



# All American Federation Club Award

## 1973

### APPLICATION FORM

1. Name and mailing address of club: Lincoln Gem and Mineral Club  
Box 5342  
Lincoln, Nebraska 68505
2. Club President (1973) name and address: Roger K. Pabian  
300 Sycamore Drive, Lincoln, Nebraska 68505
3. Date of organization 1954 Number of members 168 Average attendance 85
4. Name of Bulletin Pick and Shovel, Evelyn Ulrich, Editor
5. How often does your club meet? Monthly, except June, July, and August, at 7:30 P.M.,  
4th Saturday, WOW Building, 734 South 27th Street.
6. Are your bylaws up to date? Yes.
7. Does your club have any inter-club activities such as combined shows, or combined field trips, visiting, or sharing programs? Yes. Informal visits and field trips; displaying at other club shows; bulletin exchange.
8. A. CONTRIBUTION TO MEMBERS:  
What are the benefits your club offers to its members?  
Bulletin, annual swap, field trips. See attached information
- B. CONTRIBUTIONS TO THE COMMUNITY:  
What has your club done in your own community having to do with the hobby? Annual show..  
Field guides, museum volunteers, displays at local festivals and carnivals. See attached supplement.
- C. CONTRIBUTIONS BEYOND YOUR IMMEDIATE AREA:  
What has your club done to widen your scope of interest or further the knowledge of the general public in the earth sciences? Neihardt center, hobby month, Midwest Federation, 4-H club projects. See attached supplements.
- D. Does your club contribute to the AFMS Scholarship Fund? 100 %

### REGIONAL CHAIRMEN

California Federation	Col. Bertram H. Johnson, 1705 Oakville Road, Napa, CA 94558
Eastern Federation	Jacob F. Busch, P.O. Box 558, Washington, D.C. 20044
Midwest Federation	June Culp Zeitner, Mission, S. D. 57555
Northwest Federation	Carl and Betty Church, 6636 N. Missouri St., Portland, OR 97217
Rocky Mountain Federation	Mrs. Louellen Montgomery, 1184 Collins, Topeka, Kan. 66604
South Central Federation	Col. Sam Goldenberg, Route 3 - Box 196-G, Georgetown, TX 78626

OUR

BULLETIN

## OUR BULLETIN

Our Club's Bulletin, The Pick and Shovel, is eagerly awaited each month by our club's members. The bulletin carries club news, federation news, useful information on the various aspects of the hobby such as lapidary, fossils, and minerals. The calendar of events keeps our members notified about the activities of our club as well as the activities of our many neighboring clubs.

In addition to publishing all official club affairs, our Bulletin Editor, Mrs. Evelyn Ulrich, and our Publications Director, Mr. Arthur Howlett, attempt to give the readers a well balanced selection of materials, some of which is taken from exchange bulletins and some of which is solicited from the club membership at large. The success of material prepared by our own club members is apparent when it is seen to appear later on in exchange bulletins. A sample of our bulletin and samples of materials originating in our bulletin but appearing in exchange bulletins is attached.

## HELPFUL HINTS.....

Witches Brew - for cleaning chalcedony roses, crystals and agates. USE AN ENAMEL CONTAINER AND DO COOKING OUR OF DOORS. NON WATER SOLUBLE XLS....use a solution of one cup of Drano, one half cup of uniodized salt and water to cover or a solution of one teaspoon of Polident to a cup of water. Bring to a boil, cook for fifteen minutes. Let cool, then scrub and rinse.

Place crystals in an enamel container, fill with water and add all the oxalic acid the vessel of water will absorb. Start with cold water, bring to a boil for a short time. REMOVE CRYSTALS FROM VESSEL, then scrub and rinse in cold water.

Crew, 409, Fantastic or any of the spray cleaners will get into the corners and reach inaccessible spots and work wonders. I save all my old tooth brushes for these kinds of jobs.

....via Meadview Rock Ramblers and The Gem Scoop

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Instead of dumping acid (oxalic, muriatic, etc.) down the drain where it will cause pollution and might damage the plumbing, try the following: put it in a plastic bucket or earthenware crock (do not use metal) and a piece or two of limestone. The limestone will neutralize the acid so that it can safely be dumped almost anywhere.

via Mineral Matter & Rock Buster News  
& The Gem Scoop

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Did you know that an old diamond saw blade makes an excellent tool for trueing your grinding wheels? If you have a tool rest on your grinding wheels, raise it to the center of the wheel. Then lay the old diamond blade flat on the tool rest - use it as you would use any dressing tool. If you do not have a tool rest, cut a piece of 2x4 wood just as high as the center of the grinding wheel and use this for the tool rest. Use only diamond blades that have some diamonds left in it.

-Frank "Lefty" Rule

> via The Pick & Shovel <

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Time is a great healer, but a lousy beautician.

The Mid Iowa Rock Club will meet Aug. 15th at the Fisher Community Center. Meeting time 7:30.

####

Program:  
"Iowa's Indian Heritage: Then and Now", contains slides, tape recorded narration and printed material.

####

Competition: Indian artifacts

####

Refreshments: Clyde & Thelma Woods  
Rev. Harley Gelhaus

####

Add to your membership list

Lloyd & Mable McMamar  
3422 E. 37th St.  
Des Moines, Iowa 50317

Jesse Strike  
10 N. 7th St  
Marshalltown, Iowa 50158

####

We made about \$25.00 at our auction.

####

Shape pyrite crystals into rounds or ovals and mount in rings or pins. They need no polishing. The crystals are exceptionally hard and somewhat difficult to grind.

Gem Cutter News

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When cutting Rainbow Obsidian, cut it at an angle from 3 to 15 degrees. The larger degree of angle will give you wider bands of color.

If, when cutting obsidian with oil, and then cleaning with soapy water, the obsidian seems to retain the oil, place it in a kettle of water, completely covering the stone, and then place on stove and

boil for 20 minutes. This will remove remaining oil. Stones that retain oil will not polish well, so this will help you to attain the polish you want.

"Lefty" Frank Rule  
> via Pick and Shovel <

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Working Rhodochrosite  
Long Beach News via Gem Time

Rhodochrosite is soft and must be worked carefully, with reasonable care rewarding results can be obtained. It is sensitive to heat and care should be used in dopping. Grinding should be done on a fine grinding wheel that is true and free of bumps. Use plenty of water to keep work cool. Not much pressure is needed. Wash hands and stone before sanding. Sanding should be done on a fairly new 400-grit cloth. Use plenty of pressure on the 600-grit cloth to help prevent undercutting. Polish is done on hard leather with pure tin oxide and a bit of Linde n.

####

NOTICE TO EXCHANGE BULLETIN EDITORS

The Mid-Iowa Rock Club has changed the fall show dates and will not be held at the Fisher Community Center this year.

The Mid-Iowa Rock Club will have the show in the Marshalltown Plaza mall  
2500 South Center Street  
Show dates are

Sat. Oct. 20th 10AM to 9PM  
Sun. Oct. 21st noon to 5PM

We will be having cases of jewelry, fossils, minerals, gem stone and others also be having some working demonstrations. One will be a diamond capping machine and we will have a tumbler running. No dealers.

please put the above notice in your bulletins.

####

### HAVE YOU THOUGHT ABOUT YOUR COLLECTION LATELY?

I bought a dead man's rock collection the other day and as I was sorting the rocks the thought came to me "who is going to pick over my rock collection?"

Every Rockhound has a rock collection, some quite valuable. All of us have at least one rock or mineral or gem stone that we would like for someone to have someday. But how are you going to be sure that someone gets it after you are gone?

Of course, you could give it to them before you die but that would deprive you of the pleasure of possession and display and as you don't know just when you will die, you might be without your collection for quite sometime.

Perhaps a few pieces should be given away, but it would seem reasonable that the bulk of your collection should remain in your possession as long as it gives you pleasure. You should leave written instructions regarding the disposition of your collection, even incorporating this as a part of your will.

Perhaps the bulk of your collection should be sold. In which case arrangements should be made with a trusted rock dealer to supervise the sale or even to buy the entire lot.

In case you have some valuable pieces, it might be advisable to consult your attorney and accountant.

Is your will up to date? Who is going to pick over your rock collection?

> Via: The Pick & Shovel <  
by Arthur C. Hewlett

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### NOTICE TO ALL CAMPERS

State Park campsites will continue to be available on a first come - first served basis this summer since a trial campsite reservation system has been cancelled.

Campsite reservations will not be available in our parks this year. Meanwhile, campers are urged to avail themselves of the State Parks Recreation Data Center, toll-free telephone information service for current advice on campsite availability. The telephone number is 1-800-562-8200. Operators are on duty 9 a.m. to 6 p.m. Monday through Friday.

## LAKE SUPERIOR AGATES

One of the most popular North American gemstones is the Lake Superior Agate. It derives its name from the Lake Superior Till or Red Till of Minnesota, and not from the fact that it was originally formed in the late Precambrian Keweenawan age basalt flows. Occasionally a specimen is still found enclosed in the basaltic matrix. Lakers, as they are often called, may be the real oldsters of the agate world as the Keweenawan Basalts are approximately a billion years old.

Lake Superior agates were removed from their basaltic host by Pleistocene glaciers during the last great ice age. The continental icecaps removed the agates from their place of origin, in the Canadian Shield, several hundred miles north and east of Duluth, Minnesota. The agates rode slowly advancing ice packs and were laid down as far west as southeastern Nebraska and as far south as southern Illinois. Many choice specimens are also found in Iowa, Missouri, Minnesota, Wisconsin, and Michigan.

Lakers make their most numerous appearances in gravel pits in Wisconsin, Minnesota, Illinois, and Iowa. Lakers are much harder to find in southeastern Kansas and southeastern Nebraska but some very large specimens are found there, especially in plowed fields.

Lakers are best known for their colors and their ability to produce matched sets of jewelry, the latter being an uncommon characteristic for agates. Browns and reds are perhaps the most common colors found in Lakers. Grays are a little less common. Blue, Black and green Lake Superior agates are almost unknown. They may often show a prominent white band which functions nicely as the subject of a gem. Some specimens have white bands separated by very clear bands which produces an effect of depth in the stone.

One of the most unusual phenomena of Lakers are eyes. Eyes are concentric bands of agate that are restricted to the outside of the stone. Eyes may have once been zeolite minerals that were replaced with agate. Eyes make a very interesting subject for gemstones.

By Roger K. Pabian

President of Lincoln Gem & Mineral Club

> via The Pick & Shovel, LGMC, Lincoln, Neb. <

(Gems, continued)

forget the old caveat emptor (let the buyer beware), because fakes, phonies and forgeries are now part of the scene, too."

Maggie Wilson (Arizona Album (Republic))  
via Magic Valley Gem News, Idaho

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### AMBER

Amber is a fossil resin much used for the manufacture of ornamental objects. It is said to have been exuded about thirty-eight million years ago by pine trees of which there are no living examples today.

Amber is usually honey color, but it may vary from pale yellow to brown, and orange to red. Blue amber is very rare.

It occurs in irregular rounded nodules having the form of rods, drops, plates, etc.

Early Greeks believed amber was the tears shed by the dieties. Some believed it was the "juice or essence of the rays of the sun congealed in the sea and cast upon the shore.

The specific gravity of amber ranges from 1.05 to 1.10; the substance is only slightly heavier than water.

It is harder than most resins, and because it is not very brittle can be carved, worked on the lathe, or bored with little difficulty.

Amber possesses the property of acquiring electrical charge by friction. When rubbed on cloth, amber becomes strongly charged with negative electricity and attracts small, light particles. It is a very good insulator for use in electrical apparatus.

The enclosures of organic material have thrown much light on the flora and fauna existing at the time of the exudation of the amber.

Amber is a much prized gem material and was one of the earliest used. In the Bronze Age and during Greek and Roman times it was regularly traded across Europe to the Adriatic and Black Sea s. American amber was used by the Maya and Aztecs as ornaments and incense. In modern times amber is used for beads, pendants, and other ornaments, small carvings, cigarette holders, and mouthpieces for pipes.

Early Romans greatly esteemed pieces of amber having markings resembling initials. They believed that they were talismans of great power.

Evelyn Ulrich, Lincoln Gem & Mineral  
> Club, and The Pick and Shovel, Neb. <

FIELD  
TRIPS

## FIELD TRIPS

All of our club members participated in at least one of the many field trips that were offered. Most trips had over twenty participants and one trip had over forty. Trips were arranged to areas where fossils, minerals, and cutting materials could be collected in order that all special interest groups within the club could be served. Field trips have proved so popular that in 1973, it became necessary for our club to publish a field trip guide. The guides were distributed to all of our club members and guests at field trips. In addition to this distribution, the guides were also sent to all of the clubs on our club's exchange bulletin list. We feel the latter distribution not only helped field trip committees of other clubs, but also served as an informal invitation to members of other clubs to participate in our own field trips.

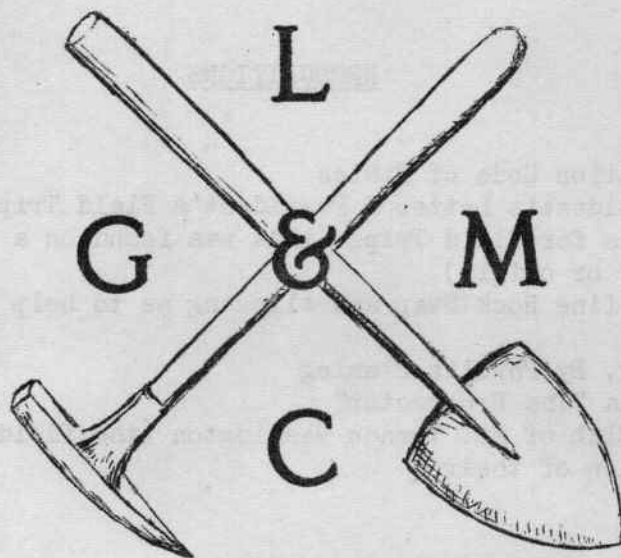
In addition to the field trip guides, a sample of which is attached, members having gone to the areas listed in the guides brought specimens of materials they collected to club meetings prior to scheduled trips. This helped give novice collectors an idea of what to look for and what kind of material to expect to find in the field.

Guests were always welcomed at our field trips and one trip to the Fairbury-Endicott, Nebraska, area was arranged for the benefit of non-rock collectors of the local chapter of the Audubon Club.

Photographs taken at one of our trips, the President's Field Trip, to the northwestern Nebraska Panhandle and Edgemont, South Dakota, area are enclosed. This particular trip was especially productive, ammonites, cycads, agates, and chalcedony being found by practically all participants. The field trip was coordinated to coincide with the Crawford, Nebraska, annual gem and mineral show at which a number of our club members displayed cases of agates, fossils, and minerals.

# THE PICK & SHOVEL

## FIELD TRIP GUIDE



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

All of these credits may not be completely accurate as most were taken from a huge file of clippings from many bulletins and some listed many sources. If the original source is in error, please forgive me and drop me a line on a postcard so that it may be corrected.

Thank you,  
Larry E. Bigley  
6126 Hartley  
Lincoln, Nebraska  
68507

RECOGNITIONS

- The American Federation Code of Ethics
- Roger Pabian - President's Letter & President's Field Trip
- General Safety Rules for Field Trips (this was found on a single sheet of paper with no author or origin)
- Don Carter - for a fine Rock Swap and allowing me to help by providing the field trips
- The Art of Swapping, By Phyllis Fleming
- Old Miners Rule, Via "The Prospector"
- Skagit Rock & Gem Club of Mt. Vernon Washington (the field trip reports are a modified version of theirs)

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## FIELD TRIP CHAIRMAN'S MESSAGE

I would like to start by thanking all who have helped and encouraged me to compile and complete this Field Trip Guide. First the Board of Directors for appropriating the money to publish. Jim and Phyllis Parks - Jim for allowing me to have part of Phyllis's time from his business and Phyllis for helping me to print and teaching me to run the printing machine. Don Carter for his encouragement and contributions to the Guide. Roger Pabian for changing his Presidents Trip (whatever his reasons) so my family and I can take our vacation. And last and most my wife Marita for encouragement, typing copy, typing stencils, correcting my spelling and just for being close when I needed her. Thank you one and all.

After being a member of this club for just a short time I have come to realize what a family affair the field trips are. So please let us continue to help each other out on our trips and let's not forget to help and instruct the youngsters who accompany us.

I would like to ask that all of the members be especially courteous to the land owners, after all it is only with their permission that we are there. Also while on a trip please follow the instructions of the trip leader whether it be myself or someone subbing for me that day. This I'm sure will make the trips so much more enjoyable for everyone.

While on the field trips we may find it necessary to caravan from one location to another. When on public roads we will probably travel at a speed lower than the posted limit. So when we are in caravan please leave ample room for faster moving traffic to pass between us. Remember, trucks are traffic too and they need plenty of room. Don't worry, no one is going to get lost. When making a turn the proper method is for the vehicle ahead to slow down after his turn and make sure that the vehicle behind can see where he has gone. Another bonus that our club has is that several members have two-way radios and by properly spacing them in the caravan everyone can be kept in close contact with one another.

The Field Trip Report pages are being provided for you to use on field trips other than the club trips. Any trips that you take on your own, you can make a duplicate copy and at the end of the year turn it in to the field trip chairman. This will certainly make planning future trips easier and much more profitable to fellow club members. Also, after our club trips the trip leader will fill out a complete report to be put on file. It will also be his responsibility to write up the trip for our bulletin, "The Pick & Shovel".

A special message to any fellow rockhounds who may receive a copy of our Field Trip Guide, if you wish to contribute please mail the yellow sheet back to us. The address is - Lincoln Gem & Mineral Club, Box 5342, Lincoln, NE 68505. Please don't forget your name and address and that of your club.

Thank you,

*Larry E. Bigley*  
Larry E. Bigley  
Field Trip Chairman

## THE PRESIDENT'S FIELD TRIP, 1973

The President's Field Trip will be held from August 15 through August 19, 1973 in the favorite Crawford, Nebraska, area. Traditionally this trip has been held on Labor Day Weekend. There are several reasons for the change of date. For many of our club families, both public and parochial schools will be holding classes on the traditional Labor Day week. This fact alone eliminates a large number of eager, would-be participants. To retain the family atmosphere, the change is desirable. Secondly, our friends at Omaha are hosting their annual show during the Labor Day weekend. Our aim as a club should be to support as many other clubs activities as we possibly can. Since our member's should not miss the fine Omaha show, the second reason also helps justify the change. Thirdly, on August 18 and 19, our friends at Crawford will be hosting their annual show. The new dates not only give the field trippers a chance to visit this excellent show but also gives us each a chance to participate in it by taking a display to it.

A full agenda of collecting is planned. Those members of ours who are familiar with the Crawford area will help out the many new members. Those collectors seeking cutting materials will have a good chance for Fairburns, Blue Chalcedony, Prairie Agate, and the plethora of cutting material available in the area. Useful equipment will include a plastic bucket with some water in it.

Mineral collectors will have a stab at the ever popular chalcedony rosettes and a number of other materials, including gypsum, celestite, barite, and specimen grade chalcedony.

Though the area abounds with fossils, I will request that our members refrain from taking the "Skull only" or "teeth only" of any of the fossils they find. Such a practice of removing just the skull or teeth of an animal is destructive to both the fossil and the reputation of the hobby. A number of our members are skilled in the art of casting vertebrate fossils---their knowledge will be made available to all of the club members.

On Thursday evening, August 16, the participants in the trip will have a picnic supper at the Fort Robinson State Park. This will be a semi-pot luck, each family bringing a dish, but furnishing its own meat. On the evening of August 17, those members having brought displays for the Crawford show will set up.

The schedule will be as follows:

August 15, 0700, meet at Fort Robinson Parking lot, head out soon thereafter for a day of collecting.


August 16, more collecting, picnic supper at 1900 hours.

August 17, more collecting, set up at Crawford show in the evening.

August 18, more collecting, Crawford Show.

August 19, more collecting, Crawford show, disperse, and return home, end of trip.

All of the field trippers in the club should plan on taking part in this trip. A good deal of nice material will be turned up but you won't find any if you don't go. See you there. Drive carefully there and back. We need you for the September meeting.

  
Roger Pabian,  
President

THE AMERICAN FEDERATION

CODE OF ETHICS

I will respect both private and public property and will do no collecting on privately owned land without the owners permission.

I will keep informed of all laws, regulations, or rules governing collecting on public lands and will observe them.

I will, to the best of my ability, ascertain the boundry lines of property on which I plan to collect.

I will use no firearms or blasting material in collecting areas.

I will cause no wilful damage to property of any kind -- fences, signs, buildings, etc.

I will leave all gates as found.

I will build fires in designated or safe places only and will be certain they are completely extinguished before leaving the area.

I will discard no burning material -- matches, cigarettes, etc.

I will fill all excavation holes which may be dangerous to livestock.

I will not contaminate wells, creeks, or other water supply.

I will cause no wilful damage to collecting material and will take home only what I can reasonably use.

I will support the rockhound project H.E.L.P. (Help Eliminate Litter, Please) and will leave all collecting areas devoid of litter, regardless of how found.

I will cooperate with field trip leaders and those designated in authority in all collecting areas.

I will report to my club or Federation officers, Bureau of Land Management, or other proper authorities, any deposit of petrified wood or other material on public lands which should be protected for the enjoyment of future generations for public educational and scientific purposes.

I will appreciate and protect our heritage of natural resourses.

I will observe the "Golden Rule," will use "Good Outdoor Manners" and will at all times conduct myself in a manner which will add to the stature and public image of rockhounds everywhere.

LET'S ALL FOLLOW THESE RULES...ON CLUB TRIPS AND WHEN WE ARE ALONE!

## GENERAL SAFETY RULES FOR FIELD TRIPS

### PREPARATION

1. Do not start short of rest on your trip - sleepy and with nerves all jangled and on edge.
2. Check car for possible defects; check water, oil, battery, and tires.
3. Carry plenty of water--at least one (1) gallon per person per day.
4. Carry food for entire trip plus some extra for emergencies.
5. Have warm as well as cool clothing, first aid kit, snake bite kit, and sun tan cream.
6. Always have your identification with you and on some of your gear.
7. Miscellaneous equipment should include a shovel, car jack (hydraulic), and tow rope or chain, pocket knife, matches, and possibly an axe or hatchet, and police whistle.
8. NOTIFY SOMEONE WHERE YOU ARE GOING AND WHEN YOU EXPECT TO RETURN.

### ENROUTE

1. Drive carefully--don't take chances.
2. Don't follow too closely--rocks flipped up by the car ahead may break your windshield and dust may obscure your vision and choke your breathing--stay back a safe distance.
3. Have a companion act as navigator--this leaves the driver free to concentrate on his driving.
4. Slow down during inclement weather.
5. If in a caravan, keep the car behind in sight so as to keep together.

### AT THE SITE

1. Park so that all cars can get out--don't block the exit.
2. Don't camp in washes or dry stream beds (flash floods).
3. Wear well-broken-in ankle high shoes or high boots which support the ankle and provide protection against sharp rocks and snake bite. Heavy wool stockings will prevent blisters. Gloves, sun glasses or glare and/or other protective glasses for use when breaking rocks.
4. Wear long trousers or slacks and a shirt with long sleeves, and a hat for protection against sunburn, insects and vegetation.
5. If camping on the ground, inspect shoes and clothing for insects before putting them on in the morning.
6. Do not shoot firearms in the area of the field trip. Bullets ricochet and may hit someone over the hill out of your sight.
7. Keep a look-out for rattlesnakes and/or scorpions. Never reach or tread where you cannot see.
8. Break all matches in the fingers before discarding.
9. Break your cigarette before discarding and then crush it out on the bare ground.

### AN OLD MINERS RULE

While a miner's tools, equipment and personal property remain in or next to a digging, that digging is his until he relinquishes it either by removing said property or announcing that he is finished digging in that area. Furthermore, any material, specimens or rocks cached on or near with said personal property are also the property of the miner, and shall not be touched or removed without his express permission. Via: The Prospector.

FIELD TRIP SCHEDULE -- 1973

DESTINATION: Weeping Water, Nebraska  
DATE: April 29, 1973 TIME: 10:00 A.M.  
REGISTRATION SITE: Weeping Water Park  
ROUND TRIP MILEAGE: About 180 miles  
MATERIAL TO BE OBTAINED: Fossils and possibly some minerals  
EQUIPMENT FOR THIS TRIP: Rock picks, sledges, chisels, cracking hammers, hard hats, safety glasses, and containers for specimens  
POSSIBLE SITE HAZARDS: Rock overhangs, steep inclines & water  
COMMENTS: Please be careful as some of these sites are being worked and some are old and have decaying limestone. Remember DON'T TOUCH WIRES!

