhibits and displays for public places in our towns and cities, in addition to our shows. Let us dare to send more specimens and kits to our schools to assist the studies there.

Many of us will admit that this whole hobby is "catching" and that once you are exposed it is like a lovely malady. (A malady can't be lovely! Says who?)

Let us all dare to expose others to it so that they may share our pleasure. And let us, in all of our great Federations, dare to apply for and accept the opportunity of being counted an All American Federation Club. I dare you!

JUNE 13-16, 1974

American Federation Convention, Lincoln, Neb.

Midwest Federation's NEWSLETTER

Published monthly except July and August as a service to members clubs.
All news, articles, subscription orders and requests for information concerning publication
should be sent to P. O. Box 1130, Des Moines, Iowa 50311



Issue No. 141 - January 1974

New slide programs

Two new slide programs are available for immediate use from the MWF slide film library.

Field Tripping in Illowa Territory section 2, donated by the Illowa Gem and Mineral Society, as was section 1. New collecting sites are visited, such as Pint's Quarry, Otter Creek, Milton, Stanzel, Niota, Rockford Brick Pit, Ollie, Anderson Quarry, Cleveland Quarry, Palo, and Nora Springs. Minerals, fossils and even some cutting material are the results of these well-detailed field trips, which show the specific collecting sites as well as typical material found there. Several of these sites are now impossible for collecting (such as Niota) but most are still productive. Dick Johannesen produced this slide program which has been highly rated. 100 slides.

American Federation of Mineralogical Societies 25th Anniversary Celebration prepared by Mrs. David Jensen of the Eastern Federation and kindly donated to the MWF. This program of 57 slides is a documentation of the activities that occurred at the 25th anniversary celebration. It includes a history of the AFMS, slides of the speakers at the celebration, many slides of the giant cake and the cabachons donated from all over the USA, a few pictures of Smithsonian mineral specimens, a history of the regional federations and the scholarship foundation.

Please note! All requests for programs should be sent directly to the Program Chairman Donald Stinnett, 29462 Aspen Drive, Flat Rock, Michigan 48134. Please be sure to include the program fee and the exact and complete address to which you want the program shipped. Also, give a choice of programs and alternate dates so that you will be sure to have a program for your meeting. Order at least 30 days in advance as programs are popular and are booked well in advance.

Junior activities

reported by Diane Dare, Junior Activities Chairman

Have you been overlooking some of the displays that could be in your show? The 1973 MWF Directory lists 1,874 Junior Members in our clubs. Do Junior Members exhibit at your club show? They should!

Set aside a table or two for Juniors at your next show. Get together with your club's Junior Advisor, and invite each one to have a display - no competition, no categories, just what-

President's Message

Time to take stock

Fall days are the beginning of our enforced vacation from rock hunting. It is a time to take stock of our acquisitions of the past year. It is a time to read about what we have found, to find if those dirty rocks can ever be made into gems of beauty. It is a time to look forward to the holidays ahead and to prepare for the cold, snowy winter; some by going into semi-hibernation; some by keeping healthy by getting out into the cold and wintry sports; some by migrating to the Gulf States, but most of us just finding it a little harder to get to work.

It is a time to get the saws going, the tumblers rattling and the grinders shaping and for dreaming about that new creation you have thought about all year. Then, just before it is finished there's that crack at its middle. Oh, well, try again. It is time to plan for the shows and swaps next year and to figure how you are going to get to all those shows and field trips you have in mind. It is time to plan to attend the greatest convention and show ever in the Midwest - maybe anywhere! Let's start saving gasoline in order to get to Lincoln. Fill your car with friends and all go. Take exhibits along if you can find room. A few may be close enough to a railroad train to go that way. Others may go by bus. It is not too early to begin reservations! Did you know June is only six months away? It is time to get at it, friends! Mark Harris, MWF President

ever interests them in earth science.

A nice gesture is to give each one who does exhibit an award - a participation certificate, an exhibitor's ribbon - something they can show friends or keep in a scrapbook.

Encourage your club's Junior Members to display! Every one of those 1,874 Juniors could create some kind of exhibit! Here is what one young exhibitor done.

Kathy Justice, 15-year-old member of Blue Grass Rock Club, Lexington, Kentucky - area Champion for 4-H Geology Record Book, and winner at 1973 Kentucky State Fair of Class Champion, and Grand Champion Best-Of-Show for her geology display.

Kathy writes she has been a club member for 3 years, also a 4-H member 3 years, has displayed at the club show each year, takes an active part in club work including meeting displays and bulletin material. Kathy provided the club's theme in 1971, "Rocks Hold the World Together", used on their bulletin.

Scholarship student award announced

The Scholarship Foundation of the American Federation of Mineralogical Societies is now in its ninth year of providing grants to graduate students to complete their work in earth science. In that period it has helped 31 students at a total cost of \$24,000, not including this year's grants and it has caught the imagination of the individual clubs in the Federation to the point that they have contributed more than \$150,000 of capital funds. The interest from these funds is used to provide the scholarships.

A glance at the method that is used to select the scholars, and what type of persons they are and what they will be studying helps explain the importance of the Scholarship Foundation in encouraging study of the earth sciences, enlisting the interest and the help of professional scientists, and exemplifying the educational purpose of the American and regional federations.

This year, for the second time, each of the six regional federations selected an Award Winner, a professional scientist who would select the student to receive the \$750 stipend for each of two years. In previous years one professional had been chosen to make the selections for all the federations, but with the increase of the scholarships to six a year this became a heavy burden for one professional scientist to undertake.

Honorary award winner for the Midwest Federation was Professor Stuart Struever Professor of Archeology, Anthropology Department, Northwestern University, Evanston, Illinois.