DESTINATION: Beatrice, Nebraska  
DATE: May 6, 1973 TIME: 9:00 A.M.  
REGISTRATION SITE: Indian Creek Mall on the north edge of Beatrice  
ROUND TRIP MILEAGE: About 100 miles  
MATERIAL TO BE OBTAINED: We will be searching gravel pits for agates, wood, and bones.  
EQUIPMENT FOR THIS TRIP: Small boxes, buckets or shoulder bags  
POSSIBLE SITE HAZARDS: These are working sand and gravel pits so stay away from the waters edge because of slide possibilities.

DESTINATION: Cherokee, Oklahoma  
DATE: May 26 - 29, 1973 TIME: 7:30 A.M. May 26, 27, & 28th  
REGISTRATION SITE: City Park in Cherokee  
ROUND TRIP MILEAGE: About 850 miles  
MATERIALS TO BE OBTAINED: Selenite Crystals  
EQUIPMENT FOR THIS TRIP: Shovels, cans for washing sand, suntan lotion, sun-glasses, old clothes, hats for sun  
POSSIBLE SITE HAZARDS: Hot glaring sun & salt--take plenty of water to site. Also be sure to take jackets as I understand a cloudy and rainy day can be quite cool. Be sure to wash your vehicles as soon as you possibly can because of the salt.

COMMENTS: Round trip mileage was figured using these routes. I-80 Lincoln to York, U.S. 81 South to Minneapolis, Kansas. Then I-35W South to Wichita where you will pick up the KTA Turnpike (toll road) continue South on interstate to Blackwell, Oklahoma turn off. Take Oklahoma Hiway 11 West to intersection of Hiway 8, take Hiway 8 South 2 miles to Cherokee.

For those who want to camp out, camping is available on the east side of the Great Salt Plains Reservoir. This is a Federal camp site grounds.

A call to the Plains Motel has given us this information for those who need accomodations: Single - color T.V. - \$7.00  
Double - color T.V. - \$9.00 B&W T.V. \$8.00  
2 Double beds T.V. - \$14.00  
BAC accepted

There are 20 units at this motel. Anyone wishing to make reservations call Mr. Harms at 112-405-596-3311 in Cherokee, Oklahoma.

FIELD TRIPS cont.:

DESTINATION: Norfolk, Nebraska

DATE: June 16-17, 1973 TIME: 10:00 A.M.

REGISTRATION SITE: Johnson Park in Norfolk

ROUND TRIP MILEAGE: About 250 miles

MATERIAL TO BE OBTAINED: Wood, brown chalcedony, Indian artifacts, mammoth bones and teeth

EQUIPMENT FOR THIS TRIP: Shovels, rock hammers, chisels, containers, and/or shoulder bags

DESTINATION: Plattsmouth, Nebraska

DATE: June 24, 1973 TIME: 9:30 A.M.

REGISTRATION SITE: Road intersection on Hiway 34 one mile east of Hiway 75 South of Plattsmouth

ROUND TRIP MILEAGE: About 125 miles

MATERIAL TO BE OBTAINED: Trilobites, assorted fossils, & colored calcites

EQUIPMENT FOR THIS TRIP: Hard rock equipment & carrying containers, hard hats and safety glasses

POSSIBLE SITE HAZARDS: Rock overhangs, steep inclines, & rough roads

DESTINATION: Fullerton, Nebraska

DATE: July 8, 1973 TIME: 10:00 A.M.

REGISTRATION SITE: Fullerton Park

ROUND TRIP MILEAGE: About 225 miles

MATERIAL TO BE OBTAINED: Petrified wood, common opal, & jasper

EQUIPMENT FOR THIS TRIP: Collecting containers

POSSIBLE SITE HAZARDS: Sand & gravel pit area - stay away from waters edge because of slide possibilities.

DESTINATION: Marysville, Kansas

DATE: July 21, 1973 TIME: 9:30 A.M.

REGISTRATION SITE: Port of entry station on Hiway 77

ROUND TRIP MILEAGE: About 180 miles

MATERIALS TO BE OBTAINED: Pink gypsum & satin spar

EQUIPMENT FOR THIS TRIP: Rock hammers, chisels, pry bars, large containers

POSSIBLE SITE HAZARDS: Fee site - \$3.00/bushel, creek fording, make sure all gates are closed because of livestock. Dense underbrush, old clothes because we will be working partially in the creek. If owner will join us we'll have the possibility of seeing a log cabin, if not please do not trespass. For lunch we have a beautiful meadow to eat in. Please do not litter!

August 4, 1973 Please see the Rock Swap section. I request help on these trips as they are for out of towners who are visiting us. All members are welcome to accompany us.

August 15 - 19, 1973 Please see the President's Trip page for information on this outing.

FIELD TRIPS cont.:

DESTINATION: For what we have to do...

DATE: September 1, 2, 3, 1973

MATERIAL TO BE OBTAINED: This trip is to obtain material for favors for the 1974 show. As time progresses I will know more of what the other clubs throughout the state will be contributing. This is a Holiday weekend & I realize some of you will be in areas that materials will be needed from. I would like to ask that those of you who are planning trips for this weekend to please contact me and donate a small part of your time on this club project.

DESTINATION: Fairbury, Nebraska

DATE: September 16, 1973 TIME: 9:30 A.M.

REGISTRATION SITE: Fairbury Park

ROUND TRIP MILEAGE: About 150 miles

MATERIAL TO BE OBTAINED: Selenite crystals & clusters, marcasite - nodules & massive, carbonized limb casts & leaf fossils

EQUIPMENT FOR THIS TRIP: Containers large & small, paper & tape, hard rock equipment

POSSIBLE SITE HAZARDS: This location is directly off the Hiway so please look twice for oncoming traffic. Also there is a high bluff and soft steep inclines in the area. Be extremely careful of footing and falling chunks of hard dry clay. Hard hats and safety glasses are definitely recommended!

MORNING DESTINATION: Odell, Nebraska

DATE: September 30, 1973 TIME: 8:30 A.M.

REGISTRATION SITE: Hiway 8 intersection at Odell

ROUND TRIP MILEAGE: 110 miles

MATERIAL TO BE OBTAINED: Barite roses, Odell diamonds

EQUIPMENT FOR THIS TRIP: Tweezers, small containers, clothing per weather

POSSIBLE SITE HAZARDS: Water shed lake & dam, sore knees

AFTERNOON DESTINATION: Wymore, Nebraska

Leave Odell - 11:30 A.M. Arrive Wymore for lunch - 12 noon

One hour lunch, rest break & registration at park

There are two sites at Wymore:

Site 1 - The Old County Quarry

MATERIALS TO BE OBTAINED: Various colored calcites, & other minerals

POSSIBLE SITE HAZARDS: Rock overhangs, sore backs, hard hats and safety glasses a must

Site 2 - Emerson Farm (this is a fee site, approximately \$1.50/person)

MATERIAL TO BE OBTAINED: Blue celestite geodes

POSSIBLE SITE HAZARDS: Poison ivy, a creek, sore backs

EQUIPMENT FOR THESE TWO SITES: Sledges, rock picks, pry bars, wedges, paper to wrap specimens, containers & tape

## THE ART OF SWAPPING

By Phyllis Fleming

Swapping can be lots of fun if you know how. Most rockhounds swap with friends and club members all the time but get cold feet at the very thought of swapping with strangers at shows or swapfests. This can be the most fun of all if you know how to go about it. Aside from the fun, it is one of the most painless ways to recognize cutting material, minerals, etc., that I have ever found.

The first rule is: Leave the crud at home..... . If you don't want it, what makes you think somebody else does? Take a good variety of material with you, and a few extra pieces. Your first thought is "I'll be taken; I don't know the value of what I have". You're right, you'll probably get the short end of a lot of trades! But you will also come home with several extra nice slabs or specimens to add to your collection. Chalk the first one up to the price of learning. It's worth it, and you now know which is your most desirable material.

You don't need to know the dollar value of a piece of material unless you are a dealer. What you do need to know is the quality and/or rarity of the material being offered to you. Once you have learned this there will be no hesitation in your decisions. You can't afford to dabble because someone else will have that good piece before you make up your mind.

Bring at least three grades of material. Take one plastic dishpan full of slabs. Some cabbings quality, some good only for tables. Trade this group one for one. Forget about value. This keeps trading active and helps the beginners gain confidence in themselves. The second group, be a little more particular about. The third group, which is your premium group, should be traded for something outstanding and something you want. Try not to duplicate something you have in your collection.

Now you have arrived at the swapping area and have been assigned to a spot. What will you do now? Put your materials out, but keep your prizes in the car? Then look over the tables and see if there is anything you want to trade your prizes for? Well, I've got news for you. You're not as clever as you thought. Ninety percent of the ones there have done exactly the same thing! Put all of your material on display and learn to say "No" if you are not satisfied with the trade offered. After all, it is easier to tell a stranger "no" than a friend. Then soften the blow by telling him you will trade anything in group 1 or 2 for what he has. Don't let the pitiful old man in the baggy overalls fool you. He'll pick out a prized slab of plume agate and offer you an Apache tear for it and it will nearly break your heart. Keep him digging in his knapsack until he comes up with something you want or until he decides that he just might have something better in his camper. Then set aside the things he wants and wait until he gets back before you trade them off. You'll be amazed at the lovely crystals he'll come back with... Then, trade!!!

I prefer to do my swapping with rockhounds and my buying from dealers. If you are a beginner or for some reason couldn't bring material with you, buy a few slabs or etc., from a dealer and start swapping. I know a girl that bought two slices of Brazilian agate and two nodules (Mexican) which she had sawed free in the working exhibit and traded all afternoon in a federation show.

When you're swapping, swap. Don't sell. Then everyone is on an equal footing. When you are approached by someone who wants to buy, give him your name and address and offer to trade by mail. If they are sincere, you will hear from

THE ART OF SWAPPING cont.:

them, and if they are just taking the easy way out you won't be bothered by them again.

Beware of the "sharpie" that snatches a good specimen when you are busy trading with someone and says that he wants this and to come down to his table and pick out something when you have time. Just take it out of his hand and set it back down, and tell him you will be there in a minute to see what he has. Nine times out of ten, he has crud on his table. He is operating on the idea that "Possession is nine tenths of the law" and gambling that your too well mannered not to let him keep it even if it isn't an even trade.

Don't let actions like this discourage you. People are people, no matter where you are or what you're doing. Just learn to cope with them pleasantly.

ROCK SWAP CHAIRMAN'S MESSAGE

On August 4th & 5th the Lincoln Gem & Mineral Club will have its annual Rock Swap at the National Guard Park 10th & Military Road.

Our Field Trip Chairman Larry Bigley has two fine field trips lined up for Saturday and Sunday Afternoons. One for fossils and one for cutting material. Saturday night we will have a watermelon feed also entertainment by Olivers Polka Band.

By having the swap at this time of year we should have alot of people back from vacation with alot of material they have collected. So bring some of your goodies and join us for two days of fun. For more information contact Don Carter, 1101 Driftwood Drive, Lincoln, Nebraska 68510, or phone 489-3442.

DESTINATION: Weeping Water, Nebraska  
DATE: August 4, 1973                      TIME: 10:00 A.M.  
REGISTRATION SITE: Rock Swap Site  
MATERIALS TO BE OBTAINED: Fossils and possibly some minerals  
EQUIPMENT FOR THIS TRIP: Rock picks, sledges, chisels, cracking hammers, hard hats, safety glasses, and containers for specimens.  
POSSIBLE SITE HAZARDS: Rock overhangs, steep inclines & water  
COMMENTS: Please be careful as some of these sites are being worked and some are old and have decaying limestone. Remember DON'T TOUCH WIRES!

DESTINATION: Beatrice, Nebraska  
DATE: August 5, 1973                      TIME: 10:00 A.M.  
REGISTRATION SITE: Rock Swap Site  
ROUND TRIP MILEAGE: About 100 miles  
MATERIAL TO BE OBTAINED: We will be searching gravel pits for agates, wood, and bones  
EQUIPMENT FOR THIS TRIP: Small boxes, buckets or should bags  
POSSIBLE SITE HAZARDS: These are working sand and gravel pits so stay away from the waters edge because of slide possibilities.





A



B



PRESIDENTS FIELD TRIP, AUGUST, 1973

EDGEMONT, SOUTH DAKOTA

(A) Exposures of Late Cretaceous Age, Carlisle Shale. (B) Collectors spotting the first of a number of ammonites. (C) A lot of ammonites have been found in a small area and much interest is generated. (D) The ammonites have been collected and the flurry of interest is replaced by a coke break. In addition to ammonites, gastropods, bivalves, shark teeth, cone-in-cone structures, and some chalcedony was collected.

ANNUAL

SHOW

## ANNUAL SHOW

The culmination of the Lincoln Gem and Mineral Club's working year comes with the annual show. We have held such shows for sixteen consecutive years, making ours one of the oldest of its type in the region. Our attendance has increased annually which indicates to us that we are getting the message across.

This year, as in preceeding years, free admissions were granted to elementary school pupils from all of Lincoln and the surrounding area. Over 16,000 free passes were handed out through official school channels. A copy of the cover letter that accompanied the passes is attached.

We try to personally communicate with the people we hope will attend our show and an information packet of the type of which we mail out several thousand is also attached. The individual packet contains a show flyer, two discount passes, and a letter describing the events presented at the show, and these packets are mailed to all members of the Nebraska Association of Earth Science Clubs, Community Arts Council of Lincoln, Nebraska Art Association, and to the Liaison Officers of those clubs within a 500 mile radius of Lincoln.

Material about the show is also sent to the Lincoln and Omaha newspapers and they have been most generous in printing publicity stories of Lincoln Gem and Mineral Club events. In addition to free publicity given by the papers, we also purchase advertising space to tell the public about our show. Samples of publicity stories and our advertisements are attached.

Also attached are photographs that were taken at our 16th annual show, May 12, 13, 1973.

## PRECIOUS METAL SUPPLIES For the LAPIDARY SUPPLY DEALER

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## MAY 12 AND 13 IN LINCOLN, NEBRASKA

The 15th annual show of the Lincoln Gem and Mineral Club, Lincoln, Nebraska, will be held Saturday and Sunday, May 12, 13, 1973, in the Exposition Building at the State Fairgrounds. Show Chairman, Ralph Ulrich, reports an intense interest in the final regular show to be held in Lincoln before the 1974 National Show.

Howard and Harvey Kenfield, Ogallala, Nebraska, will display their famous rock pictures. These have been seen at a number of midwestern shows but will be seen by Lincoln rock fanciers for the first time. The pictures are mainly of old buildings, churches, and houses that are typical of the many deserted villages and farmsteads of the high prairies. The petrified woods in the pictures are bleached to provide a weathered appearance that is so characteristic of these abandoned structures.

A large collection of agates made by Roger Pabian, author of several popular rock collector's books and technical papers, will be displayed in its entirety for the first time at the Lincoln show. The collection is one of the largest in the midwest and contains some 2,000 agates, mainly Laguna, Moctezuma, and Coya Mito material from Old Mexico. The displays are arranged to show various phenomena in agate such as crystal pseudomorphs, stalactitic inclusions, metallic inclusions, iris, flow structures, and miniature geological structures such as folds, faults, and dikes. Several specimens are used to demonstrate silica stability fields. These phenomena are interpreted as evidence to explain the origin of agates. In addition to the Mexican agates, a large number of Brazilian agates and Lake Superior and Fairburn agates from Nebraska will be displayed. This feature occupies some 75 feet.

Voné Luthi of Topeka, Kansas, will display her fossil sculptures, including a working circus and model train. Mrs. Luthi's circus was created while she was recuperating from a lengthy illness. Also to be shown is an Indian with a head dress of selenite feathers, and a rockhound field trip scene complete with cars, trucks, vans, station wagons, and people with their booty.

Competitive display entries are running far ahead of 1972 according to Sally Heald, Competition Chairman. Competition is opened to all collectors regardless of their federation affiliation. Those wishing to compete in Lincoln before the 1974 National Show may obtain a premium list of opened categories by writing Sally Heald, Competition Chairman, 2435 South 11th Street, Lincoln, Nebraska 68502.

George and Glenna McGinnis, Dealer Chairmen, have announced a slate of dealers representing six states—Oregon, California, Tennessee, Iowa, Minnesota, and Nebraska. A large selection of merchandise to suit all areas of interest is expected. As several of the dealers will be in Lincoln for the first time, many new varieties of cutting materials and minerals are being eagerly looked forward to by the Lincoln clientele.

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**HAROLD F. HILLMAN, 133 Main, WaKeeney, Kansas 67672**

Friday plume agate from Oregon, will be displayed by Harry and Clara Keller of Bend, Oregon, and a well-known collection of petrified wood rounds will be displayed by Melvin and Bernita Lentz of Mulvane, Kansas.

The Nebraska Geological Survey will show the famous "Mini-Oil-Well," a scale model of an operational well, and many of their current publications and maps. The model was completed in 1953 at a cost of over \$2,000. It was rescued from a scrap heap in 1969 and was restored for the Lincoln show that year. Because of its extreme popularity with show going crowds, the well has been shown at many Nebraska shows since.

A full-slate of illustrated lectures on geology, paleontology, mineralogy, and lapidary is planned as well as a number of working demonstrations featuring cabochon cutting, faceting, and metal working. ⊕

## BEREA, OHIO SHOW ON MAY 19TH & 20TH

"The Beautiful World of Rocks and Gems" will be featured at the annual Cuyahoga County Gem and Mineral Show, on May 19 and 20. Sponsored by the Fairview Park, Parma, and Rockport Lapidary Clubs of Greater Cleveland, the show will be held at the Cuyahoga County Fairgrounds, Berea, Ohio. The hours will be 10:00 a.m. to 10:00 p.m. on Saturday, and 10:00 a.m. to 6:00 p.m. on Sunday.



Karyn Evans Proppé wearing her synthetic ruby which has 129 facets and weighs 250 carats. Regarded as the world's second largest finished synthetic gem, the ruby will be one of the special attractions at the "Beautiful World of Rocks and Gems" show sponsored by the Fairview Park, Parma, and Rockport Lapidary Clubs of Greater Cleveland, Ohio.

One of the special attractions at the show will be a synthetic ruby owned by Karyn Evans Proppé. The ruby has 129 facets, weighs 250 carats, and is regarded as the world's second largest finished synthetic gem. Also featured will be a display area designed for the blind, so that they may learn more about "The Beautiful World of Rocks and Gems."

There will be competitive, noncompetitive, and many special exhibits. Demonstrations will be provided, including faceting, gem capping, and fossil cleaning. A number of dealers will be present, and the very popular silent auction will again be offered. Lunch facilities, swap area, and camping on the grounds will be available. Show Chairman is Milford J. Sharp, 3901 West 210th St., Fairview Park, Ohio 44126. ⊕

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**Price List Sent to Dealers Only Upon Request**

TO: Elementary Teachers

FROM: The Lincoln Gem and Mineral Club

CONCERNING: Free tickets for elementary pupils

The Lincoln Gem and Mineral Club is sponsoring its fifteenth annual Gem and Mineral Show in the Exposition Building at the State Fair Grounds May 12 and 13, 1973. The hours are:

Saturday, May 12, 1973	10:00 am--10:00 pm
Sunday, May 13, 1973	10:00 am--6:00 pm

In accordance with its objective of furthering the study of Earth Science, the Club is providing free tickets for all elementary school pupils.

This distribution was approved in the Weekly Focus for April 9-16, 1973.

Sincerely yours,

*Marie Wells*

Marie Wells  
Ticket Chairman

DISCOUNT COUPON

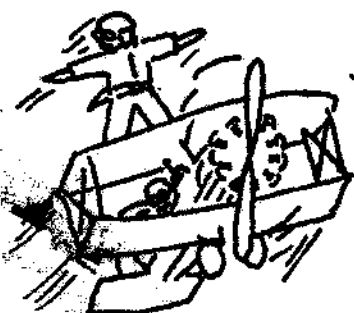
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LINCOLN GEM & MINERAL CLUB SHOW  
LINCOLN, NEBRASKA  
May 12-13, 1973

Exposition Hall, State Fairgrounds  
Sat. 10 AM - 10 PM Sun. 10 AM - 6 PM  
Adults \$1 Children under 12 - 50¢  
(free with adult)

DISCOUNT COUPON

Good for 25¢ toward one admission to  
LINCOLN GEM & MINERAL CLUB SHOW  
LINCOLN, NEBRASKA  
May 12-13, 1973

Exposition Hall, State Fairgrounds  
Sat. 10 AM - 10 PM Sun. 10 AM - 6 PM  
Adults \$1 Children under 12 50¢  
(free with adult)



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**MAY 12, 13, 1973**

HOURS: Saturday, 10:00 A.M. - 10:00 P.M.; Sunday 10:00 A.M. - 6:00 P.M.

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DEALERS \* CRAFTS \* PROGRAMS \* WORKING  
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Lincoln Gem and Mineral Club  
1000 S. 10th St. Lincoln, NE 68502

6718  
Lincoln, Nebraska  
402-471-0087

April 25, 1973

Dear Patron:

Thank you for attending the 1972 Lincoln Gem and Mineral Club Show. We hope you found our exhibits both entertaining and educational. We also hope you enjoyed the selection of unusual merchandise offered by the several dealers at our show.

The Lincoln Gem and Mineral Club takes pride in presenting its 15th annual Gem and Mineral Show. This is now the oldest continuous show of its type in the midwestern region. This year the show will be held on May 12, and May 13, at the Exposition Building at the State Fairgrounds. We hope you will be able to attend.

In 1974, the Lincoln Gem and Mineral Club will host the National Gem and Mineral Exposition right here in Lincoln. Meanwhile, we have one more regular show to present before the big one. We treat each of our local events as a means of realizing our goals of having the finest National Show ever held in 1974. Thus, let us tell you what we have done to make the 1973 show one of the stepping stones to a successful 1974 National Show.

Special Exhibits: Howard and Harvey Kenfield, Ogallala, Nebraska, will show their rock pictures. The pictures, for the main part, are made of bleached petrified wood and they depict scenes common to the rural areas of the great plains of the depression years and drought season of the 1930's. The bleached woods provide the color and texture of the weathered surfaces of the unkempt buildings of the many abandoned towns and farmsteads so common to rural America in this period of economic hardship. In addition to the rural scenes, the Kenfield's have created a number of still life pictures using rock and mineral media. The Kenfield creations should be viewed by every one with an interest in the arts.

Rock pictures of a different nature will be shown by Bob and Mitzi Brown of Bellevue, Nebraska. The Brown's pictures have been made in Japan and utilize agate as the principal medium. The pictures, for the main part, depict animal and plant life.

Voné Luthi of Topeka, Kansas, will show her novel fossil creations. Mrs. Luthi's Creations are all made of bits of broken shells, crinoid stems, and occasional, small crystals. This display is unique in every respect.

Roger Pabian of Lincoln, Nebraska, will display one of the midwest's largest agate collections. The agates, for the main part, are from Ojo de la Laguna, el Rancho Coya Mito, and Moctezuma, Chihuahua, Mexico. Also shown will be agates from Brazil and a number of excellent specimens collected right in the Lincoln area.

Special Working Demonstrations: Colonel Elmo Nolan and Mrs. Nolan of Pass Christian, Mississippi, will present demonstrations of the process of Indian sand art. The process involves placing layers of colored sand in bottles and manipulating the sand with wires, sticks, and other special tools to produce designs and pictures within the bottle. The Nolan's demonstration is perhaps one of the most exciting we have ever obtained for one of our shows. Some of their wares will be for sale at the show.

Henry Myers of Kansas City, Missouri, will demonstrate silver smithing at our show. Mr. Myers has shown his works at a number of midwestern shows and just completed an engagement at the greater Kansas City gem and mineral show.

Working demonstrations will also include faceting of gemstones, cutting of cabochons, tumbling, polishing flats, and setting stones into jewelry. Working demonstrations of carving rock and many other facets of the rock hobby will be presented.

Programs: Peter Huntoon will present a series of slides and movies on the Grand Canyon Region of Arizona, where he served as principal geologist on the Grand Canyon mapping project sponsored by the Grand Canyon Historical Association.

Roger Pabian will present programs on gemstones and invertebrate fossils of Nebraska. These programs are new and have been prepared by the Conservation and Survey Division of the University of Nebraska.

Dealers: The dealer committee has contracted one of the most exciting slates of dealers to ever come to Lincoln. They represent Oregon, California, Kansas, Minnesota, Tennessee, Iowa, and Nebraska. Each has so much unique merchandise that they have been allowed eight additional feet of display space compared to years previous. We hope you will find time to visit them.

Advanced tickets: Advanced tickets may be obtained at the price of two for one dollar from any member of the Lincoln Gem and Mineral Club, or from Everett's Lapidary, 2941 North 65th Street, Lincoln, Nebraska 68504. Phone 466-6204. Tickets at the door are one dollar each.

Individual displays: In addition to the many fine features listed above, we will have displays from many of the outstanding collections in the midwest, as these still make up the crux of a good gem and mineral show.

We hope you will be able to attend our show. Remember, children under 12 are admitted free with a parent or adult guardian.

Sincerely,  
Members and Directors,  
Lincoln Gem and Mineral Club

April 25, 1973

Dear Friends:

The Lincoln Gem and Mineral Club takes pride in presenting its 15th Annual Gem and Mineral Show. This is the oldest continuous show of its type in the mid west. This year the show will be held on May 12 and 13, 1973, at the State Fairgrounds, Exposition Building, Lincoln, Nebraska. We hope you will be able to attend. Our various committees have arranged to bring some of the best possible demonstrations, displays, and lectures for a show of this kind. These are described below.

Demonstrations---Colonel and Mrs. Elmo Nolan of Pass Christian, Mississippi, will demonstrate the craft of Indian Sand Art. By pouring layers of various colored sands in clear, glass bottles and manipulating these sand layers, the Nolans are able to create designs and pictures within the confines of the bottle. They have indeed found the desert dwellers sequel to building a ship in a bottle. Their display is well worth seeing.

Henry Myers of Kansas City, Missouri, will demonstrate silver smithing. Mr. Myers has demonstrated at some of the country's largest gem shows and recently has completed an engagement at the Greater Kansas City gem and mineral exposition.

Special Exhibits---Vone' Luthi of Topeka, Kansas, will display her famous rock novelties. Mrs. Luthi has created a circus and field prospecting scene using bits of broken fossils and crinoid stems.

Bob and Mitzi Brown of Bellevue, Nebraska, will display their rock pictures from Japan. The pictures display animal and plant life and are created from such colorful media as carnelian agate. The pictures are being shown for the first time to Lincoln gem show audiences.

Howard and Harvey Kenfield, Ogallala, Nebraska, will display rock pictures of a different type. Using bleached petrified woods as a medium, the Kenfields have made a group of pictures depicting the rural high plains of the depression years and the ensuing drought. The bleached woods produce the texture and weathered appearance of the buildings of the deserted towns and farmsteads so common to America in this era of economic hardship. In addition to the wood pictures, the Kenfields will display carvings and pictures of animal and still life subjects, all created from rock.

A large agate collection of Roger Pabian, Lincoln, Nebraska, will be shown for the first time. The collection contains agate from Ojo de la Laguna, el Rancho Coya Mito, and Moctezuma, Chihuahua, Mexico, for the main part, though some specimens from Brazil and a number of agates collected right around Lincoln will be shown.

Jade and agate carvings will be displayed by Lo and Rador, Kow Loon, Hong Kong.

Dealers---Dealers bring much unique and interesting merchandise to our show. A comparison of their prices will assure you that they are amongst the first wave of a specialized breed of inflation fighter. Their jewelry, mineral specimens, agates, fossils, and other merchandise are purchased not only by the dollar conscious shopper but many specimens purchased at our shows adorn one of the nation's finest museums. Our dealer committee informs us that the dealers represent Oregon, California, Kansas, Tennessee, Iowa, and Nebraska. They further inform us that the dealers have pledged so much excellent material that each will have eight additional feet of display space compared to years previous.

Programs---Professor Peter Huntoon will present a special program on the Grand Canyon of Arizona. He has many unique slides of areas of the canyon rarely seen and that he made while serving as principal geologist of the Grand Canyon mapping project sponsored by the Grand Canyon Historical Society.

Roger Pabian will present programs on the gemstones of Nebraska and on the invertebrate fossils of the Pennsylvanian and Cretaceous rocks of Nebraska.

In addition to the several lecturers, educational movies will be shown during the most of the show.

Individual displays---These still make up the crux of the gem show. Though we will have many fine features, we will also have many fine displays made up by local talent. We have had all winter to work on the material we collected last summer. We have cut many nice gems since last year. We have prepared many new fossils and exhibits since last year. In addition to the many displays provided by Lincolnites, exhibits representing the finest private collections from about 75 Nebraska and out of state communities are expected.

Advanced tickets---Advanced tickets may be obtained at the price of two for one dollar from any member of the Lincoln Gem and Mineral Club, or From Everett's Lapidary, 2941 North 65th Street, Lincoln, Nebraska 68504. Phone 466-6204. Tickets are one dollar each at the gate.

Please pay us a visit; we are sure you will enjoy our show. Our members and guest exhibitors have put their best foot forward to make this the best Lincoln Gem and Mineral Club show ever. We hope you will find time to attend and enjoy this event.

Sincerely,  
Members and Directors,  
Lincoln Gem and Mineral Club

Lincoln, Nebraska  
April 20, 1973

Dear NAOSCI MEMBER:

One more regular show remains before we have a national show right here in Lincoln. We don't want you to miss the National Show in '74, but we don't want you to miss our annual show in '73 either. There are a number of reasons why we feel you should attend our show this year. We are sure that if you read the reasons we think our show will be a good one this year, you will find one or more to visit with us.

DEALERS: We take great pride in our selection of dealers. Not as many as last year, but their merchandise is so good, and they have so much of it, they will each have booths 33 1/3 percent larger than previously. Each of our eight dealers will have 32 feet of some of the finest merchandise available at any rock show. Our dealer chairmen are so pleased with their results on filling this spot that they wish to share their choice of dealers with you. They are:

Claude B. Dawson  
1199 Semmes St.,  
Nashville, Tenn. 38111

Melvin Lentz  
P.O. Box 2, Rt. 1  
Mulvane, Kansas 67110

Guy Miller  
1245 North California Ave.  
Hastings, Nebraska 68910

Everett's Lapidary  
2945 North 65th Street  
Lincoln, Nebraska 68504

Johnson Agate Company  
305 West 7th  
Mankato, Minnesota 56001

The Keller's  
138 Hawthorne  
Bend, Oregon 97701

Sherman's Rock Shop  
P.O. Box 520  
Onawa, Iowa 57040

Nash Rambler's  
P.O. Box 3066  
Visalia, California 93277

Once you see our dealers, you will not only agree that they have the finest selection of lapidary materials and specimens available but that they are also the inflation fighters of the rock world.

COMPETITIVE DISPLAYS: Your chance to compete in Lincoln before '74 is now opened. We know many of you would like to try for a National trophy in '74 so we are offering you a chance to get your feet wet in '73. Our competitive displays are opened to all competitors regardless of their parent club's federation affiliation. Premium lists have been sent to your clubs --- look them over and see what category you would like to try. If your club has not received a premium list, you may obtain one by writing Sally Heald, Competition Chairman, Lincoln Gem and Mineral Club, Box 5342, Lincoln, Nebraska 68505.

FEATURE DISPLAYS: Our feature displays this year will undoubtedly create comments amongst our show guests. Colonel Elmo Nolan, Pass Christian, Mississippi, will both display and demonstrate Indian Sand Art. Some of his products will be sold at our show. This will be the Nolan's first appearance at a Nebraska Show. We are pleased that they will be here to entertain and show their skills.

The agate collection of Roger Pabian will be shown in its entirety for the first time. This collection includes a large variety of agates from the United States, Mexico, and Brazil. The collection is displayed in such a manner as to show some ideas on the mode of origin of agates. The display occupies 75 feet.

Vone' Luthi of Topeka, Kansas, will present her fossil novelties. Though a relative newcomer to the gem show circuit, Mrs. Luthi's talents have won the admiration of gem show visitors in several states. Her fossil circuit and fossil field trippers, complete with cars, campers, trucks, and collectors, will be one of the highlights of our show.

Lo and Rador International Gem House of Kow Loon, Hong Kong, have consented to display a collection of oriental carvings in such media as jade and agate. These carvings include figures of seals, lions, dragons, grapes, peaches, and pears. Lo and Rador are members of the Hong Kong carver's guild. We are sure their display will be one of the top attractions of our show.

Harry and Clara Keller of Bend, Oregon, will show their collection of Priddy Plume agate. This is one of the world's finest collections of this ancient breed of agate.

Howard and Harvey Kenfield of Ogallala, Nebraska, will display their rock pictures. The most popular pictures in this area are undoubtedly the rural scenes made from bleached, petrified woods. The bleached woods provide the appearance of the weathered surfaces of the buildings of the abandoned farms and town sites so common to the great plains of the depression years.

Mike Holmquist of Lincoln, Nebraska, now of Holmquist Jewelers, will show a 12 month jewelry display utilizing birth and zodiac stones. This is a first for our show.

Melvin and Bernita Lentz, Mulvane, Kansas, will show their collection of fossilized woods. This collection has been in Lincoln several times before but always returns by popular demand.

Metal smithing demonstrations will be given by Henry Myers, Kansas City, Missouri.

EDUCATIONAL PROGRAMS: Our program committee has worked overtime providing one of the finest arrays of programs possible. Of special interest to every rock collector will be "Geology of the Grand Canyon, Arizona" given by Professor Peter W. Huntoon, Conservation and Survey Division, University of Nebraska. The program, both slides and movies, was made while Professor Huntoon was principal geologist of the Grand Canyon mapping project, sponsored by the U.S. Geological Survey and Grand Canyon Historical Society.

Roger Pabian will present two separate slide shows, "Nebraska Gemstones" and "Nebraska Invertebrate Fossils". These programs are both new and will be seen at gem shows for the first time at Lincoln.

INDIVIDUAL DISPLAYS: Our members are preparing many of last summer's finds to show you at our show. As usual, they will present their finest material for your education and entertainment. Not only do our members participate in this part of the show but collectors from many clubs in several states join the fun here. We welcome your display at our show. Our club will have several cases available for you if you wish. We will also maintain a come and go area for those exhibitors who can not stay for the duration of the whole show. An application blank for display space is attached below. We hope you can participate with us in this annual event.

We hope to see you on May 12 and 13. Thank you.

Yours truly,

Members and Directors,  
Lincoln Gem and Mineral Club

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#### APPLICATION FOR DISPLAY SPACE

I plan on displaying \_\_\_\_\_ cases of \_\_\_\_\_ at your forthcoming show. I will need \_\_\_\_\_ feet. I will/ will not need electrical outlets. I will/will not furnish my own cases. I will display for the duration of the show/come and go. I will display competitively/non competitively.

Name \_\_\_\_\_

Address \_\_\_\_\_

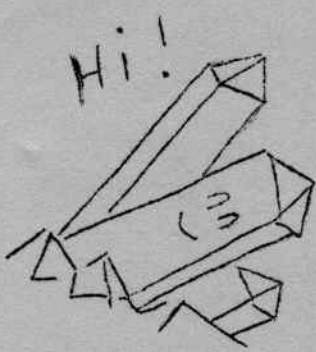
City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_

Club Affiliation \_\_\_\_\_

For Club Use
Area _____
Table _____
Space Numbers _____

Return to:  
Displays Chairman, 1973 Show  
Lincoln Gem and Mineral Club  
Box 5342  
Lincoln, Nebraska 68505

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LINCOLN GEM AND MINERAL CLUB, INC.

PREMIUM LIST FOR COMPETITIVE EXHIBITS—

FOR 15th ANNUAL SHOW  
EXPOSITION BUILDING - STATE FAIR GROUNDS  
May 12, 13, 1973



Come to  
our show

JUDGES -

- LAPIDARY AND SILVERSMITHING: To be announced
- MINERALS: James Swinehart
- FOSSILS: Sally L. Heald

Our show judging will operate under the AFMS Uniform Rules. As a local club, we are only having three groups for judging at our show: ADVANCED, NOVICE, AND JUNIOR.

All more experienced exhibitors are urged to enter the advanced group, leaving the NOVICE group opened for beginners. JUNIOR group is for exhibitors who have not yet reached their 18th birthday.

No competitive exhibit may exceed 12 square feet (five feet maximum length) in floor space or three feet in height.

DIVISION "A", Open Division: Any exhibit that is not covered by any other class.

DIVISION "B", Minerals: Maximum 35, minimum 20, any size or type.

- BS 2" X2" X2", maximum 35, minimum 20
- BT 1" x1" x1", maximum 35, minimum, 20.
- BM 1½" x1" x1", maximum 35, minimum 20
- BMM, micromounts, maximum 35, minimum 20.

DIVISION "C" LAPIDARY

- C-1, General Lapidary, three types
- C-2, Petrified Wood, maximum 30, minimum 20
- C-4, One locality, not over 10 cabochons from one political entity.
- CC-1, Cabochons, Maximum 30, minimum 20, not more than 5 mounted.
- CC-3, Cabochons in commercial mountings, maximum 30, minimum 20.
- CCW-1, Polished flats, maximum 30, minimum 20.
- CCW-3, Bookends, minimum 5 pair
- CCW-4, Spheres, minimum 5
- CS-1, Specialties, for which no specific classes exist in sub-division DC (Ash trays, cubes, lamps, miniatures, mosaics, novelties, etc.)
- CS-2, Intarsias, jewelry size
- DS-3, Intarsias, picture size
- CS-5, Carvings
- CF-1, Faceted, natural gem stones, not more than 5 mounted
- CF-2, Faceted stones, natural and synthetic, not more than 5 mounted
- CF, Advanced, maximum 50, minimum 30 (Juniors, nevinces, max. 30, min. 20)

DIVISION "D", JEWELRY AND METAL CRAFT

- D-1, metalcraft
- D-2, jewelry, any type
- D-3, matched sets
- D-4, jewelry, using tumbled stones
- D-5, jewelry, using cut cabochons
- D-6, jewelry, using faceted stones

DIVISION "E", EDUCATIONAL EXHIBITS

- E-1, mineral
- E-2, lapidary
- E-3, jewelry
- E-4, fossil
- E-5, others, mixed exhibit, aspect of hobby, etc.

"The place to go in '74, National Gem and Mineral Show, Lincoln, Nebraska,  
June 13 - 16, 1974"

## DIVISION "F", FOSSILS

- F-1, fossils, animals, proportion 4 invertebrate:1vertebrate
- F-2, fossils, vertebrates
- F-3, fossils, invertebrates
- F-4, fossils, animals, plants, proportion, 4 invertebrates;1vertebrate;  
2 plants
- F-5, fossil plants
- F-6, fossils, one time unit
- F-7, fossils, one taxon (includes any super taxon or sub-taxon), class,  
order, family, genus (kingdoms must enter under F-1 or F-4)
- F-8, fossils, one locality
- FT-1, fossils, thumbnails, 1" xl" xl", maximum 35, minimum 20
- FM-1, fossils, micromounts, maximum 35, minimum 20

## DEFINITIONS:

**Advanced:** Any exhibitor who has been awarded a blue, first place ribbon in a novice group. That is, any exhibitor who won a blue ribbon (first place) in, for example, thumbnail fossils must compete in the advanced group if he wishes to enter thumbnail fossils again. He may, however, compete in any other group as a novice if he has not won a blue ribbon in that group.

**Novice:** This is the beginners group; therefore, experienced exhibitors are urged to enter higher competition to assure equitable competition for the newcomer.

**Junior:** Any exhibitor who has not reached his 18th birthday on the opening day of the show. Juniors who have competed and won first place ribbons must enter in a higher group if they wish to compete in that same class again,

## JUDGING:

Judges decisions final!

1. The judges will not be permitted to handle any specimens.
2. The judges may not open any cases unless the competition chairman or a duly appointed clerk is present.
3. Each judge will be accompanied by an appointed scorer. The judges and scorers tallies must coincide for all exhibits before premiums are awarded. The scorer will serve as a measuring committee where size determines a class (e.g. thumbnails). Exhibitors may request that the competition chairman measure any doubtful specimens before judging begins.

No Protest Candidates. In case of tied scores, the judges panel has the option of awarding one point, by any method chosen, to the exhibit of panel's choice, for determining best class, group, or best of show winners.

Competitive exhibits must be in place by 11:00 A.M., May 12, 1973. They may not be removed until 5:00 P.M., May 13, 1973. Judging will begin at 12:30 P.M. Sharp.

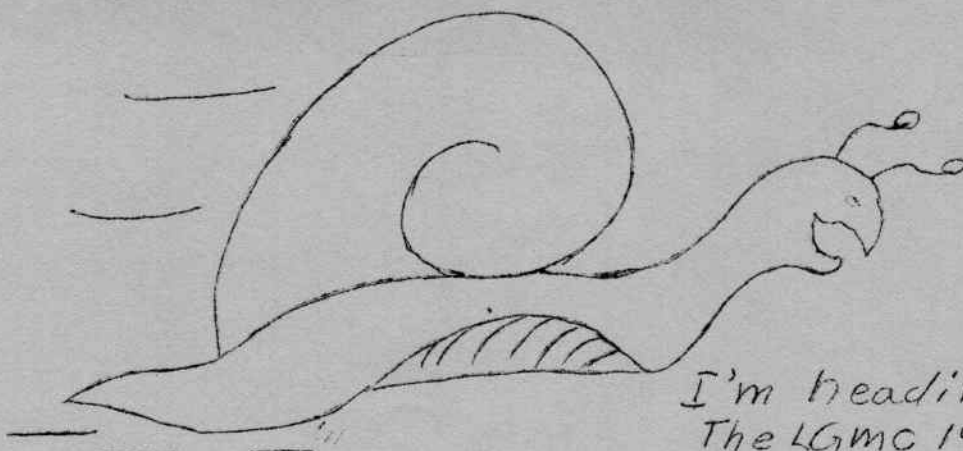
A critique for exhibitors will be scheduled after the judging Saturday — time and place to be posted.

**TROPHIES:** The following trophies have been donated by our members.

- Best in show (advanced or novice), Tom Simmons
- Best in show (junior), Sally Heald
- Best Educational Display, Roger Pabian
- Best Fossil Display, Roger Pabian

Best Open Display Utilizing Rocks (judged separately), Irl Everett

Entries will be accepted until the deadline for placing exhibits. However, to avoid confusion and unnecessary last minute rushes, please enter early. Thank you,



I'm heading for  
The LGMC 1973 Show

OFFICIAL ENTRY FORM

Name \_\_\_\_\_ Age (if junior) \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_

Class(es) Entered \_\_\_\_\_ please specify group

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Lincoln Gem and Mineral Club, Inc., will attempt to furnish one (1) Wichita Case to each out of town exhibitor who enters competition. Additional cases must be furnished by the exhibitor. If possible, please furnish your own case.

Mail to: Competition Chairman  
Lincoln Gem and Mineral Club  
Box 5342  
Lincoln, Nebraska 68505

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OFFICIAL ENTRY FORM

Name \_\_\_\_\_ Age (if junior) \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ ZIP \_\_\_\_\_

Class(es) entered \_\_\_\_\_ PLEASE SPECIFY GROUP

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Lincoln Gem and Mineral Club, Inc., will attempt to furnish one (1) <sup>Wichita</sup> case to each exhibitor who enters competitively. Additional cases must be furnished by the exhibitor. If possible, please furnish your own cases.

Mail to: Competition Chairman  
Lincoln Gem and Mineral Club  
Box 5342  
Lincoln, Nebraska 68505



# LINCOLN GEM & MINERAL CLUB, INC.

## 1973 Officers

President . . . . . Roger Pabian  
1st Vice-President . . . . Ralph Ulrich  
2nd Vice-President . . . . Don Lawson  
Rec. Secretary . . . . . Nelda Oliver  
Treasurer . . . . . James W. Parks  
Board Members . . . . . Tom Simmons  
Howard Taylor  
Don Eckel

John Harrison, Jr.

Bulletin Editor . . . . . Evelyn Ulrich  
Liaison Officer . . . . . Roger Simmons

Regular Meeting - 4th Saturday of each month, September through May

## PURPOSE OF OUR CLUB

The improvement of its members in the art of cutting and polishing gem materials.

The study of mineralogy and geology.

To collect minerals and gem materials.

To provide opportunity for the purchase, exchange and exhibition of mineral specimens and gem materials. It is not organized for any business purpose of pecuniary gain or profit.

## MEMBERS OF

Midwest Federation of Mineralogical & Geological Societies  
American Federation of Mineralogical Societies  
Nebraska Assn. of Earth Science Clubs  
Community Arts Council

## WELCOME

We extend to you a most cordial welcome to our 15th Annual Gem and Mineral Show.

We hope you find our displays interesting and educational. If you have any questions about displays, please contact anyone wearing exhibitor's ribbons.

To all of you attending our show we say thank you. Have a good time, stay as long as you like, and come back and see us again in 1974.

Ralph Ulrich, Show Chairman  
LINCOLN GEM & MINERAL CLUB, INC.

## SPECIAL FEATURES

ROCK PICTURES done with Petrified Wood...Howard and Harvey Kenfield

JUPITER'S JEWELRY

FOSSIL SCULPTURES . . . . Vone Luthi

FAMOUS AGATE COLLECTION..Roger Pabian

PLUME AGATE . . Harry & Clara Keller

PETRIFIED WOOD ROUNDS . . Melvin and Bernita Lentz

INDIAN SAND BOTTLE ART . . Elmo Nolan

JADE CARVINGS . Lo & Rador International  
Hong Kong

"MINI-OIL-WELL".Nebraska Geol. Survey

## PROGRAM

### Saturday-May 12

"Monster Dig" 12:45 PM  
Audio-slide  
Courtesy Lincoln Gem & Mineral Club

Fossils of Nebraska 2:00 PM  
Slide-lecture Roger Pabian

"Grand-Canyon" 3:00 PM  
Slide-lecture Pete Huntoon

Gemstones of Nebraska 5:00 PM  
Slide-lecture Roger Pabian

"Grand Canyon" 7:00 PM  
Slide-lecture Pete Huntoon

"Monster Dig" 8:00 PM  
Audio-slide  
Courtesy Lincoln Gem & Mineral Club

### Sunday-May 13

Fossils of Nebraska 11:00 PM  
Slide-lecture Roger Pabian

"Monster Dig" 1:00 PM  
Audio-slide  
Courtesy Lincoln Gem & Mineral Club

Gemstones of Nebraska 2:00 PM  
Slide-lecture Roger Pabian

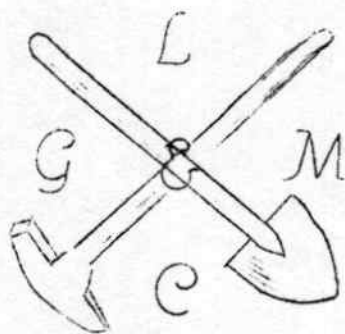
"Grand Canyon" 3:00 PM  
Slide-lecture Pete Huntoon

Fossils of Nebraska 5:00 PM  
Slide-lecture Roger Pabian

Movies will be shown as time permits

Lincoln Gem & Mineral Club

AWARDS BANQUET



ADMINISTRATION BUILDING

State Fair Grounds

10:00 P. M.

may 12, 1973

A HUNDRED MILLION YEARS  
(Tune-Clementine)

In a cavern, in a canyon,  
Back 100 million years,  
Brontosaur and Stegosaurus  
Gnashed their teeth and shed their tears.

Chorus:

Hundred million, one hundred million,  
One hundred million years ago,  
Largest reptiles show their spring styles  
Here's their bones, it must be so.

Laid their eggs on desert sand,  
Thought their race would never cease.  
Ancient yeggs sold breakfast eggs for  
Just about two bits a piece.

Chorus

In the lees of ancient seas  
The trilobites were in the pink.  
Picked a fight with amonite  
No more salt water does he drink.

Chorus

Into innards of a rhino,  
Up a rocky canyon wall,  
Climbed a score of dusty Rock Hounds,  
Now we have no doubt at all.

Chorus

## PROGRAM

Invocation

Welcome . . . . . Ralph Ulrich

Mixed Glee Club . . "100 Million Years"

Director . . . Irl Everett

Accompanists . . Push & Pull Gals

Address . . . . "Competition & Awards"

Dr. G. B. Dunning

## PRESENTATION OF AWARDS

Recognitions

Ralph Ulrich

Best in Minerals

Roger Pabian

Best in Lapidary

John Harrison

Best in Fossils

Roger Pabian

Best in Jr. Division

Sally Heald

Best in Open Display

Irl Everett

Best of Show

Tom Simmons

BUFFET BANQUET

Golden Fried Chicken

Potato Au Gratin

Tossed Salad

Dinner Rolls

Butter

Beverage

Brownies

FOOD FOR THOUGHT

The highest of distinction  
is service to others

- George VI of England

## OPEN DISPLAY COMPETITION

This year those persons competing in open display may enter several categories. These arrangements must not exceed 12 sq. ft. and a major component of the arrangement must utilize rocks, minerals, gemstones or fossils.

The divisions are:

1. Special Occassions - as anniversaries, birthdays, holidays, etc.
2. The Four Seasons - Winter, Spring, Summer or Fall
3. Space Age
4. Down Memory Lane
5. Grottoes
6. Miscellaneous

Indicate in which of the six divisions you are competing. Each individual may compete in all or one or more divisions but only one entry per person may be entered in each division. All entries must be in place by 10 A. M. Sat. May 12, 1973. Judging will begin at 11 A. M. Sat.

Winners will be announced at the awards banquet. Everett Lapidary (Irl & Lois Everett) has contributed the trophy for Best in Open Display.

Call Gladys Jeurink, 488-3969 after 6 P. M. or Marie Wells, 435-6758 to make arrangements.

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Trophies offered in the 1973 Lincoln Gem and Mineral Club Show Competition are:

Best in Minerals	donated by	Roger Pabian
Best in Lapidary	"	" John & Lee Harrison
Best in Fossils	"	" Roger Pabian
Best in Jr. Division	"	" Sally Heald
Best in Open Display	"	" Everett Lapidary (Irl & Lois Everett)
Best of Show	"	" Tom Simmons

Sunday World-Herald

# Entertainment

Sunday World-Herald Magazine, May 6, 1973



Mrs. Nolan creates a sand bottle.

## Indian Sand Bottle Art Part of 15th Gem Show

Lincoln. Col. and Mrs. Elmo Nolan of Pass Christian, Miss., will demonstrate Indian sand bottle art at the 15th annual gem and mineral show in Lincoln May 12-13.

The show will be held in the exposition building at the State Fairgrounds.

Indian sand bottle art involves placing layers of sand in different colors in the bottle and then working with the sand using sticks or wires to produce a scene or other design.

Other displays planned for the show are rock pictures from Nebraska by Howard and Harvey Kenfield of Ogallala, rock pictures from Ja-

pan by Bob and Mitzi Brown of Bellevue, Neb., jade and rock carvings by Lo and Rado of Hong Kong, a large agate collection by Robert Pabian of Lincoln, plume agates by Harry and Clara Keller of Bend, Ore., petrified wood by Melvin Lentz of Mulvane, Kan., birthstones by Mike Holmquist of Lincoln and fossils by Vone' Luthi of Topeka, Kan.

There will be demonstrations of jade carving, metal-smithing and gem faceting.

Featured speaker will be Professor Peter Huntoon of the Nebraska Geological Survey and former director of a Grand Canyon mapping project.

Wednesday, May 2, 1973—PAGE 9

Louisiana's commercial fishing catch includes about 75 million pounds of shrimp a year.

The palm tree evidently takes its name from the resemblance of leaf clusters to a human hand (palm).

## 15th Annual Gem Show

State Fairgrounds  
Exposition Building

May 12 & 13, 1973

Sat: 10 a.m. to 10 p.m.  
Sun: 10 a.m. to 6 p.m.

Admission \$1

Children under 12  
free with parent

Wednesday, May 9, 1973—PAGE 5

SEE: JADE, AGATES, FOSSILS, MINERALS, ROCKS, CRYSTALS, JEWELRY, GEM

### All This And More

at the 15th annual

## Gem Show

May 12 and 13, 1973

State Fairgrounds  
Exposition Building

- See demonstrations of metal smithing, gem cutting, Indian bottle art, rock carving, and more.
- Eight dealers featuring cut and rough gemstones, jewelry, minerals and novelties.

Hours: Saturday 10 to 10  
Sunday 10 to 6

Admission: \$1.00. Children under  
12 free with adult.

SEE: JADE, AGATES, FOSSILS, MINERALS, ROCKS, CRYSTALS, JEWELRY

HEAR: LECTURES ON INDIAN BOTTLE ART, GRAND CANYON, FOSSILS, GEMSTONES

HEAR: LECTURES ON INDIAN BOTTLE ART, GRAND CANYON, FOSSILS, GEMSTONES

Save this page

Wednesday, May 9, 1973—PAGE 9

## Sand Packed Into Bottles Creates Art for Rock Hounds

Col. and Mrs. Elmo Nolan of Pass Christian, Miss., create intricate designs by pouring selections of sand from a variety of more than 30 shades into glass bottles.

Their craft is called Indian Sand Art, a skill that might be called the desert dweller's sequel to building a ship in the bottle, and it will be on display at the Lincoln Gem and Mineral Club show Saturday and Sunday, May 12-13, in the Exposition Building at the State Fairgrounds.

They don't dye the sand they use, they don't grind rock and they don't mix the basic colors . . . they simply dry the sand they have gathered and thoroughly sift it once to remove the trash.

Then they use special tools created by Col. Nolan to suit the needs for the various designs . . . long narrow probes of metal, wires of various sizes, picks and wooden tamps. The ends of the tools are curved, flattened, and bent to the angles needed. They look quite simple but are very efficient.

The Nolans begin their design by pouring two layers of sand into the bottle, leveling it, then, using a tool suited to the design they want, tamp color down into the lower layer.

Carefully and patiently more colors are added and worked until the designs they want begin to take shape.

"We learn by experimenting," the Nolans said. "Our bottle patterns range from animals such as buffalos, elephants, reindeer, birds and flowers to such figures as angels, Indians and Batman. We also make geometric designs and fantastic arabesque designs. Actually almost any figure can be created with time, the proper tools and a fancy-free imagination.



Mrs. Elmo Nolan tamps layers of sand design into a bottle. (SUN News Service).

We do consider the elements of good design, balance, harmony of colors, and repetition of lines, curves and motifs and try to adapt the entire pattern to the individual bottle containing it."

It takes about 45 minutes to an hour to complete a sand bottle. Then comes the hard part. The sand must be packed so tightly, and tamped so hard that not a single grain of sand can shift. Proper packing is essential to the design and, the Nolans insist, the only trick in making the bottle. If it isn't tight enough the sand will shift and the design will be lost; if it is packed too tightly the bottle will break. But the Nolans report that of all the bottles sold in the last three years they have had to replace only a few.

### '73 Rock Show Offers Variety of Features

Working demonstrations to fascinate both the casual observer and the most avid rock hound are scheduled for the 1973 Lincoln Gem and Mineral Club Show, scheduled for 10 a.m.-10 p.m. Saturday and 10 a.m.-6 p.m. Sunday, May 12-13 at the exposition building at the State Fairgrounds.

Among the special features are:

—Drought and depression scenes of the 1930's, assembled in petrified wood by Howard and Harvey Kenfield, Ogallala.

—Agate pictures depicting plant and animal life, shown by Bob and Mitzi Brown of Bellevue.

—Novel fossil creations of broken shells, crinoid stems and occasional small crystals, by Vone Luthi of Topeka, Kans.

—One of the Midwest's largest agate collections, shown by Roger Pabian, Lincoln.

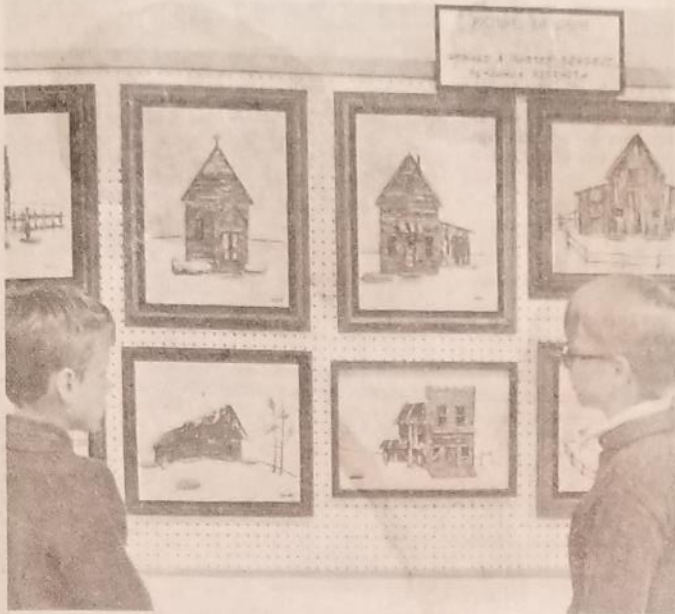
—An Indian Sand Art demonstration by Col. and Mrs. Elmo Nolan, Pass Christian, Miss. Art is created by tamping vari-colored sand into bottles.

—Silver smithing, demonstrated by Henry Myers, Kansas City, Mo.

—Slides on the Grand Canyon region of Arizona by Peter Hunttoor, who served as principal geologist on a mapping project there.

—Programs on gemstones and invertebrate fossils of Nebraska, presented by Roger Pabian.

—Competitive displays in the following categories: Special Occasions, The Four Seasons, Space Age, Down Memory Lane, Grottoes and Miscellaneous.



Young gem and mineral enthusiasts Mike Welch (left) and Andrew Arnold of Omaha studied these pictures made from pieces of petrified wood at the Gem and Mineral Show Saturday at the Fairgrounds. The pictures were created by twins Howard and Harvey Kenfield of Ogallala.

## Rocks Around the Clock—Up to 6 p.m.—at Fairgrounds

More than 400 plays for a rock hound's fancy are on display through 6 p.m. today at the State Fairgrounds Exposition Hall.

An estimated 1,500 spectators began the visual tour of Lincoln Gem and Mineral Club's 15th annual gem show Saturday. Groups from Omaha, Shelton and other parts of Nebraska were there to wheel and deal with dealers from as far away as Texas, California and Oregon.

Rock hounds, known for their propensity to travel for special rock finds, spoke Saturday of their fear that traveling times may be increasingly limited as the predicted gas shortage becomes a reality.

Fuel shortages will "certainly change the aspects of field trips," said Lincoln Gem and Mineral Club President Roger Pabian.

### More Chartering

Pabian looks for more travel in large groups — more trips with five or six to a car instead of two or three, and more chartering of buses.

Traveling in large groups, he says, has the advantage of lower cost, but the disadvantage of slowness and the problem of landowners who often don't want large groups on their property.

Show Chairman Ralph Ulrich thinks the fuel problem will cut the number of people who travel across country by camper. Local collectors will be spending more time exploring gravel pits and river banks in Nebraska and less traveling out of state, he predicts.

"There's just as much collecting in Nebraska as in Colorado," he says. "The only reason you go to Colorado is to collect something different."

Getting that something different, he and Pabian agree, may soon mean more trading by mail. Some goes on now, they said. Or it might mean more rock swaps like the one the Lincoln group is planning for this August.

### May Be Fewer

The fuel problem is real for people out in Shelton, too, but Harold Liggett of the MidState Rock Club came on down to Lincoln, anyway. He ventured a guess that some of the longer trips he and his group make — to South Dakota, Wyoming, Kansas and Texas, for instance — will be fewer than in the past.

Lincoln area rock hounds are fortunate, in the shadow of a fuel crisis, to have the prestigious national Gem and

Mineral Show coming to their very doorstep next year.

The 1974 show, according to Ulrich, will be worldwide in scope. It will take four large fairgrounds buildings with some 112,000 sq. ft. of usable space to house it.

### 600 Camping Sites

Planners project that 35,000 to 40,000 people will attend and those who travel from distances afield will need some 600 camping sites.

So while the sand painting and the petrified wood pictures, the fossil sculptures and the jade carvings are special treats at this year's show, planners can assure that there's lots more to come next year.

## Sand Bottle Art At Lincoln Gem Show

A display and demonstration of Indian sand bottle art will be one of the many features at the 15th annual Lincoln Gem and Mineral Club show Saturday and next Sunday at the Exposition Building on the State One Two Three. God.

Bringing the Indian display will be Col. Elmo Nolan of Pass Christian, Miss. The art involves the layering of natural colored sand in patterns into a bottle. Bottle patterns range from buffalo, elephants, reindeer, birds, flowers, angels and Indians to Batman. Also on display will be geometric and arabesque designs.

The patterns are created by layering the various sands with special tools. Col. Nolan promises to demonstrate the art and teach it free to anyone who wants to learn.

Also featured will be the agate collection of Roger Pabian including agates from the United States, Mexico and Brazil.

Vone Luthi of Topeka, Kan., will bring her fossil novelties including a fossil circus and some fantasy fossils.

Oriental carvings from the Lo and Rador International Gem House of Kowloon, Hong Kong, will be on display featuring carvings of seals, lions, dragons and fruit out of jade and agate.

From Bend, Ore., Harry and Clara Keller will bring a collection of Friday Plume agate and Howard and Harvey Kenfield of Ogallala will display rock pictures of bleached petrified woods.

Other displays include a zodiac of birthstones by Mike Holmquist of Lincoln. The collection of fossilized woods of Melvin and Bernita Lentz of Mulvane, Kan., and a metal smithing demonstration by Henry Myers of Kansas City, Mo.

In addition dealers and display competitors will attend the show. Educational movies and special programs are planned.

Peter Huntoon will present slides of the Grand Canyon that he made while serving as principal geologist



Col. Elmo Nolan working on Indian sand bottle art.

of the Grand Canyon mapping project sponsored by the canyon's historical society.

Roger Pabian will give slide shows on "Nebraska Gemstones" and "Nebraska Invertebrate Fossils."

The show will be open to the public from 10 a.m. to 10 p.m. Saturday and from 10 a.m. to 6 p.m. next Sunday.



FIELD  
GUIDES

## FIELD GUIDES

One of the most important educational grants that was made by the Lincoln Gem and Mineral Club in 1973, was to the Conservation and Survey Division of the University of Nebraska, to help publish a new series of field guides that are designed especially for the beginning student and amateur collector. This project is in part financed by the Lincoln Gem and Mineral Club, and in part financed by the Nebraska Geological Society. To the best of our knowledge, this marks the first time that a professional society and an amateur society have gone forth in a joint venture to make educational materials available to the general public. We feel that this is a great step forward for both types of societies.

As a service to its members, the Lincoln Gem and Mineral Club provides a copy of each new field guide to each family. The complete set of guides will contain about twenty five different field trips covering most of the state of Nebraska. Financial support from the Lincoln Gem and Mineral Club and Nebraska Geological Society has enabled the Conservation and Survey Division to keep the price of the guides nominal (10 cents each) and has enabled them to distribute the guides free of charge to those school teachers requesting them.

Copies of the first six guides in this series are attached.

THE UNIVERSITY OF NEBRASKA-LINCOLN  
CONSERVATION AND SURVEY DIVISION  
NEBRASKA HALL  
LINCOLN, NEBRASKA 68508  
(402) 472-3471

ASSOCIATED SURVEYS  
GEOLOGICAL CONSERVATION  
WATER RESOURCES  
SOIL INFORMATION

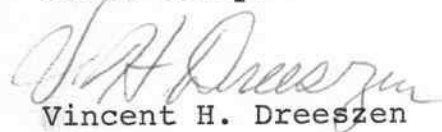
March 1, 1973

Roger K. Pabian, President  
Lincoln Gem and Mineral Club  
Box 5342  
Lincoln, Nebraska 68505

Dear Mr. Pabian:

It is my pleasure to thank the members of the Lincoln Gem and Mineral Club for the generous donation of 200 dollars to be used toward production of a new series of field guides. We feel these guides will be of considerable value to both teachers and collectors.

Yours truly,

  
Vincent H. Dreeszen  
Director

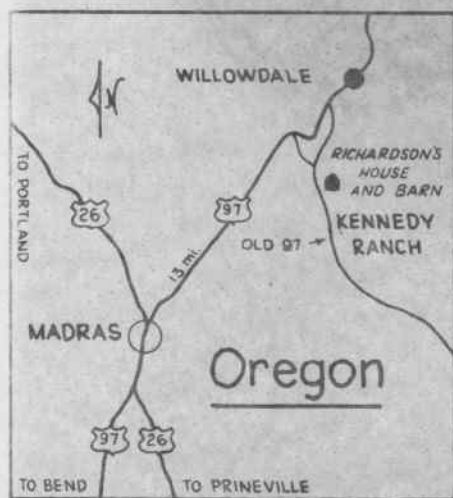
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University of Nebraska, Lincoln, Nebraska 68508. Financing for the field guides was a joint project of the Nebraska Geological Society and the Lincoln Gem and Mineral Club, marking, it is believed, the first time that professional and amateur earth science groups have cooperated to help put out a series of publications of interest to both.

#### OREGON

A new location has been opened for collecting on Muddy Ranch in Ashwood. Green and moss agate, agatized and petrified wood and colorful jasper may be found. The area also includes the Norton Ranch, recently purchased by Muddy Company, and borders the Ochocos. A per pound fee is charged. For more information contact Sandy's Rock Shop, Main Street, Ashwood, Oregon 97711.



#### Kennedy Ranch

Johnnie Richardson's Kennedy Ranch was visited by members of the Tek Rock Club. To get there (see map) take Highway 97 north from Madras until you reach the ranch sign (about 13 miles). Turn east and proceed to the ranch house where you sign in and get maps to the digging areas and directions to the campground. The fee is 20¢ per pound (no charge for camping). Materials include thundereggs, petrified wood, ledge agate and jasper. Bring tools for hard rock mining. Plan to reach the campground during daylight hours. — *Tek Rock Club News*

#### RHODE ISLAND

A most unusual and desirable innovation has been made in the publication, *Minerals of Rhode Island*, by Clarence E. Miller. (Published by the Department of Geology, University of Rhode Island, Kingston, RI. \$2.00.) Illustrated.

Most publications of this nature repeat a list published over 100 years ago, in the early Dana mineralogies, with a few additions. The present list includes, "Some Special Locations of the Past," and "Some Special Locations of the Present," etc. Minerals are classified according to abundance or frequency with symbols used to indicate present condition of

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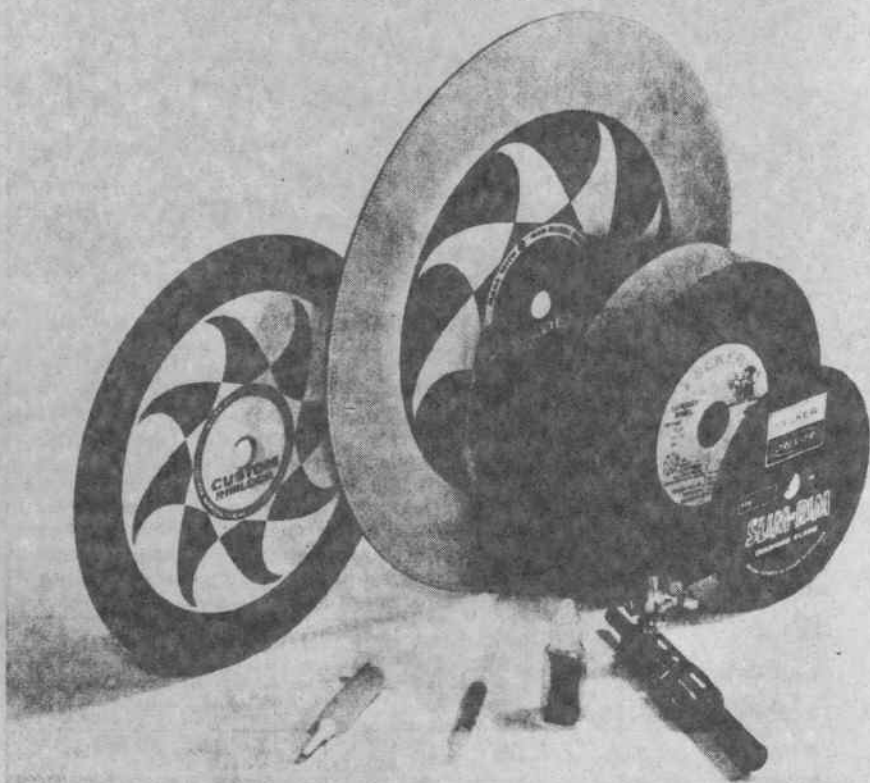
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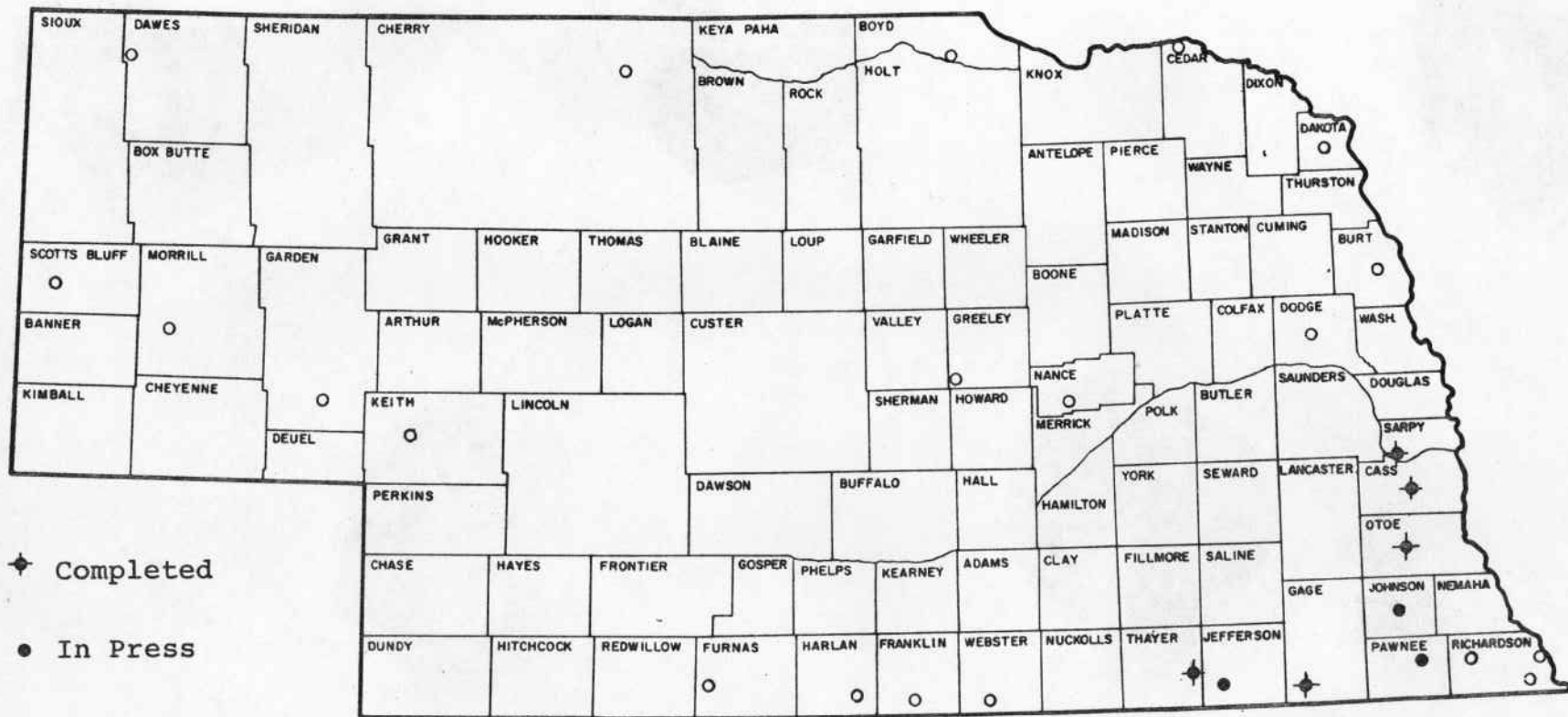
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# FIELD GUIDES .... EACH 10¢

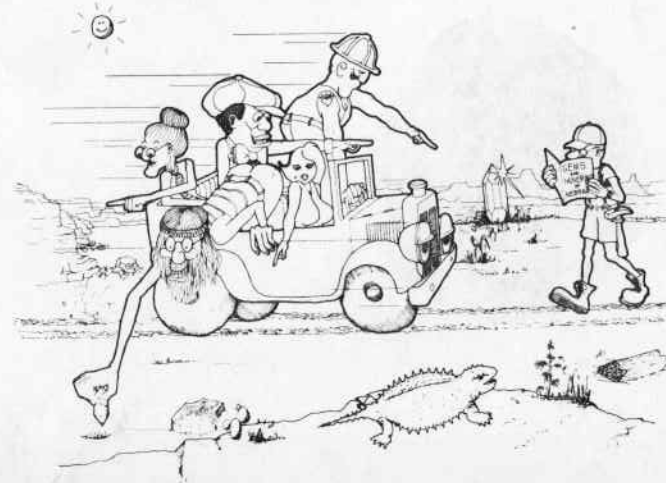


- ◆ Completed
- In Press
- Proposed

SCALE 0 10 20 30 40 50 MILES

Recent emphasis on the earth sciences has created a demand from teachers and students for geologic information in the area in which they live. In response to this demand in Nebraska, Educational Circular No. 1, "Record in Rock," and Educational Circular No. 2, "Minerals and Gemstones of Nebraska," were prepared. In addition to the educational emphasis on earth sciences, rock collecting has grown to be one of the nation's most popular hobbies. Many students and hobbyists are now requesting information on how to identify the various stratigraphic horizons (rock layers) and geologic features they encounter in the field. Thus, these field guides have been prepared to help the nonprofessional familiarize himself with the stratigraphy and some of the geologic phenomena of Nebraska.

CONSERVATION AND SURVEY DIVISION  
 113 Nebraska Hall, University of Nebraska  
 Lincoln, Nebraska 68508



## Field Trips

We again published and distributed a Field Trip Guide this year. We believe these guides serve a two-fold purpose. They are an invitation to other clubs to participate in our own field trips and they may also help individuals who are looking for hunting areas to locate some new <sup>or</sup> interesting spots.

The American Federation "Code of Ethics" was included in our guide so that prospective hunters would be familiar with their good advice and guidance.

The general safety rules for field trips were included with the hope that all would read and heed and return home happy and uninjured.

The President's Field Trip was planned so that a variety of specimens could be collected from various areas in Wyoming, South Dakota, and Nebraska. We found that the landowners who had given us permission to hunt on their land were very much interested in our hobby. We made a few new friends for the hobby. The trip ended at Crawford, Nebraska so that we could attend their annual show and participate in exhibits. Several of our Club members set up displays of material they had collected on the President's Field Trip.

The number of Club field trips was necessarily fewer this year--only five--because we were occupied with the National Show during the first half of the year.

4-H CLUB

#### 4-H CLUB ACTIVITIES

The Lancaster County 4-H Petrified Pebble Pups was originally headed up by one of our members, Mrs. Marie Wells, who has remained active with this group ever since its' founding. In addition to Mrs. Wells work, the Lincoln Gem and Mineral Club has supported the 4-H Petrified Pebble Pups by allowing \$15.00 to be spent for county fair and state fair display awards to 4-H club rock exhibitors, and, also, by allowing the 4-H Petrified Pebble Pups space in the Pick and Shovel, our club bulletin, to report their own achievements. In addition, 4-H Petrified Pebble Pups have been encouraged to attend Lincoln Gem and Mineral Club meetings, field trips, and swaps, and to display at the annual show.

Two of our members, Mrs. Marie Wells, and Mr. Roger K. Pabian, helped prepare the study guide that was used in the state-wide 4-H rock collecting program for Nebraska. A copy of that guide is attached.

EXPLORING OUR  
EARTH THROUGH

GEOLOGY

UNIT I - BEGINNING GEOLOGY

PROJECT GUIDE AND RECORD BOOK

Members name \_\_\_\_\_ Age \_\_\_\_\_

Address \_\_\_\_\_

County \_\_\_\_\_ Club name, class or group \_\_\_\_\_

Name of Leader \_\_\_\_\_

Authors: Marie Wells, Lincoln  
Roger Pabian, University of Nebr.  
John Bergstrom, Chappell

Extension Service, University of Nebraska - Lincoln College of Agriculture  
Cooperating with the U.S. Department of Agriculture and the College of Home  
Economics E.F. Frolik, Dean J.L. Adams, Director

SELECTED REFERENCES

- |   |  |
|---|--|
| 1. <del>A.</del> Rocks and Minerals               | Herbert S. Zin<br>Paul R. Shaffer  |
| 2. My Hobby is Collecting Rocks<br>and Minerals   | David E. Jensen  |
| 3. How to Know the Minerals and<br>rocks          | Richard M. Pearl   |
| 4. Gem Stones                                     | U.S. Department of Interior<br>Bureau of Mines<br>Superintendent of Documents<br>U.S. Government Printing Office<br>Washington, D.C. |
| 5. The Agate Book                                 | H.C. Dake<br>Mineralogist Publishing Co.<br>329 S.E. 2nd Ave.<br>Portland, Oregon  |
| * <del>6.</del> Record in Rock                    | Roger Pabian<br>Education Circular No. 1<br>University of Nebraska<br>Conservation & Survey Div. \$1.00                              |
| <del>7.</del> Minerals and Gem Stones in Nebraska | E.C. #2<br>University of Nebraska \$1.00   |
| 8. Fossils  | Frank H. Rhodes<br>Herbert S. Zim<br>Paul R. Shaffer   |
| * <del>9.</del> Collecting Rocks                  | U.S. Department of Interior  |
| * <u>10.</u> Use and Conservation of Minerals     | U.S. Department of Interior  |

\* These publications may be obtained from the Conservation & Survey  
Division, University of Nebraska, Lincoln, Nebraska 68508

# EXPLORING OUR EARTH THROUGH GEOLOGY

## INTRODUCTION

### I. IT'S PURPOSE

1. To stimulate an interest in collecting rocks and their use in science, in daily living, and as an interesting and rewarding hobby.
2. To learn something about the minerals that surround you.
3. Learn to classify rocks.
4. Actually exhibit and display rocks you have collected and/or polished.
5. To learn "by doing" and "working with others." There is no quick and easy way to learn to be an authority on any of the points above since this subject is large in scope and requires continued and long time study, practice and observation.

### II. QUALIFICATIONS

1. A boy or girl between the ages of 9 and 19 years old.

### III. PROJECT GUIDE AND ACTIVITIES

Suggested activities listed below should be reviewed and discussed by the club member and the leader. Then together the member (s) and leader can set goals to accomplish a better understanding of Geology.

1. Collect and list on identification sheet, at least 10 rock specimens, collected during the current project year. (5 of these must be native to Nebraska.)
2. Visit a museum, rock shop, an adult "Rock Hound" to view his collection, a trip to a quarry, sand or gravel pit, or visit a cement, pumice, brick or other mineral processing plant. Jot down what you saw.
3. Give a demonstration - illustrated talk.
4. Describe a geological specimen you found on each field trip. Learn all you can about this material - how it was formed - how it got where you found it, and any economic value it may have.
5. Make an exhibit case according to this manual. (Optional)
6. Exhibit at a local rock show, county fair or state fair.
7. Attend an adult Rock Hound Club meeting and report back to the club what you learned.
8. Use your imagination.
9. Make an exhibit demonstrating Mohs scale of hardness

### GENERAL INFORMATION:

Geologists agree that much of the material found here originated elsewhere and has been moved in by various geologic processes such as stream activity and glaciation. Some of the material originated in places far distant from ours.

We hope to find various types of rock, such as granite, gabbro, gneiss, and rarely an agate or piece of petrified wood. There is always the possibility of finding something rare and unusual.

When you go on tour, be sure to follow instructions of your leader, and take notes on what he will be saying about the specimens that are collected.

DESCRIPTION OF ROCKS AND MINERALS

<u>NAME</u>	<u>FRACTURE</u>	<u>COLOR</u>	<u>HARDNESS</u>
Quartz	Conchoidal	Colorless	7
Felspar	Uneven	Yellow, Red, Gray, White, Pink	6
Mica	Platy	Colorless	2.5
Agate	Conchoidal	All colors	7
Jasper	Conchoidal	Red, Brown, Yellow	7
Chert	Conchoidal	White, Gray, Yellow	7
Flint	Conchoidal	Gray, Black	7
Limestone	Fine Grained or Crystalline	White, Black, Gray	3
Dolomite	As Limestone	Gray, Yellow	3 ±
Granite	Coarse grained - Composed mainly of quartz, felspar, mica.		
Gabbro	Coarse grained	Dark Green, black	6±
Basalt	Fine Grained	Dark Green, black	6±
Shale		Black, Gray, Green, Red	1 - 3
Sandstone		Brown, White, Gray	7 ±
Schist	Fine Grained Platy	Red, Black, Green, Gray	6 ±
Gneiss	Coarse Grained Platy	Red, Black, Green, Gray	6 ±

## " LET'S GO ROCK COLLECTING "

### WHERE?

Let's take to the hills, the roadsides, the dry washes, the bed of streams and even into the plowed field to look for rock specimens.

### FIRST THINGS FIRST:

- I. Precautions and Considerations:
  - (a) Respect personal property.
  - (b) Receive permission to enter personal property from owner.
  - (c) Always leave gates as you find them.
  - (d) Limit your collection of rocks and minerals to just what you require.
  - (e) Handle specimens properly. Some specimens require special handling.
- II. Personal Equipment suggested for Rock and Mineral Project:
  - ~~(a)~~ Comfortable walking shoes.
  - ~~(b)~~ A bag to carry specimens.
  - ~~(c)~~ Hammer - use a flat face hammer for breaking and trimming rocks. A prospector hammer or mason's hammer is preferred, but any tempered hammer will do.
  - (d) Chisel - use an all metal cold chisel about 6 inches long and from  $\frac{1}{2}$  to 1 inch wide.
  - (e) Pocket knife - important for testing hardness of minerals and rocks.
  - (f) Magnifying glass - a hand lens or magnifying glass is used to determine crystal size or mineral content. Lenses with a magnifying power between 8 - and 12 - are most useful.
  - ~~(g)~~ Gloves
  - ~~(h)~~ Protective glasses
  - (i) First aid and snake bite kit
  - (j) Notebook and pencil.
  - (k) Labels and plastic vials
  - ~~(l)~~ Drinking water.

FIELD TRIP RECORD

(Describe the soils, rocks, fossils, minerals observed; specimens collected, etc.)

Place \_\_\_\_\_

\_\_\_\_\_ Date \_\_\_\_\_

Materials observed or collected: \_\_\_\_\_

Place \_\_\_\_\_

\_\_\_\_\_ Date \_\_\_\_\_

Materials observed or collected: \_\_\_\_\_

Place \_\_\_\_\_

\_\_\_\_\_ Date \_\_\_\_\_

Materials observed or collected: \_\_\_\_\_

Place \_\_\_\_\_

\_\_\_\_\_ Date \_\_\_\_\_

Materials observed or collected \_\_\_\_\_

Place \_\_\_\_\_

\_\_\_\_\_ Date \_\_\_\_\_

Materials observed or collected \_\_\_\_\_

(add additional sheets, if needed)

RECORD OF ROCK MINERAL OR FOSSIL COLLECTED

Specimen Number	Date Collected	Location	Name	Texture or description

## LESSON - 1

### CLASSIFICATION AND THE USE OF COMMON NAMES

Science divides rocks into three classifications: Igneous, Sedimentary and Metamorphic.

1. Igneous Rocks - Are classified by their texture, mineral content and origin. They all come from magmas - molten mixtures of minerals often rich in gases found deep below the surface.
2. Sedimentary Rocks - Are highly variable. They are formed from compacted sediment, fragments of pre-existing rocks, that was deposited by water or wind. They may be bedded or massive. Nearly all are of materials that have been moved from a place or origin to a new place of deposition. The distance may be a few feet or thousands of miles. In total, these rocks cover about three-quarters of the earth's surface but constitute only about 5% of all rocks.
3. Metamorphic Rocks - Sedimentary or igneous rocks that have been altered by heat, pressure or solutions. Subjected to intense pressure and heat, the sedimentary rock limestone becomes marble.

#### FACTS ABOUT ROCKS:

1. The 90 - odd elements from which our world is made tend to combine with one another and form countless different minerals, only about 20 of which are important in rock formations.
2. In the earth's surface, only eight of the elements are present in great abundance:
  - (a) Oxygen and silicon make up almost 75% of the rocks and another 24% is composed of aluminum, potassium, iron, calcium, sodium and magnesium.
  - (b) The remaining 1% is made from about 83 elements.

#### IDENTIFICATION:

New names are constantly being added, none of which give any indication as to the elements in the rock. Example: A large number of minerals are named after their discoverers.

Almost all rocks contain several minerals adding to the difficulty of properly naming them, thus the reason for common names such as (a) Agate (b) Jasper, etc.

#### BRING TO THIS MEETING:

At least three rock specimens

4-H RECORD SHEET # 1

LESSON: CLASSIFICATION AND THE USE OF COMMON NAMES.

1. Science divides rocks into what 3 classifications:

(a) \_\_\_\_\_

(b) \_\_\_\_\_

(c) \_\_\_\_\_

2. Which classification of rock covers about three-quarters of the earth's surface:

(a) \_\_\_\_\_

3. In the earth's surface 8 elements are present in great abundance. Name 4 of these elements:

(1) \_\_\_\_\_

(2) \_\_\_\_\_

(3) \_\_\_\_\_

(4) \_\_\_\_\_

4. Which elements make up almost 75% of the rocks matter?

(a) \_\_\_\_\_

(b) \_\_\_\_\_

5. How many of the rocks that you brought to this meeting were you able to classify?

(a) \_\_\_\_\_ (Number)

Of the above number classified, how many in each classification?

(a) \_\_\_\_\_ = Number of Igneous Rocks classified.

(b) \_\_\_\_\_ = Number of Sedimentary rocks classified.

(c) \_\_\_\_\_ = Number of Metamorphic rocks classified

## LESSON

### MINERAL IDENTIFICATION

Students and mineral collectors, regardless of their special interests, should learn to identify as many minerals as possible. The more minerals one can identify, the easier and more accurate one's future determinations become. There are a number of simple tests that yield useful criteria for mineral identification. These tests are effective because each mineral has distinct physical properties, a characteristic chemical composition, and a characteristic crystal structure.

#### Physical Properties

Important physical properties include: cleavage, hardness, luster, streak, specific gravity, form, color, tenacity, and fluorescence. Determination of these properties is, therefore, useful for identification of minerals.

#### Cleavage

Cleavage is the preferred direction in which a mineral splits when it is struck a sharp blow. If the mineral consistently splits with smooth, flat surfaces, it is said to have perfect cleavage. If the surfaces are less than perfect, the cleavage may be described as good, fair or poor. Cleavage is also described in terms of the number of directions in which it occurs. Mica has a single cleavage plane. Feldspar and pyroxene cleave perfectly in two directions at 90 degrees. Amphibole cleaves perfectly in two directions at 60 degrees. Galena (cubic) and calcite (rhombohedral) cleave perfectly in three directions: galena at 90 degrees and calcite at 75 degrees. Fluorite (octahedral) cleaves perfectly in four or six directions. Cleavage is directly related to chemical bonding that exists between atoms. The cleavage is best developed where bonding is weakest. Quartz is composed of silicon ions bonded to oxygen ions; there are no weak bonds, all of them being of almost the same strength. For this reason, quartz breaks with a conchoidal fracture.

#### Hardness

Hardness is simply the measure of resistance a mineral has to being scratched. A scale of hardnesses known as the "Mohs" scale is used. This scale is based on ten arbitrary levels of hardness, each of which is defined by a particular mineral. Talc, number 1 on the scale, is the softest; diamond, No. 10 on the scale, is the hardest. The Mohs scale is as follows:

1. Talc --very easily scratched with a fingernail, feels greasy
2. Gypsum --scratched with a fingernail, does not feel greasy
3. Calcite --scratches a fingernail but can be scratched with a penny
4. Fluorite --scratches a penny, easily scratched with a knife
5. Apatite--barely scratches a knife, does not scratch most glass

6. Orthoclase--scratches glass but with some difficulty
7. Quartz --scratches glass easily, scratches orthoclase
8. Topaz --scratches quartz
9. Corundum--scratches topaz
10. Diamond--scratches corundum

### Luster

The manner in which light is reflected from the surface of a mineral is referred to as the luster. If similar to that shown by broken glass, the luster is termed vitreous (as quartz). Adamantine luster is a particularly brilliant luster that is exhibited by sphalerite and diamond. Other, more common terms describing luster are: metallic (pyrite), earthy (limonite), waxy (agate), resinous (sphalerite), and greasy (quartz).

### Streak

Streak is the mark made when a mineral is rubbed across a streak plate ( an unglazed piece of porcelain). Hematite, whether earthy or highly metallic, always has a red streak. Goethite has a yellow-brown streak. Sphalerite has a yellow streak.

### Specific Gravity

Specific gravity is the weight of a mineral sample compared to the weight of an equal volume of water at standard pressure and temperature.

### Form

The term form has two entirely different meanings when used to describe a mineral. Crystal form indicates which type of faces occur on a crystal. Since each mineral has a distinct crystalline structure, only certain kinds of crystal forms are possible. Pyrite frequently crystallizes in the form of a cube or a pyritohedron. Sphalerite crystallizes in the form of a tetrahedron, and barite in the form of a diamond.

Form is also used to describe the general external appearance of a mineral, other with respect to the shape of some commonly known object. Some of the more common structures or forms found in minerals include: fibrous, as tightly packed strands. Radial, as fine crystals pointing outward from a central point. Botryoidal, or lumpy as a head of cauliflower. Stalactitic, like icicles or cave formations. Pisolitic, or pea-shaped, and dendritic, or branching.

### Color

Although color can be a useful guide for identification, it is the most variable and misleading physical property of minerals. Some minerals, such as calcite and barite, occur in nearly every color, whereas epidote, for example, is almost always a pistachio green. Color must be used with great caution as a means of mineral identification.

## Tenacity

Tenacity is the resistance that a mineral offers to breaking, crushing, bending, or tearing. Although most minerals are brittle -- that is, they can be crushed readily into a fine powder -- a few have other types of tenacity. Definitions of various types of tenacity, each with an example, are given below.

Brittle - breaks or powders easily when struck with a hammer (quartz)

Ductile - can be drawn into thin strands of wire (gold)

Elastic - thin layers can be bent without breaking the mineral and, when released, return to their original shape (mica)

Flexible - Thin layers may be bent without breaking but do not return to their original shape (asbestos)

Malleable - may be hammered into thin sheets (gold)

Sectile - may be cut into thin shavings (gypsum)

Tough - very hard to break into pieces or crush into a powder (jade)

## Fluorescence

Fluorescence occurs if a mineral is irradiated with light or invisible wavelengths (ultra-violet, infra-red, etc.), and the disturbances created in the atomic and sub atomic particles of the crystal convert this light to a visible wavelength. A fluorescent mineral appears to "glow in the dark."

## Chemical Properties

### Chemical Composition

The chemical composition of a mineral may vary within limits. Olivine is a simple example. This mineral is an iron-magnesium silicate whose formula may be written  $(\text{Fe, Mg})_2 \text{SiO}_4$ . The iron or magnesium may occupy the cation site in the olivine structure.

### Taste

Water-soluble minerals have characteristic tastes. Halite (sodium chloride) tastes like table salt, which it is. Melanterite (ferrous sulfate) has a sweetish, astrigent or metallic taste. Minerals of the alum group generally have a sour taste and cause one's lips to pucker. Some clay minerals have a mildewy taste and adhere to the lips or tongue.

## Chemical tests

Most chemical tests require extensive laboratory equipment and considerable experience in order to be effective for mineral identification. However, one simple chemical test is commonly used: calcite effervesces (fizzes) freely when treated with dilute hydrochloric acid. If hydrochloric acid is not available, household vinegar may be used instead with a similar effect ( a powdered sample effervesces freely in household vinegar).

## Crystallography

A crystal is the regular polyhedral form assumed by an element or compound when it passes from a liquid or gaseous state to a solid state. Although a great variety of crystal forms is possible, all forms may be classified into six large groups, each of which is called crystal system.

Each crystal system is characterized by a particular relationship or crystallographic axes, a line of symmetry expressing the relationships of the crystal faces and the center of the crystal. The relationships between crystallographic axes and crystal faces for the six systems is illustrated in the Minerals and Gemstones of Nebraska, ( page     ).

Isometric system -- crystals having three axes, all of which are of equal length and are perpendicular to each other.

Tetragonal system -- crystals having three axes, two of equal length, one unequal, all intersecting at right angles.

Hexagonal system -- crystals having four axes, three of equal length intersecting at angles of 120 degrees, and a fourth, unequal axis perpendicular to the three equal axes at their point of intersection.

Orthorhombic system -- crystals having three unequal axes, all of which are perpendicular to each other.

Monoclinic system -- crystals having three unequal axes, all of which are perpendicular, and the third inclined to the other two.

Triclinic system -- crystals having three unequal axes, all inclined to each other.

Some minerals have no crystalline structure; these are called amorphous (without form) minerals. Opal is probably the most common example. Cryptocrystalline minerals occur as seemingly amorphous masses but are actually composed of very small crystals which can be seen only with magnification.

4-H RECORD SHEET

LESSON: MINERAL IDENTIFICATION

1. Give two ways minerals can be identified:

(1) \_\_\_\_\_

(2) \_\_\_\_\_

2. What 4 way can the latter of these two be identified?

(1) \_\_\_\_\_

(2) \_\_\_\_\_

(3) \_\_\_\_\_

(4) \_\_\_\_\_

## GUIDE FOR MAKING A ROCK EXHIBIT

Let's Decide --

1. On kind of an exhibit
  - a. Individual exhibit consists of at least 10 rocks.
  - b. Club booth exhibit consists of several individuals putting their rocks together to make a larger exhibit.
  - c. Special exhibits for certain classes at rock shows or county fairs.
2. Label each specimen with identification tag. Tags to be made as shown below.

Specimen # _____
Specimen Name _____
Composition _____
Where Collected _____
Date Collected _____

An identification tag, when completed, should look like one of these examples:

# 824 Tourmaline Boron, Aluminum, silicate Black Hills, So. Dakota 8-11-1964
--

#824 Tourmaline HgAl (B,Oh) Si O 3 2 4 19 Black Hills, So. Dakota 8-11-1964
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### 3. Making a Rock, Mineral or Fossil Display

You may mount the display on a piece of plywood, heavy cardboard, or wooden box with glass top like those in entomology or build a Wichita Show Case. Sand the plywood or display box smooth, use a dander, sealer or a coat of neutral paint to make a good background for the specimens.

Do not glue the specimen (or the label) directly on the display board. Instead glue it to a rectangle of white cardboard just slightly larger than the sample. This can be pinned to the board and you can rearrange the display as needed.

If sheets of plywood or heavy cardboard are used  $\frac{1}{4}$ " holes may be bored in each upper corner for easy display or hanging. The display may be covered with clear plastic to protect specimens.

### 4. Explanation for making the Wichita Show Case

To fill the need for a low - price case which every member could own and to provide a standardized appearance for society show, the Wichita standard show case was developed. The case consists of a glass top, masonite bottom, high back panel, low front panel and two side pieces slanted from front to back. Construction details are given as though the case were in its horizontal show position. White pine, White fir, or spruce is acceptable.

A 1 x 12 board 14 feet long will make three cases with no waste if properly cut. Saw this into three boards  $23 \frac{3}{4}$  inches long for the sides of the case and into three boards  $30 \frac{3}{4}$  inches long for the fronts and backs. The boards must be cut on a saw that cuts absolutely square.

Now split the  $23 \frac{3}{4}$  inch boards diagonally from one end to the other, in such a manner that the larger or back end of each board will be  $7 \frac{3}{4}$  inches wide on the inside face of the back panel and  $3 \frac{3}{4}$  inches on the inside face of the front panel. All sides should be grooved for the glass and masonite.  $\frac{1}{8}$  inch non-tempered masonite is used. The glass is 24 x 30 inches double strength window glass - - - Single strength is too flimsy for the lie down case.

The groove should be  $\frac{1}{4}$ " for the masonite and  $\frac{7}{16}$  for the glass. The masonite groove should open at the top to allow the glass to drop in. Groove in ends of front and back boards  $\frac{3}{8}$  inch for the side boards to join the front and back. Put front and two sides together, slide in masonite, then put on back. \* The glass drops

into the 7/16 inch groove on top. Ten screws, size 8 x 1 hold the case together, three on each side of the back and two on each side of the front.

Use no glue as it is designed for quick disassembly for transportation or storage.

It can be painted, stained, or varnished. Brass corner strips or pieces of wood may be added to the top edge of the back and front to hold the glass in place if desired.

This case may be also used upright for display in the home. The original back then becomes the bottom and shelves are fitted in. These shelves are 5 3/4 4 3/4 and 3 3/4 inches deep by 29 inches long and are set on 1/8 inch pins set in bored holes. Thus the shelves can be removed quickly and the pins pulled out so the case can be used for flat display.

Variations of the above may be used as desired.

\* Any suitable cover may be used instead of glass, provided it is transparent.

4-H RECORD SHEET

LESSON            EXHIBITS

1. Did you have an individual exhibit at the County Fair?

\_\_\_\_\_yes                      \_\_\_\_\_ No.

2. What was the total expense you incurred in the project?

\_\_\_\_\_ Dollars

3. Total amount of premiums won:

\_\_\_\_\_ Dollars

\_\_\_\_\_ Ribbon Received

4. List 3 ways you feel the project can be improved.

(a) \_\_\_\_\_

(b) \_\_\_\_\_

(c) \_\_\_\_\_

5. List the two strongest points of this project

(a) \_\_\_\_\_

(b) \_\_\_\_\_

6. Tell briefly about your experiences and activities.

My 4-H Geology Story

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RECORD OF MY 4-H ACTIVITIES FOR THIS PROJECT

Offices I held \_\_\_\_\_  
 My club held \_\_\_\_\_ regular meetings this year. I attended \_\_\_\_\_

(Check activities in which you took part and tell more about them in your story)  
 I led in group singing \_\_\_\_\_, games \_\_\_\_\_, group discussions \_\_\_\_\_, served as leader \_\_\_\_\_  
 assistant leader \_\_\_\_\_, secured \_\_\_\_\_ new members, took part in: health improvement \_\_\_\_\_,  
 health examination \_\_\_\_\_, safety \_\_\_\_\_, conservation camp \_\_\_\_\_, demonstration day \_\_\_\_\_,  
 song contest \_\_\_\_\_, other 4-H events \_\_\_\_\_.

My Demonstration Record

Individual		Team	
Title	Where Held	Title	Where Held

Exhibits Made in This Project

Kind of Exhibit	Where Held	Placing (if any)

Submitted by \_\_\_\_\_ Club Member

We have read and approved this report

Parent \_\_\_\_\_ Date \_\_\_\_\_

Leader \_\_\_\_\_ Date \_\_\_\_\_

County Extension Agent \_\_\_\_\_ Date \_\_\_\_\_

OTHER  
EVENTS

#### OTHER EVENTS

Lincoln Gem and Mineral Club participated in four major local events in order to publicize the club and the rock hobby. These various events were as follows: (1) Old Settlers Celebration, Hickman, Nebraska, June 16, 17, 1973. An estimated 23,000 persons saw the club booth, and contact was made with about 250 prospective rockhounds. (2) Summer Festival, Madonna Professional Care Center, Lincoln, Nebraska, July 14, 15, 1973. About 27,000 people saw the club booth and contact was made with about 1,500 prospective rockhounds. (3) Hobbies Month Displays, Gateway Shopping Center, Lincoln, Nebraska, July 28, 1973. An estimated 20,000 persons passed by the club booth and contact was made with about 600 prospective rockhounds. (4) Nebraska State Fair, Lincoln, Nebraska, August 27 - September 7, 1973. Over 40,000 persons passed by the Lincoln Gem and Mineral Club booth which was situated in the museum hall at the state fair. Members on duty visited personally with over 2,000 visitors.

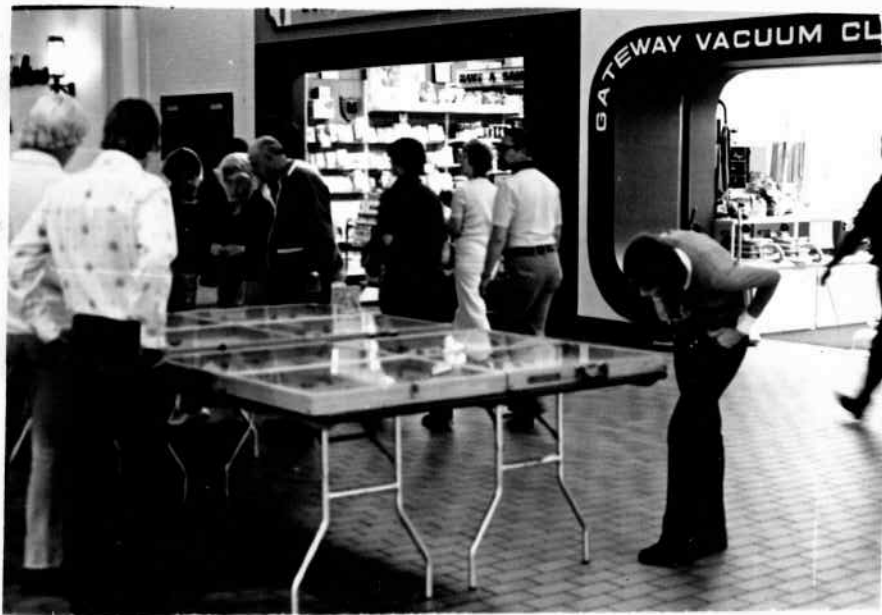
All of the above displays were manned and we were able to give any interested party complete details about the Lincoln Gem and Mineral Club, the forthcoming 1974 National Gem and Mineral Show, and also provide some insight and information about various phases of the rock collecting hobby. At each event a well rounded series of displays featuring fossils, minerals, lapidary, and jewelry and metalcraft displays were to be seen. In addition to displays, working demonstrations of cabochon cutting and faceting could be seen. Such demonstrations proved to be very popular. Contact with the general public not only netted the club some new members, but also led to the opportunity to furnish displays at other functions for following years. We feel the new members gained as well as the favorable impression the club has generated makes these appearances worthwhile and more are anticipated.



SUMMER FESTIVAL, MADONNA PROFESSIONAL CARE CENTER, JULY, 1973  
Lincoln, Nebraska  
About 27,000 Attendance

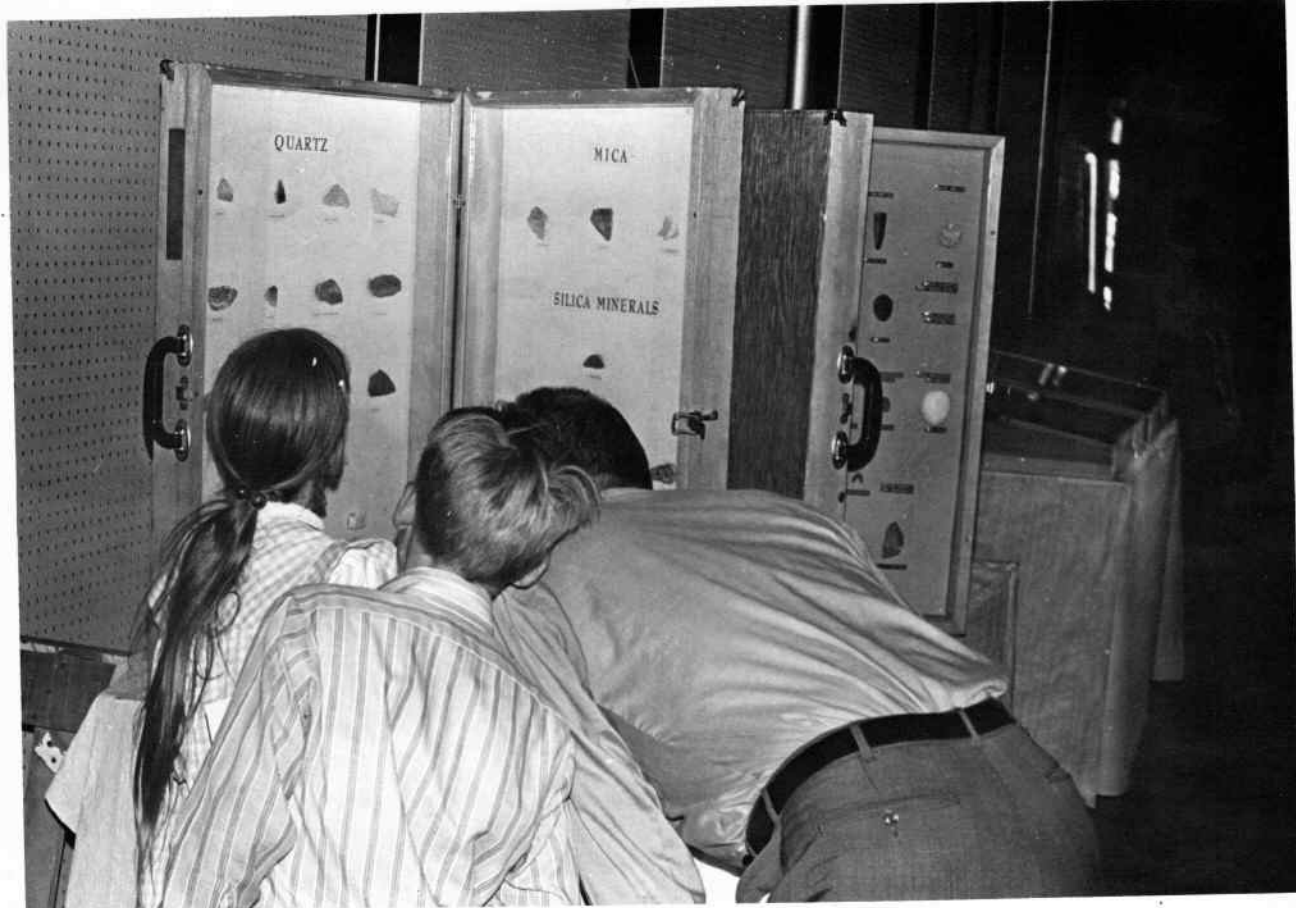
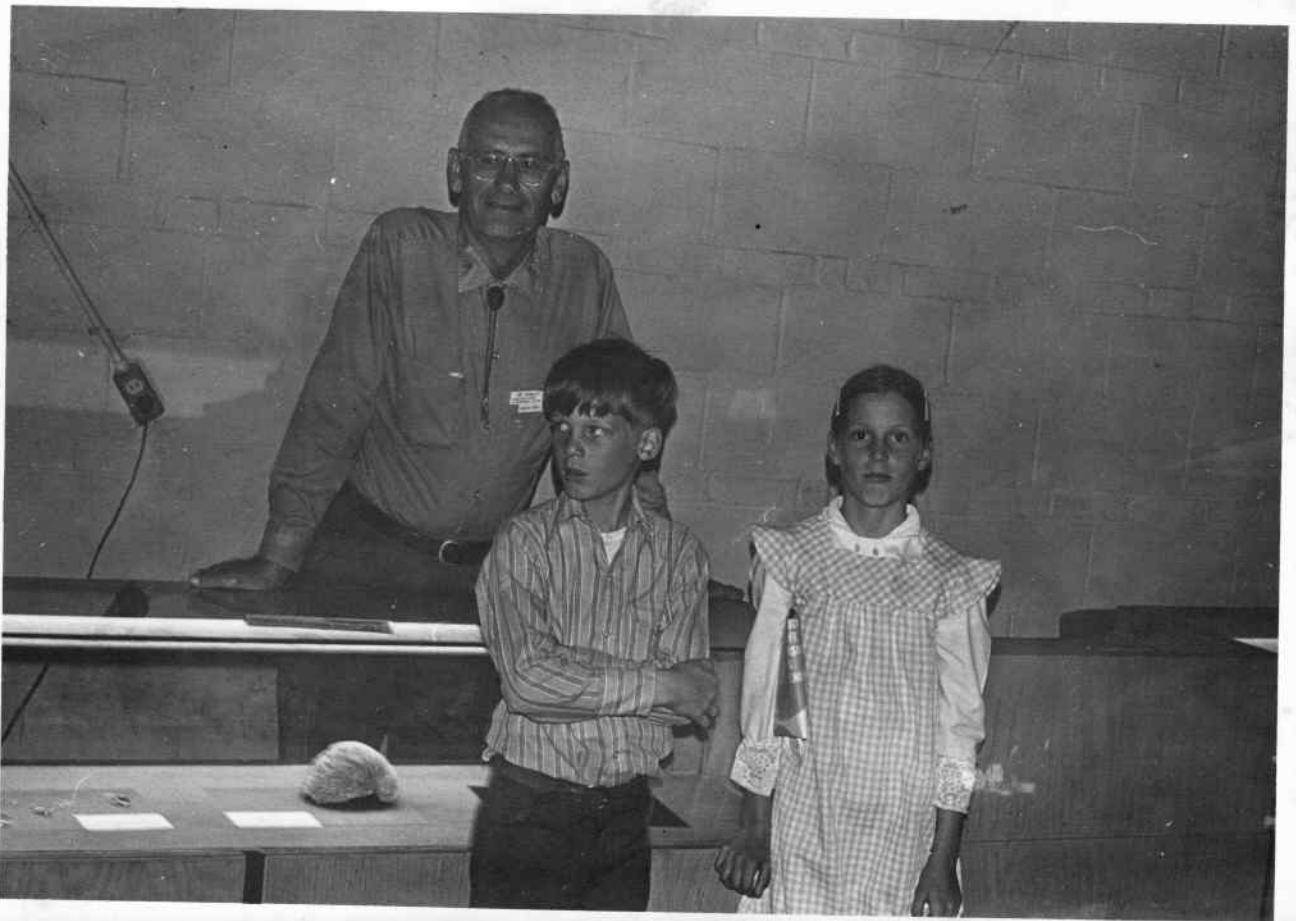


OLD SETTLERS CELEBRATION, HICKMAN, NEBRASKA, JUNE, 1973  
About 23,000 Attendance

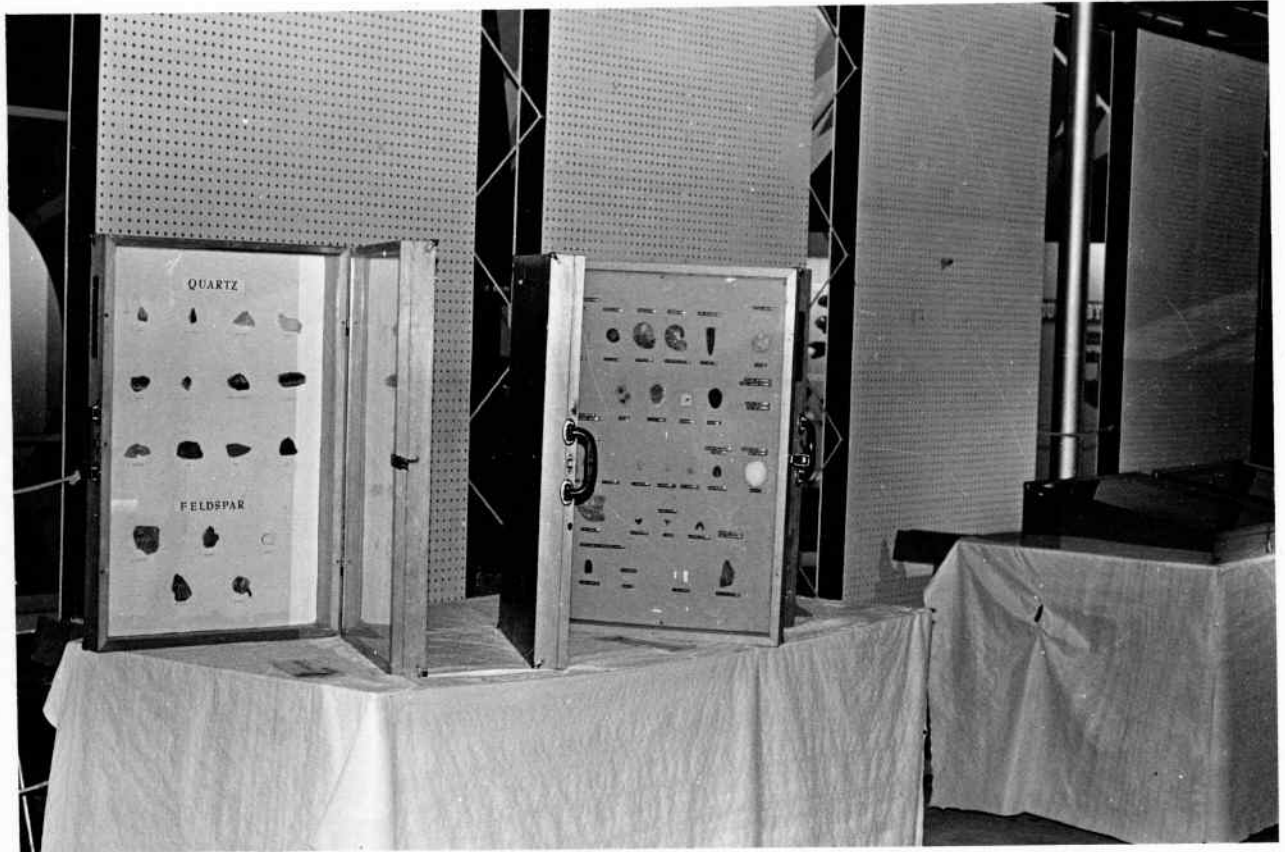
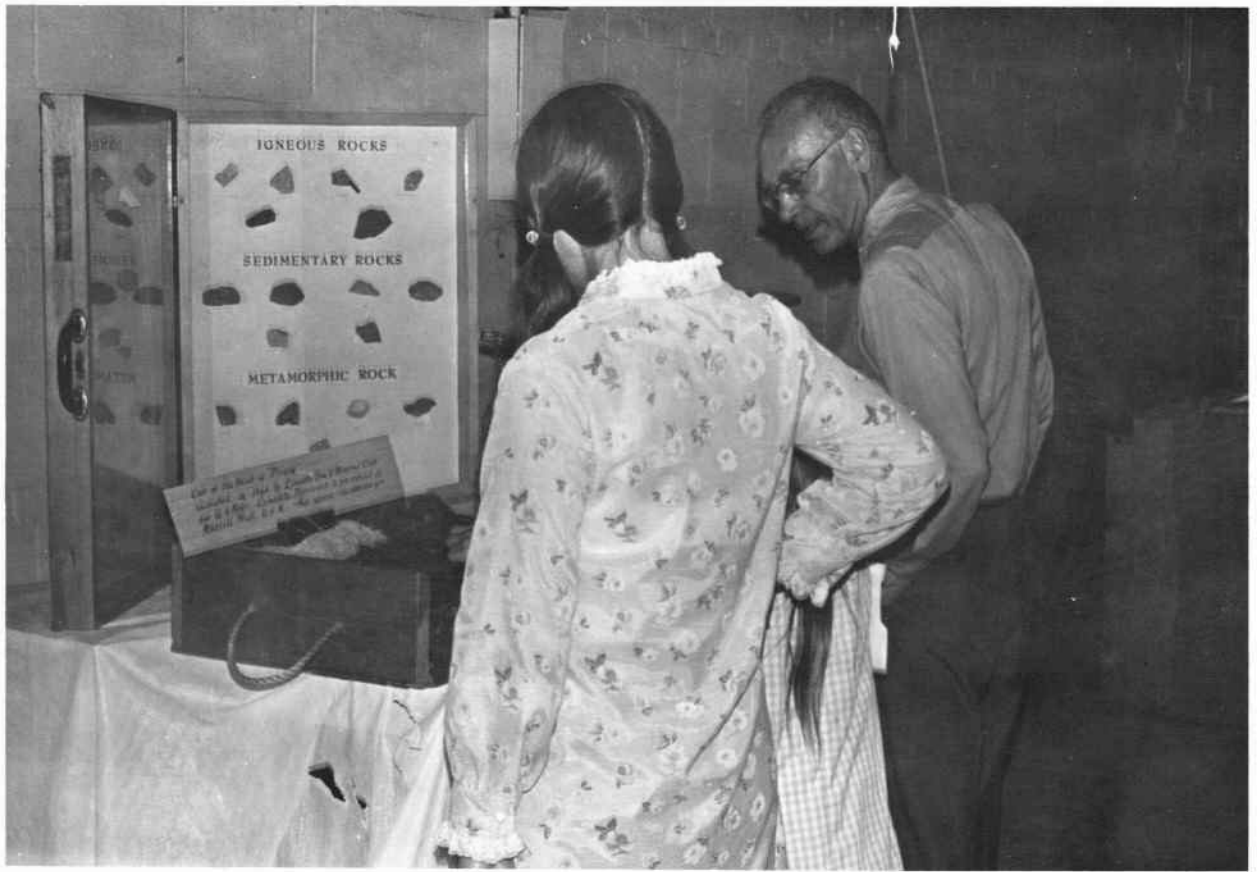


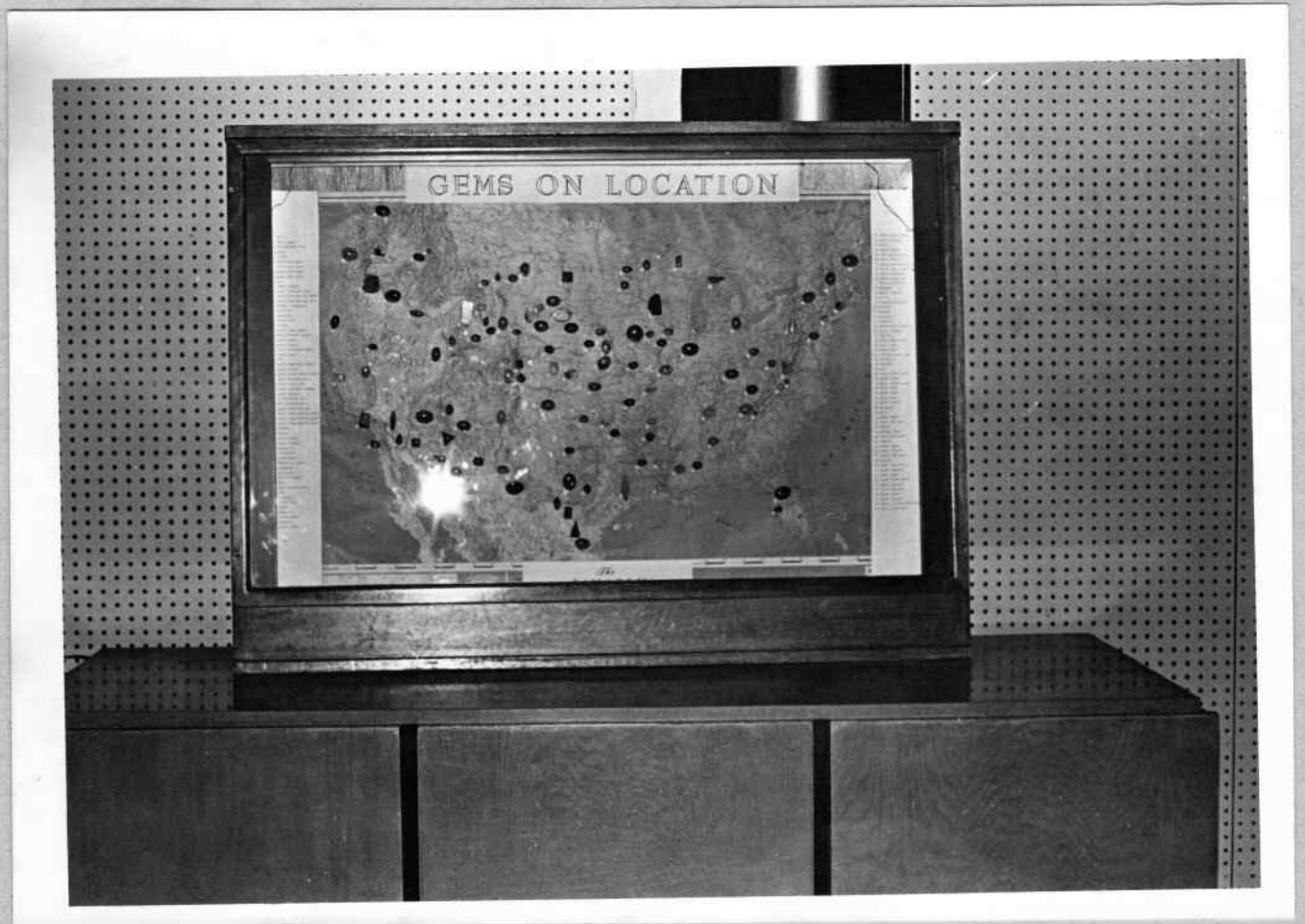
GATEWAY SHOPPING CENTER, HOBBIES MONTH, JULY, 1973  
Lincoln, Nebraska  
About 20,000 Attendance

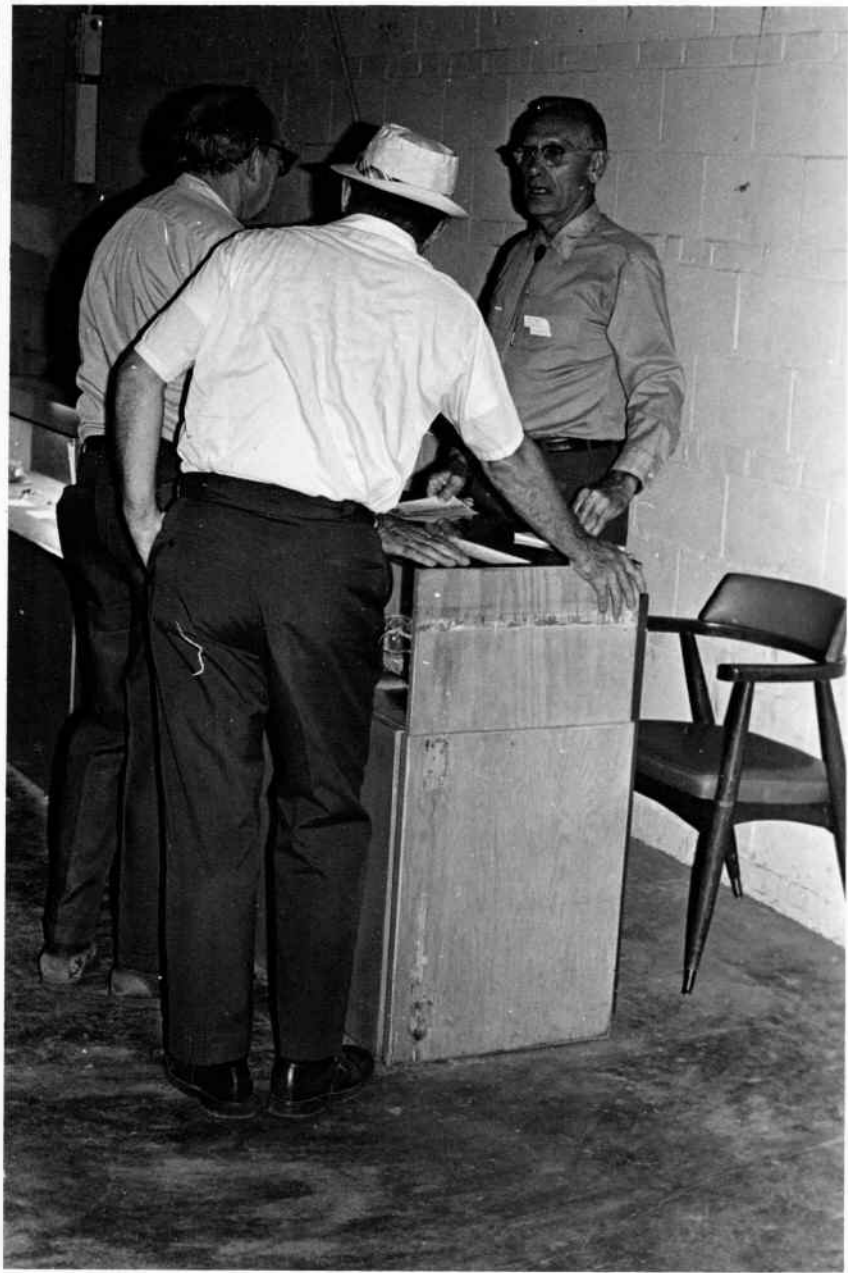




NEBRASKA STATE FAIR, AUGUST, SEPTEMBER, 1973  
Lincoln, Nebraska  
About 40,000 Attendance







#### SIOUXLAND TRAVELING TROPHY

On Saturday, October 28, 1973, the competitive club case entered by the Lincoln Gem and Mineral Club in the Siouxland Gem and Mineral Show in Sioux City, Iowa, won the Siouxland Traveling Trophy. Our club won the same trophy in 1972 making it two years in succession that the trophy has remained in Lincoln. The trophy is not idle. During the year we get to keep the trophy, those members who helped make up the club case take turns in displaying it at their various places of business or work. The display of this trophy has brought the club much good publicity and the reputation for having skilled and knowledgeable members.

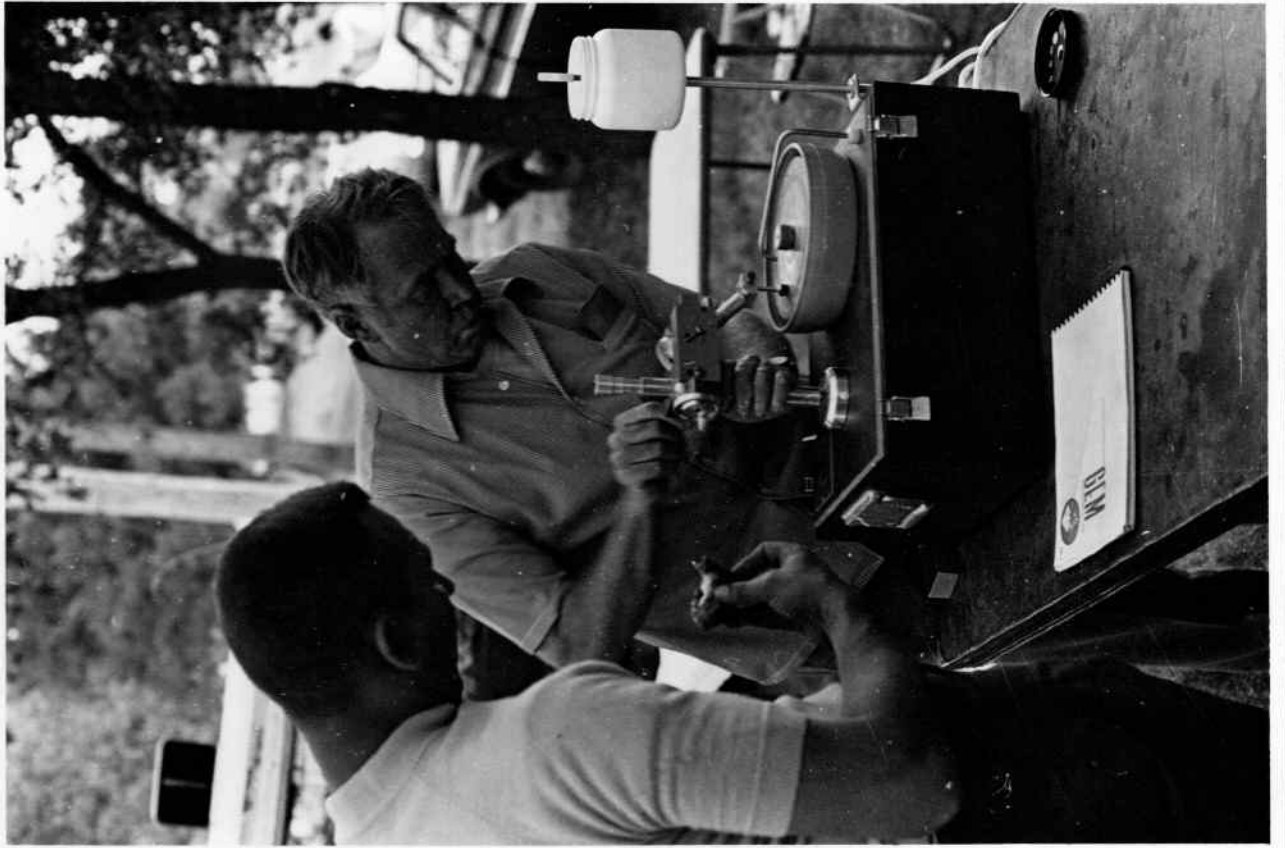
A photograph of our club's winning case (with the front removed to prevent glare) and a photograph of the trophy are enclosed.



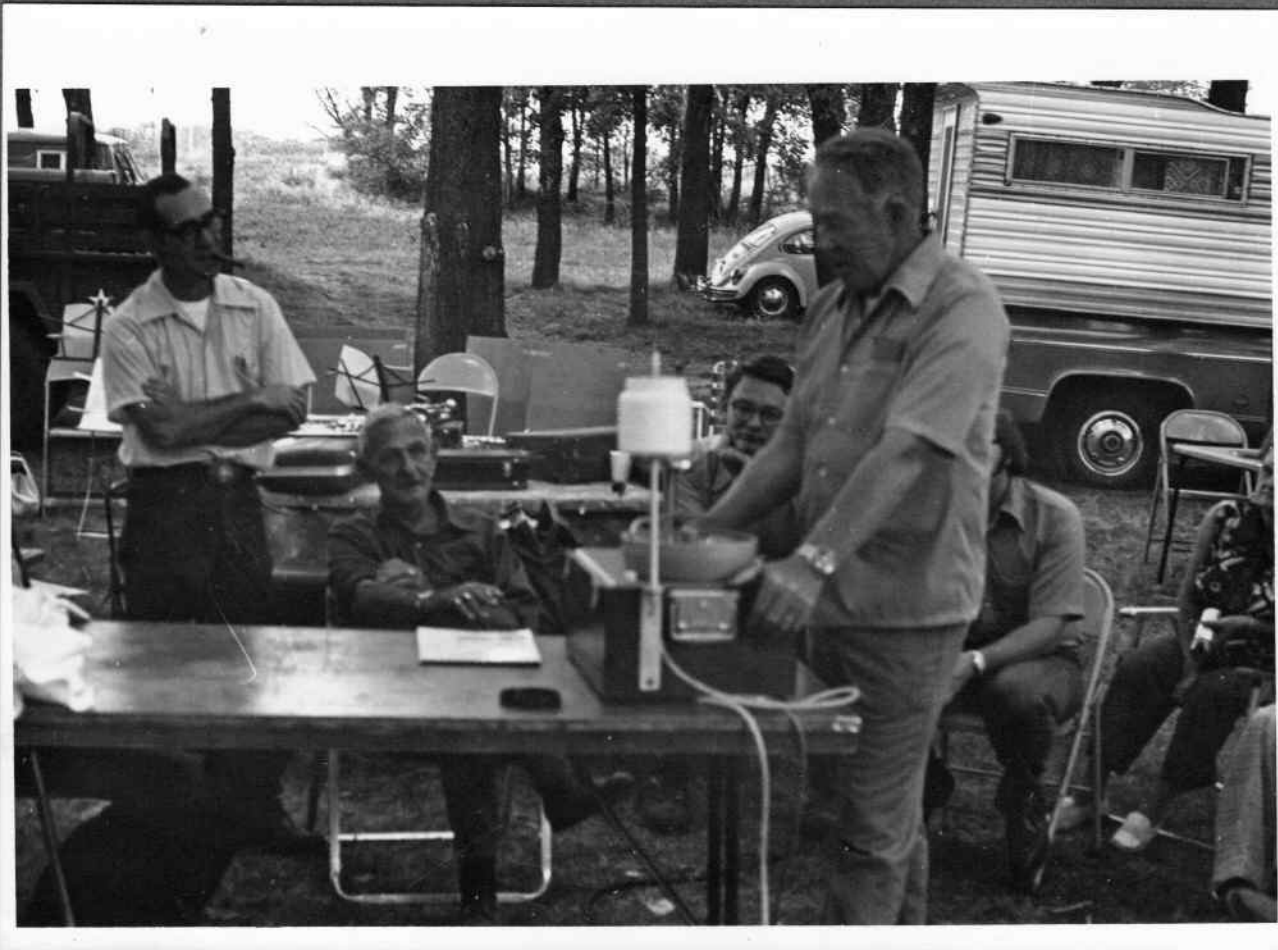
ANNUAL  
SWAP

#### ANNUAL SWAP

The Lincoln Gem and Mineral Club held its annual swap for 1973 in the first weekend of August. The swapping was as hot and sultry as the weather and over 150 swappers from as far away as Ohio and California attended, though most were from neighboring Nebraska and Iowa clubs. In addition to a great deal of swapping taking place, demonstrations in making gold, wire jewelry, by W.E. McNamar and operating a digital read out faceting Machine by Mr. Dixon of California were given. The entertainment was furnished by the Oliver Hotsie Totsie Polka Band.







OTHER

ACTIVITIES

#### OTHER ACTIVITIES

Some of the other activities in which members of the Lincoln Gem and Mineral Club participated include the Midwest Federation of Mineralogical Societies. Mr. Howard Taylor served as Nebraska State Director during 1973 and was elected to the office of Second Vice President. Ralph Ulrich served on the 1974 Convention Committee. Roger Pabian served as chairman of the Education Committee and assisted in judging merit award applications for 1972, to be awarded at the 1973 annual National Convention and Show. Though not a member of the AFMS URC Fossil Subcommittee, Roger Pabian offered suggestions to this committee as evidenced on page 8 of their 1973 Report, which is attached.

American Federation of Mineralogical Societies

FOSSIL SUB-COMMITTEE

February 1973



The FOSSIL SUB-COMMITTEE OF THE AFMS UNIFORM RULES COMMITTEE has been reactivated and charged with the task of reviewing the Uniform Rules for fossil competition and making recommendations for any desirable changes to the AFMS Uniform Rules Committee. The Sub-Committee is comprised of one representative from each regional federation plus a chairman:

EASTERN:	Mrs. Bessie Hall 2408 Bay Street Sarasota, Florida 33577	CALIFORNIA:	George W. Shokal 2125 Carmelita Drive San Carlos, Calif. 94070
ROCKY MT:	John Pate 50 So. 35th Street Boulder, Colorado 80303	NORTHWEST:	Robert B. Stallwood 1834 Marshall Richland, Washington 99352
MIDWEST:	Dr. Dwayne D. Stone Department of Geology Marietta College Marietta, Ohio 45750	SO. CENTRAL:	Mrs. G. M. Lindveit 1938 Chimney Rock Road Houston, Texas 77027
		CHAIRMAN:	Mrs. Betty J. Crawford 1119 Seminole Avenue Mansfield, Ohio 44906

This paper is being circulated to some of the interested fossil exhibitors and judges of whom we are aware. If you have any comments on this material, or new ideas or suggestions, please write to the representative from your federation (with copies to the others if you wish.) Exhibitors and judges often criticize the rules and have ideas about how they can be improved, but do not know how to go about accomplishing changes. Here is your chance to let your desires be known. If there is enough response to this paper we will circulate another with further discussions, but if there is insufficient response, the Sub-Committee will continue its work within its membership. No changes will be made unless it is generally agreed that they are desirable and workable. It is not practical to experiment with ideas and then rewrite the rules later if they don't work out. Regional federation, on the other hand, can write supplementary rules for their own use and experiment in any areas they wish.

It is not possible to include in this paper all the correspondence that has passed between the members of the sub-committee, but some of the ideas are being presented herewith. If we are going to be responsive to the needs of the exhibitors, we need feed-back from you!

South Central feels the rules are becoming more difficult for the amateur to understand, as the wording goes beyond their knowledge. It is also becoming more difficult to obtain judges for this division, and they say, "Let's not make things so difficult that the beginner is scared off before he even gets started."

Bill Bode summarized that exhibits are needed for Federation and National Shows. The present rules favor the knowledgeable collector, the silver pick collector, and the collector with professional help, also the collector free to travel for material. These same rules eliminate the majority of the amateur fossil collectors in the smaller clubs. To get them to display these areas have to be relaxed: Scientific Name, Duplication of Material, Quality and Rarity.

By the same token, he continues, with these areas relaxed we will receive many exhibits using fossils made into geometrical patterns, depictions of objects and scenes or exhibits with no scientific value, and do we want this?

It has been suggested that one way to pick up the strictly amateur collector is to create another exhibitor group -- Amateur (and Junior Amateur.) This has received both support and opposition. It doesn't seem a good choice of words, because almost all exhibitors are amateurs and not professionals.

Another suggestion was to relax the labeling requirements for the less advanced exhibitor groups, but this was rejected by the AFMS URC at Anaheim as not being workable.

John Pate explains that historically, (re. Uniform Rules) less was required from less advanced groups, and the AFMS trophy rules were different (and stricter) from the regional rules. So many complaints resulted, that the URC attempted to standardize one set of rules for competition from the novice to the AFMS competitor. The less experienced groups are given a handicap by the decreased points required for the ribbon qualification. Thus an exhibitor can progress with the same ease. As year after year, he/she improves the case, he climbs up. Before, there were two hiatuses when all labels and the concept of the exhibit had to be changed.

Your Chairman feels that judging fossils is a difficult job, and that probably most of the criticism of the rules is due to poor judging rather than inadequacy of the rules. We all agree that fossil judges just cannot be well enough informed in all areas to do a perfect job. Would there be any merit in requiring that when an exhibitor files his application for display space he indicate the exact nature of his display so that the judges can be prepared with adequate references? This should not be difficult for the exhibitor, as he usually knows ahead of time what he is going to display, and if he will indicate that we will have Miocene Fossils of Florida, or Gastropods from the Yorktown Formation, the judges can be informed by the Competitive Exhibits Chairman so they will have an opportunity to obtain necessary references. How many times have judges thought, "If only I had known this display would be here, I would have brought such and such a reference, but without it I cannot definitely say that the exhibitor is wrong." Any comments?

#### LABELING - COMMON NAME

This has been a problem for a long time as there is no complete reference. California would like to see this deleted, and South Central would have it optional. Rocky Mountain says that if there is a common name it is the means by which the non-collector can relate to the specimen. (A 30 million year old willow leaf !) If there is no common name, an anglicized version of

the phylum, class or other taxon is used. Thus, we already have a built-in redundancy, e.g. Phylum: BRYOZOA; Common Name: BRYOZOAN. They suggest the compilation of an AFMS List of Common Names, Phyla, Classes, Sub-Classes and Orders. A sample of such a proposed list appears elsewhere in this report. They suggest the label info include the Scientific Name, the Common Name from the AFMS List, the Age from the AFMS List, and Locality.

#### LABELING - SCIENTIFIC NAME

There has been discussion in the past about not requiring the specific name. Often a professional paleontologist will hesitate to classify down to species without intensive study, whereas we require that the specimen be fully identified. Cal George proposed his solution for this, but it seems to have become lost in my Anaheim files. Could you send another copy, Cal?

California suggests that Masters be required to use up-to-date information no more than ten years old. MWF and Rocky Mountain consider this unworkable, and following are John Pate's comments:

It is not unusual to find a specimen for which you may find two names in the literature, and you are not able to decide which is correct. As an example, two paleontologists collected material in quarry X, from which your specimen came. The two paleontologists were not aware of the other's work (unusual, but it does happen) and each published a journal paper describing and naming a new fossil. Your fossil Y fits both descriptions, which are practically identical. Both paleontologists have died in the twenty years since the papers were published. No work has appeared since on this formation or species, and the directors of the museums where the type specimens are located agreed that your specimen appears identical with each of the type specimens. What name do you use? Actually, you may use either. You may be interested enough that you will check references and select the name which has priority, as best as you can determine. You may ask a professional paleontologist which he prefers, or you may flip a coin! (Chairman's comment: It is my understanding that the first published name and description is the valid one.)

You may encounter a judge who is familiar with the other name! Usually, however, the judge will not deduct points for outdated or alternate labelling. He will usually mention the preferable name but not deduct points UNLESS the name you used was shown to be wrong or superseded in a definitive publication.

What is a definitive publication? Consider a second example. You have a specimen which was named X twenty years ago. Ten years ago, a journal article appeared and the author said the previous author was wrong, and the name should be Y. Since then, several articles have appeared in which either X or Y were used, with statements that one or other author was wrong. What do you do?

Actually, you follow the same course as before. A definitive publication has not appeared. If the professionals have not decided, you should not be expected to do so. In such a case, you should be alert. If a judge has penalized you for an incorrect name, being only aware of Y's article, you should appeal to the judging chairman, who will arrange a review of this point by the judge.

A definitive publication is usually a monograph or extended article reviewing the taxonomy of a broad group of organisms (family, tribe, etc.) The characteristics, naming, and classification of all species described in

that group are reviewed. On the basis of current knowledge, names and classifications are changed as necessary. These monographs are prepared by taxonomists who are specialists in the groups and who may or may not be paleontologists! Usually, a judge will deduct points for superseded names only if such a monograph has invalidated the name you used. CAUTION: For some groups in which research is quite active, new monographs may appear as little as three years apart. Examples of such monographs are: the Memoir series of the Geological Society of America; Professional Papers of the U.S. Geological Survey.

#### LABELING - PHYLUM

Rocky Mountain prefers to delete and use common names from an AFMS Fossil List. The purpose of the Phylum and Class was to show the diversity and types of life forms in the exhibit. The Fossil List does this and combines three label elements into one. Chairman's comment: Perhaps it does this for the exhibitor who uses the list, but for the viewer who does not have access to the list, it does not provide that information.

Since vertebrates all belong to the same phylum, it was suggested that order might be used on the label. ??

#### LABELING - LOCALITY

California would like to require the county and state, but several others have indicated they prefer the current practice of area and state. The exhibitor can then use the county, the name of a city or some other more specific locality, at his discretion.

California also suggests a uniform abbreviation list for states, etc., similar to the USPO list. Some opposition, as the Post Office list is hard to decipher, and sometimes the exhibitor would like to spell out the name of the state to help balance the label.

Your Chairman feels that we should not dictate to the exhibitor any of the following: (1) sequence of information for labels; (2) method of label making (i.e., printing, typing, hand lettering); (3) size of labels; (4) Centering of information; (5) that he must use standard abbreviations. The more the exhibitor is encouraged to use his ingenuity and artistic ability, the better chance of coming up with unusual, creative displays. (All the above restrictions have been proposed at one time or another.)

#### LABELING - DEDUCTIONS

South Central suggests 2 points for misinformation but only 1 point for incorrect spelling. Your Chairman contends that spelling errors are caused by negligence and there is less excuse for making them than for misidentification. Relaxing the penalty for misspelling would only tend to promote negligence rather than discourage it.

#### LABELING - GENERAL

Some people are concerned about the size of labels for micromounts and thumbnails and feel that there is too much information required for these labels.

QUALITY

Bode states that to him the beauty of a fossil is of least importance in a fossil exhibit. Pate's reply was that the beauty of a fossil is irrelevant in the science of paleontology. The Educational Division is the place for paleontological exhibits. Type specimens, rare and unclassified blobs, quantities of specimens of the same species, etc. -- all of these are kept in the working areas of museums. The impressive and showy specimens are earmarked for use in displays in public galleries to attract, educate and intrigue the non-paleontologist. Rules should concentrate on educational exhibits but also retain the present system of non-educational divisions as well. This attempts to show the non-fossil collector that fossils can be beautiful - and intrinsically interesting - as well as scientifically interesting !

RARITY

Some wish it dropped and the points assigned elsewhere. Generally, it seems that they agree there is value to retaining rarity. If it were dropped, we would probably see a trend toward showing the prettiest fossils and forgetting about the unusual ones, as there would be no advantage to showing the rarer, less showy specimens, thus depriving the public of seeing a wide variety of fossils.

VARIETY

South Central wants this deleted because it is too complicated and tends to confuse the amateur.

California says that Variety of Time Units kills fossil collecting as a hobby and forces purchasing of specimens to meet the current rules requirements. Just how can all time units be found in any one of the AFMS regions, particularly in CFMS? It's a different kind of hobby if specimens must be purchased to be able to exhibit. They suggest "Variety of Material shall refer to a reasonable variety of life forms, time units, etc., represented in the exhibit (subject to limitations of the exhibit.)"

Chairman's note: I originally thought Variety was going to create many problems, but it seems to be working out reasonably well. A general fossil display should show as many varieties of life forms and time units as possible, and those exhibitors who can demonstrate this in their displays deserve more credit than others no matter how they obtained their fossils -- from collecting, purchasing, trading, or however. A solution to the above problem would be to enter exhibits from one locality. The new Class F-11 will permit more specialized displays, and one might display just gastropods from a certain locality in California if he wishes and not lose variety points, but he would need to have a very complete representation of the gastropods from that locality, because all variety points would depend upon this.

Some suggest an order of preference: 1 - Life Forms; 2 - Time Units; 3 - Classes; 4 - Sub-Classes. Could we in some way assign more of the Variety points to the life forms, and less to the time units, when both are involved? That is, where both time units and life forms are represented in an exhibit, assign possibly 12 of the points to the life forms (beginning with phyla, then classes, then sub-classes) and 8 of the points to the time

units? In some displays, of course, all of the points would be assigned for one or the other, depending upon the nature of the exhibit.

#### REFERENCES

It has been suggested by many that the exhibitor supply the judges with a list of references used. This should not be too much to ask of the exhibitor, as he certainly had to get his identifications from somewhere. I would like to suggest that he furnish to the judges a list of references for the name of each specimen. This could be any publication, such as Index Fossils, The Treatise, monographs, Journal of Paleo. articles, or even the statement that the fossil was identified by Dr. John Doe of ABC University Geology Department. If a publication was used, it should contain the name of the author(s), year, title (and perhaps publisher, page number, plate and figure number(s)). This should help both the judge and the exhibitor, as the judge may be in a position to recommend better references or provide the exhibitor with beneficial comments. The references would not be placed in the case, nor would the exhibitor lose points for any errors in spelling, neatness, or anything else on the list (except that the judges might make comments and corrections if they choose, merely for the sake of helping the exhibitor.) Failure to provide such a list of references could be penalized by deducting 5 points from the final score.

#### DUPLICATION

I have received several questions recently about using a slab with a crinoid -- as a matter of fact, with two crinoids. One is an exceptionally nice specimen, the second one on the slab is the same species. The exhibitor does not want to destroy the second crinoid but has been charged with duplication by the judges for having two identical specimens. May I have some comments on this ???

#### MICROMOUNTS - FM

South Central is concerned that many fossils displayed are not actually micromounts, but tiny immature individuals.

The new Rules Book has two micromount classes: FM-1, Micromount Fossils, General Classes (equivalent to any one of the following classes: F-1, F-2, F-3, F-4, F-5 and F-9).....FM-2, Micromount Fossils, Restricted Classes (equivalent to any one of the following classes: F-6, F-7, F-8, F-10 & F-11) 50 specimens are to be shown, 30 for Juniors.

Rule 21.1 (c) states that "Evaluation of the exhibit shall be based upon the microscopic examination of at least ten (10) mounts. At a given show the same number from each exhibit shall be examined. The Rules Chairman or a person delegated by him shall designate which specimens are to be examined. The same sequence determined at random is to be used on all exhibits." This creates a problem the same as it did for minerals. Should not all the labels be checked for accuracy, etc.? Variety should be based on all the specimens, and so should Rarity. The following additions should be made to the FM Rules: "Micromount label scoring shall be based on the correctness of all labels." and "Rarity and Variety shall be scored by all labels and may be verified by microscopic inspection." You can all visualize

what would happen to the Rarity and Variety scores if the judging is based on only 10 specimens which have been selected by the Rules Chairman. Is it right to have the Rules Chairman select the ones to be judged? This would mean that by some method he has arrived at the fact that #3, #9, #17, #20, #29, #32, #34, #36, #40 and #49 from every FM exhibit will be microscopically examined. Is this the best procedure, or would it be best for the judges to determine, "We would like to examine one conodont, one foram, etc., and select the specimens from the cases?"

#### THUMBNAILS -FT

The new rules provide two thumbnail classes: FT-1, Thumbnail Fossils, General Classes and FT-2, Thumbnail Fossils, Restricted Classes, the same as micromounts.

#### TROPHIES

South Central suggested that two new trophies be added -- one for Thumbnail Fossils and one for Micromount Fossils. This was rejected at the URC meeting in Anaheim because there does not appear to be sufficient competition to merit this addition, which would actually mean 4 new trophies, because Junior trophies would have to be added, too. South Central is again requesting that these trophies be added to the AFMS list of Trophies because at the AFMS show in Anaheim thumbnail cases won both the regional and the AFMS trophies. Let me provide you with some statistics from Anaheim:

<u>REGIONAL COMPETITION</u>		<u>AFMS COMPETITION</u>	
Adults - F-1	Juniors - F-4	Adults - F-7 (from Regional)	
F-3	FT-1	FT-1 (from Regional)	
F-4		F-9 (Direct entry)	
F-5	(FT-1 won the	FT-1 (Direct entry)	TROPHY
F-7	Junior Trophy)	Juniors - FT-1 (from Regional)	TROPHY
F-8			
F-9			
F-9			
FT-1	TROPHY		

You can see that there was a good variety of classes, yet the thumbnails walked off with all the trophies. If they can hold their own and win over the other displays, more power to them! In minerals there is enough competition to warrant special trophies for micromounts and thumbnails, but not so with fossils. South Central thinks this would encourage more displays.

#### COMMENTS

Some professionals have said that ... "Fossils which are undescribed or are type specimens have no place in competitive exhibits. Type specimens do not belong to any individual, but belong to the world. The owners are the caretakers and should do everything in their power to safeguard these for future generations."

True, to a certain extent. However, there are fossils which are as yet unnamed or undescribed but that are really not so uncommon that the museums and professionals need them. What about the "blobs" from Pit 11?

To date, they are still undescribed, but they are the most common fossil at the locality. Many of the worms from there are not described, but is this a valid reason for not displaying them? It adds interest to a display to have such specimens.

A solution to part of the problem of type specimens might be this one suggested by Roger Pabian. Allow a cast or replica of a fossil providing it was the property of the exhibitor who has donated the original to a museum. The cast in the display would carry the information that the original was donated by the owner to SYZ Museum. Only the original owner would ever be allowed to exhibit the replica.

There has been some concern about the percentages in classes F-1 (vertebrates & invertebrates); and F-4 (vertebrates, invertebrates and plants.) Have any of you encountered problems here, and if so, do you have any solution?

A new Class F-11 has been added to the rules which will be available soon: F-11 Fossils, Specialized. The Exhibitor shall limit his exhibit to one category from each of the two (2) following groups:

(1) One Classification Unit (kingdom, or phylum, or class, or family, etc.)

AND

(2) One Locality, or One Time Unit, or One Rock Unit. (Examples: Mississippian Crinoids or Vertebrate Fossils from Calvert County, Maryland.

This should open the door for many more specialized displays that would formerly have lost points for variety of either life forms or time units.

Here is an additional suggestion for Variety: "Variety should not include the micro fossils from a faunal list. This can be corrected by the insertion of the word macro between major and lifeforms in Rule F2a2." Another suggestion that the phylum Protozoa could be dropped from a faunal assemblage in a display of macrofossils. However, it is possible to obtain some very large protozoans that add interest to an exhibit.

On the following pages is a sample of John Pate's proposed AFMS Fossil List. Another individual has suggested that the time range of the phyla be included in such a list. Your Chairman would like to make these comments. Regarding Part I, although the time in years may be of interest to the average viewer, I would think most fossil collectors and paleontologists would prefer the name of the period or epoch. It is easier to think of Devonian fossils as they relate to other Devonian fossils rather than 350,000,000 year old ones. I rather unconsciously fit them into a slot between Silurian and Mississippian and don't stop to think about the actual age in years. I favor sticking with the names of the periods and epochs.

Re. Part II, I do not think the exhibitor should be required to use STROPHOMENID BRACHIOPOD for the common name if he prefers to use BRACHIOPOD. This is doing exactly what many of the exhibitors are complaining about now-- forcing them to do more research and classify their fossils even further than currently is required. Wouldn't this defeat the purpose of the use of the common name -- that is to use terms that will help the average viewer relate to the fossil?

This list is promulgated by the AFMS URC as an aid to preparing fossil labels for fossil division exhibits under the Uniform Rules. It does not purport to be, and is not, a definitive scientific work. All interested individuals are urgently requested to submit proposed changes and additions to your regional rules chairman, so that the Fossil List may be continuously improved for better service to exhibitors.

The list consists of two parts. Part I consists of time intervals and corresponding ages in years for use on competitive Fossil Division labels. Part II consists of a classification table and corresponding Common Names for use on competitive Fossil Division labels.

PART I - TIME PERIODS AND ELAPSED TIMES

(Information based in part on USGS Bulletin 2000)

NOTE 1: For a specimen from a formation which is borderline between two time intervals, the age corresponding to the time may be shown. For example, a specimen from the Caloosahatchee Fm. is either Pliocene or Pleistocene (not yet determined). The age could be shown as 1 Million Years.

NOTE 2: If you can describe the time more exactly, you may estimate the age (elapsed time). For example, if you have a Cincinnati fossil (Upper Ordovician), you can use 440 Million Years. CAUTION: Older references to the age of particular formations may have to be adjusted to the time scale given here.

<u>TIME PERIOD OR EPOCH</u>	<u>DURATION</u>	<u>ELAPSED TIME FOR LABELS</u>
Precambrian (Not used in judging Variety)	600 to 3000 Million Yrs.	1 Billion Years
Cambrian	500 to 600 " "	550 Million Years
Ordovician	425 to 500 " "	465 " "
Silurian	405 to 425 " "	415 " "
Devonian	345 to 405 " "	375 " "
Mississippian	305 to 345 " "	325 " "
Pennsylvanian	280 to 305 " "	290 " "
Permian	230 to 280 " "	255 " "
Triassic	180 to 230 " "	205 " "
Jurassic	135 to 180 " "	160 " "
Cretaceous	63 to 136 " "	100 " "
Paleocene	58 to 63 " "	60 " "
Eocene	36 to 58 " "	47 " "
Oligocene	25 to 36 " "	30 " "
Miocene	13 to 25 " "	19 " "
Pliocene	1 to 13 " "	7 " "
Pleistocene	Recent to 1 " "	$\frac{1}{2}$ " "
Recent (Not used in judging Variety)	Present to 25,000 Years	15 Thousand Years

## Information based in part on:

Invertebrates: Blackwelder, Classification of the Animal Kingdom  
 Vertebrates: Romer, Vertebrate Paleontology, 3rd Edition  
 Plants: Bold, Morphology of Plants

NOTE 1: Use the Common Name shown for the smallest or most restricted classification listed under which your specimen falls. For example, if you have a specimen of Zaphrentis phrygia (Order: Rugosa), use Rugose Coral, as the Common Name. Do not use Hexacoral, Coral or Coelenterate. For example, if you have an Antipathid (Order: Antipatharia, Subclass: Ceriantipatharia), neither the subclass or order is shown on the list, under Class: Anthozoa. Use Coral as the Common Name.

NOTE 2: If the specimen is part of an animal or plant, the common name may be modified by adding the name of the part. For example: MAPLE TREE, Leaf; TRILOBITE, Pygidium; RAY, Tooth.

<u>PHYLUM</u>	<u>CLASS</u>	<u>SUBCLASS</u>	<u>ORDER</u>	<u>COMMON NAME</u>	
PROTOZOA	FLAGELLATA			PROTOZOAN	
		SARCODINA		PROTOZOAN	
	CILIATA		Foraminifera	PROTOZOAN	
			Radiolaria	FORAMINIFER	
				RADIOLARIAN	
				PROTOZOAN	
PORIFERA	CALCAREA			SPONGE	
	HYALOSPONGEA			CALCAREOUS SPONGE	
	DEMOSPONGEA			SILICEOUS SPONGE	
	RECEPTACULIDA			DEMOSPONGE	
				RECEPTACULID SPONGE	
CYATHOSPONGIA	MONOCYATHA			CYATHOSPONGID	
	ARCHAEOCYATHA			MONOCYATHID	
	ANTHOCYATHA			ARCHAEOCYATHID	
				ANTHOCYATHID	
GRAPTOZOA	GRAPTOLITHIDA			GRAPTOLITE	
				GRAPTOLITE	
			Dendroidea	DENDROID GRAPTOLITE	
			Graptoloidea	GRAPTOLID GRAPTOLITE	
			Tubeidea	TUBOID GRAPTOLITE	
			Camaroidea	CAMAROID GRAPTOLITE	
			Stolonoidea	STOLONOID GRAPTOLITE	
CONULATA			CONULARID		
COELENTERATA	PROTOMEDUSAE			COELENTERATE	
	DIPLEUROZOA			PROTOMEDUSAN	
	STROMATOPOROIDEA			DIPLEUROZOAN	
	HYDROZOA			STROMATOPOROID	
				HYDROZOAN	
			Hydroida	HYDROID	
	SCYPHOZOA			JELLYFISH	
	ANTHOZOA				CORAL
			ALCYONARIA		OCTOCORAL
			Gorgonacea		SEA FAN
		Pennatulatea		SEA PEN	

<u>PHYLUM</u>	<u>CLASS</u>	<u>SUBCLASS</u>	<u>ORDER</u>	<u>COMMON NAME</u>
		ZOANTHARIA		HEXACORAL
			Actinariaria	SEA ANEMONE
			Rugosa	RUGOSE CORAL
			Heterocorallia	HETEROCORAL
			Scleractinia	SCLERACTINIAN CORAL
			Tabulata	TABULATE CORAL
BRYOZOA				BRYOZOAN
	PHYLACTOLAEMATA			PHYLACTOLAEMATE BRYOZOAN
	GYMNOLAEMATA			GYMNOLAEMATE BRYOZOAN
			Trepostomata	TREPOSTOMATE BRYOZOAN
			Cryptostomata	CRYPTOSTOMATE BRYOZOAN
			Cyclostomata	CYCLOSTOMATE BRYOZOAN
			Ctenostomata	CTENOSTOMATE BRYOZOAN
			Cheilostomata	CHEILOSTOMATE BRYOZOAN
BRACHIOPODA				BRACHIOPOD
	INARTICULATE			INARTICULATE BRACHIOPOD
			Atremata	ATREIMATE BRACHIOPOD
			Neotremata	NEOTREIMATE BRACHIOPOD
	ARTICULATA			ARTICULATE BRACHIOPOD
			Palaeotremata	PALAEOTREIMATE BRACHIOPOD
			Orthida	ORTHID BRACHIOPOD
			Strophomenida	STROPHOMENID BRACHIOPOD
			Pentamerida	PENTAMERID BRACHIOPOD
			Rhynchonellida	RHYNCHONELLID BRACHIOPOD
			Speriferida	SPERIFERID BRACHIOPOD
			Terebratulida	TEREBRATULID BRACHIOPOD
			Triplésiida	TRIPLESID BRACHIOPOD
MOLLUSCA				MOLLUSK
	MONOPLACOPHORA			MONOPLACOPHORAN
	AMPHINEURA			CHITON
	APLACOPHORA			APLACOPHORAN
	GASTROPODA			SNAIL
		PROSOBRANCHIA		SEA SNAIL
			Archaeogastropoda	ARCHAEOGASTROPOD
			Mesogastropoda	MESOGASTROPOD
			Neogastropoda	NEOGASTROPOD
		OPISTHOBANCHIA		SEA SNAIL
			Pleurocoela	SEA SNAIL
			Pteropoda	PTEROPOD
		PULMONATA		SNAIL
			Basommatophora	FRESH WATER SNAIL
			Stylommatophora	LAND SNAIL

ETC., ETC.....

Now, how about using alternate classification systems and giving the exhibitor a choice -- Class Pelecypoda or Bivalvia; Class Crinoidea or Crinozoa ..... We all agree Matthews is not an adequate reference and that other more technical references should be allowed. If an AFMS Fossil List is the answer to this problem, let's hear from you, and let's finally publish such a list.

BJC

American Federation  
of  
Minerals



FROM: MEMBER OF  
AFMS FOSSIL SUB-COMMITTEE  
UNIFORM RULES

TO:

## 1974 CONVENTION AND SHOW

Probably the one activity that required more time and energy than any other was making continued preparations for the forthcoming 1974 Combined American and Midwest Federation Conventions and Shows. This has been the crux of club activity for the past several years. Preparations for an event of this scale require many man hours but the results are gratifying. We feel that during the year of 1973, no other event has done so much to build feelings of solidarity and goodwill among the many rock clubs in the midwest region. The support that clubs from Nebraska and all of the other states have provided is evidenced by the attached clippings from various exchange bulletins. Such support has made our show committee's work much easier to bear in light of the current fuel crisis. The success of 1973 is due in large part to our neighboring clubs who have furnished much time, energy, and encouragement.

During 1973, many of Lincoln Gem and Mineral Club's members attended the meetings and shows of most of the surrounding clubs. Our members took displays to the shows, and, sometimes, programs or lectures to the meetings. In every case, we received permission from the host clubs to tell of our plans for 1974. Such a spirit of cooperation that the other clubs have shown toward the Lincoln Gem and Mineral club has been most gratifying and we say with confidence that the support they have shown will help for Lincoln to host one of the finest National Shows to ever be held.

Many of our neighboring clubs have responded by offering to make favors, to furnish displays, to loan cases, and to assist in any other function of the show. Thus, making preparations for the 1974 National Convention and Show has been the most time consuming, but most rewarding, activity that has been pursued by the Lincoln Gem and Mineral Club.

A MAMMOTH EVENT

"THE PLACE TO GO IN '74"

# NATIONAL GEM & MINERAL SHOW

JUNE 13-14-15-16  
STATE FAIR GROUNDS  
LINCOLN, NEBRASKA



*Mid-America Gem Frolic*

"The Place to Go in '74"

**June 13-16, 1974**

**LINCOLN, NEBRASKA**

**Make Plans NOW to Attend!**

*Mid-America  
Gem Frolic*

"The Place To Go In '74"

**June 13-16, 1974**

**Nebraska State Fair Grounds  
Lincoln, Nebraska**

**NATIONAL GEM & MINERAL  
SHOW**

**HOST**

Lincoln Gem & Mineral Club


### The Moh's Hardness Scale

- |                         |             |
|-------------------------|-------------|
| 1. Talc                 | 6. Feldspar |
| 2. Gypsum               | 7. Quartz   |
| 3. Calcite (rhomb face) | 8. Topaz    |
| 4. Fluorite             | 9. Corundum |
| 5. Apatite              | 10. Diamond |

### Birthstones

January .....	Garnet
February .....	Amethyst
March .....	Aquamarine or Bloodstone
April .....	Diamond
May .....	Emerald
June .....	Pearl
July .....	Ruby
August .....	Sardonyx or Peridot
September .....	Sapphire
October .....	Opal
November .....	Topaz
December .....	Turquoise

### Distances From Lincoln



Texas—Fort Worth .....	614
California—Anaheim .....	1,545
Ohio—Mansfield .....	804
Florida—Orlando .....	1,441
Washington—Seattle .....	1,664
New York—Lake Placid .....	1,395
Arkansas—Little Rock .....	604
Colorado—Denver .....	488
Minnesota—St. Paul .....	395
Oklahoma—Tulsa .....	390
Illinois—Chicago .....	531
Missouri—St. Louis .....	465
Iowa—Des Moines .....	200
Kansas—Wichita .....	248
South Dakota—Rapid City .....	513
Wyoming—Rawlins .....	614

1974 AFMS-MWF NATIONAL SHOW & CONVENTION and NEBRASKA STATE SHOW  
June 13-16, 1974 - STATE FAIRGROUNDS, LINCOLN, NEBRASKA

PRELIMINARY GENERAL INFORMATION BULLETIN

The National Gem & Mineral Show for 1974 will be held in conjunction with the annual convention of the American Federation of Mineralogical Societies, The Midwest Federation of Mineralogical & Geological Societies and the Nebraska Association of Earth Science Clubs, Inc.

HOST CLUB - The Lincoln Gem & Mineral Club, with assistance from various member organizations of the Nebraska Association of Earth Science Clubs. (NAOESCI)

The NATIONAL GEM & MINERAL SHOW will be held in several buildings at the State Fairgrounds, 1500 N. 17th St., Lincoln, Nebraska.

OFFICIAL OPENING CEREMONIES of the Show will be held at 8:30 AM, Thurs., June 13, 1974. Show hours will be 9 AM to 9 PM each day except Sunday when the Show will close at 6 PM.

CONVENTIONS - The meetings of the American Federation and Midwest Federation of Mineralogical Societies will be held at the convention center - The Nebraska Center for Continuing Education, 1600 N. 33rd St. (33rd & Holdrege Sts.).

The meetings of the Nebraska State Association will be held in the Administration Building of the State Fairgrounds.

The meetings are scheduled as follows:

- Tuesday, June 11, 1974 - AFMS Uniform Rules Committee Meeting, Nebraska Center  
AFMS-MWF Cracker Barrel, Nebraska Center
- Wednesday, June 12, 1974 - AFMS Officers Meeting followed by AFMS Scholarship Meeting, Nebraska Center
- Thursday, June 13, 1974 - Judges and Clerks Meeting, Nebraska Center  
AFMS-MWF Junior Activities Leaders Meeting, Nebraska Center
- Friday, June 14, 1974 - AFMS-MWF Bulletin Editors Breakfast-Meeting, Nebraska Center  
State Directors Meeting, Nebraska Center  
MWF Executive Committee Meeting, Nebraska Center
- Saturday, June 15, 1974 - MWF Delegates Meeting, Nebraska Center  
AFMS-MWF Awards Banquet, Nebraska Center
- Sunday, June 16, 1974 - Past Presidents AFMS-MWF Breakfast, Nebraska Center  
NAOESCI (Nebraska Assn. of Earth Science Clubs, Inc.)  
Meeting, Fairgrounds

PRE-REGISTRATION. - Due to price changes and inflationary controls, the prices of the meals involved in the various functions cannot be established until after Jan. 1, 1974, therefore pre-registration applications will be available after that date. You may obtain these by writing Norma Miller, Registrations Director, 931 Cottonwood Dr., Lincoln, NE 68510.

ADMISSION to the fairgrounds, which includes acres and acres of free parking for show attendants, will be for advance registrants, \$4 for the four days. Admission fee at the gate will be \$2 per day for an adult or \$5 for the four days. Children under 12 will be admitted free when accompanied by an adult, otherwise they will be required to pay \$1 per day. Persons between the ages of 13 and 17 may be admitted for one-half the adult fee except no discount for advance registration is offered for young adults or for children. All exhibitors and judges will be exempt from admission charge.

SPECIAL EVENTS - Our Special Events Committee is planning "fun things" - details of which are not all confirmed but we can tell you there are rumors of Polka Bands, Square Dances, outdoor Bar-B-Que, and MORE!

EXHIBITS - Requests for competitive and non-competitive display space should be sent to Roger Pabian, Displays Director, Box 5342, Lincoln, NE 68505. If it is impractical for visiting exhibitors to furnish their own cases there will be some Wichita (approx. 25"x20"x7") unlighted and/or Northwest Federation type cases available provided on a first-come-first-served basis. IF POSSIBLE we would appreciate it if you can furnish your own case(s). Exhibitors will set up beginning at 9:00 AM, Wednesday, June 12, 1974.

LECTURES - A series of lectures and illustrated talks has been scheduled with noted authorities to speak on subjects of interest to rockhounds and the public.

DEMONSTRATIONS - Skilled craftsmen will be on hand to demonstrate the cutting, sanding and polishing of cabochons, slabs and gemstones. Others will instruct in the art of casting, faceting, carving and jewelry making, etc.

DEALERS from all areas in the nation will present the best of mineral specimens, cutting materials, findings and supplies. Manufacturers and wholesalers will be on hand to show the latest in all types of rock cutting equipment. Dealers will set up between 8 AM and 6 PM June 12.

FIELD TRIPS (guided) will not be offered in conjunction with the show and convention however information on collecting sites can be obtained at the show or by writing Lincoln Gem & Mineral Club, Box 5342, Lincoln, NE 68505.

HOUSING - A list of hotels and motels is included in the information packet. Make your reservation directly to the place of your choice. A limited number of rooms are available at the Convention Center. Please address your inquiry to Dept. of Conferences and Institutes, 1600 N. 33rd St., Lincoln, NE 68503. (Make your reservation direct here also.)

CAMPING facilities are available for 450 units on the Fairgrounds (190 with hookups). Make your camping reservations with the State Fair Board, Box 81223, State Fairgrounds, Lincoln, NE 68501. Interstate Camp-Away (I-80 Downtown Exit) is nearby at 2nd & Superior Sts. and good campsites are available. More camping info is included with the information packet upon request.

SWAP AREA will be arranged right in one of the same buildings with the show activities. Tables will be furnished by the host club.

SYMPOSIUMS are being arranged for faceters, micro-mounters, Junior Activities Leaders, and workshops on "how to put on a gem show".

PHOTOGRAPHERS will be allowed to enter show area at 8:00 AM Sunday, June 16 (one hour before show opens) to take pictures unhampered by the viewing public.

# Lincoln Gem and Mineral Club, Inc.

P. O. Box 5842

Lincoln, Nebraska 68505

## EXHIBITOR'S ADVISORY

To facilitate management of the 1974 National Gem and Mineral Show, each exhibitor is requested to comply with the following instructions and guidelines.

- BADGES/RIBBONS:** Exhibitors may obtain their badges or ribbons at the registration booth, or Lincoln Gem and Mineral Club information booth in his assigned building on the day of set up. Those exhibitors not getting their badges or ribbons on set up day may obtain them the following morning at the registration desk. Each exhibitor's badge or ribbon authorizes one free admission to the show.
- SET UP:** Each exhibitor is requested to have his display installed and in proper order at the opening of the show. Each exhibitor is to remove his exhibit immediately after the close of the show. Installation may be done on Wednesday, June 12, 1974, between the hours of 9:00 A.M. and 9:00 P.M., unless other arrangements are made with the displays committee.
- SHOW HOURS:** The show will open at <sup>9</sup>10:00 A.M. and close at 9:00 P.M. on