Lynne Goldstein, Midwest

Professor Struever was chosen for his leadership in bringing modern scientific methods from other disciplines to bear on archeological research.

Miss Lynne Goldstein will receive the Scholarship Foundation Scholarship awarded by Prof. Stuart Struever of Northwestern University. She was the Honor Award winner of the Midwest Federation for 1973. Miss Goldstein is a graduate student in archeology at Northwestern University. She is seeking her doctorate and has been with the archeology program at the project at Kampsville, Illinois for four years. She has been a teaching assistant in the Northwestern University Archeological Field School for the last two summers. She is in the second year of the four year doctoral program and is the co-author of a monograph published by the Illinois State Museum on an Indian cremation site in the lower valley of the Illinois River.

Micromounters traders list

The following persons have expressed an interest in trading micromounts. Contact them directly.

Jeff Bauer, Box 623, Yankton, S.D. 57078; Novice, one year mounting

Noble Brobin, 1145 E. Chapman Street, Ely, Minnesota 55731
Novice

Mrs. W. E. (Mary) Dodds, 1844 Priscilla Avenue, Indianapolis, Indiana 46218; Advanced, Indiana Geode Minerals

George & Lillian Fuchs, 708 N. Edmunds Street, Mitchell, S.D. 57301; Novice

Max & Gladys Holiday, 1112 S. Prairie Street, Sioux Falls, S.D. 57105; Intermediate

Duane Jorgensen, 1806 Circle Drive, Bedford, Indiana 47421
Has M/M's from Homestake Mine, Lead, S.D. and others to trade for T/N's

Mrs. Faye King, Clarks Hill, Indiana 47930; Advanced

Mrs. J. A. (Esther) Kinenberger, 4061 N. Emerson Avenue,

Indianapolis, Indiana 46226; Novice, Indiana Geode Minerals

Dr. James Maple, 28 Gerard Avenue, Basking Ridge, New Jersey; Advanced

Lee A. Miller, 2713 Greenbush Avenue, LaFayette, Indiana 47904; Advanced, Michigan Copper and Iron Minerals

Nadine More, 465 North Regent Street, Stockton, California 95204; Novice, Included nice list of Italy-New Zealand M/M's to trade.

V. Morris, 673 Washington Street, Grosse Pointe, Michigan 48230; Advanced

Mel Moyer, Box 136, Brookings, S. D. 57006; Advanced, thirteen years mounting.

Bob and Mary Pratt, 825 Hawthorne Avenue, Waterloo, Iowa 50702; Advanced, five years mounting

WILL OFFICERS

of all clubs please add the date of 1972 to their copy of the Midwest Federation Special Displays Directory with the pink cover. - Mary McNamar, Spec. Displays Chairman

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)
Community Arts Council of Lincoln (CAC)

Regular Meetings: 4th Saturday of the month, 7:30 PM, September thru May
W. O. W. Bldg., 732 S. 27th St., Lincoln, Nebraska

1974 ELECTED OFFICERS:

President -----	Ralph Ulrich	3909 Pace Blvd.	Lincoln, 68502	423-0484
1st Vice Pres.-----	Frank Rule	6333 Kearney	Lincoln, 68507	466-1697
2nd Vice Pres.-----	Larry Bigley	6126 Hartley	Lincoln, 68507	466-0211
Rec.Secretary-----	Nelda Oliver	5700 Otoe St.	Lincoln, 68506	489-5222
Treasurer-----	John Harrison	Hickman, Ne.	68372	792-3825

1974 BOARD MEMBERS:

Norma Miller-----	931 Cottonwood Dr.	Lincoln 68510	489-8849
Tom Simmons-----	2970 South Street	Lincoln 68502	488-1619
Howard Taylor-----	910 New Hampshire	Lincoln 68508	432-3707
Marie Wells-----	2940 Vine Street	Lincoln 68503	435-6758

STANDING COMMITTEE CHAIRMAN:

Liaison-----	Norma Miller
Hospitality-----	Virginia Green
Refreshments-----	Stan & Hazel Greenwade - Don & Edna Carter
Membership-----	Marita Bigley
Vaja Con Dios-----	Marie J. Carveth
Historian-----	Frances Tracy
Librarian-----	Joella Olson
Housing & Property-----	Frank Rule
Field Trips-----	Larry Bigley, Tom Simmons, Don Carter
Education-----	Roger Pabian
Program-----	Florence Boring
Calling Committee-----	Wilfrid & Ollie Wittmann
Community Arts Council-----	Rev. & Mrs. Raymond Pfeiffer
NAOESCI Reporter-----	Luella Paul
Scholarship-----	Julius & Myrtle Young
1974 Swap-----	To be announced

1974 Show Director-----Irl Everett, 2941 No. 65th St., Lincoln 68507

STEERING COMMITTEE 1974 SHOW

Chairman-----	Ralph Ulrich	Financial Chmn.-----	Bruce Simon
Vice Chairman---	Howard Taylor	Secretary-----	Irl Everett

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Lincoln Gem & Mineral Club
Box 5342
Lincoln, NE 68505

1974



Member: Community Arts Council

"THE PLACE TO GO IN 74"
Nat'l Gem & Mineral Show
June 13-16 Lincoln, Nebr.

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HOST TO
NATIONAL GEM AND MINERAL SHOW, June 13-16, 1974

A MAMMOTH AFFAIR

LINCOLN GEM & MINERAL CLUB - 16th ANNUAL SHOW - June 13-16, 1974

Host to: The American Federation of Mineralogical Societies Show & Convention
The Midwest Federation Annual Show and Convention
Nebraska Assn. of Earth Science Clubs Annual Show and Convention

THE PLACE TO GO IN 1974 - Nebraska State Fair Grounds, Lincoln, Nebraska

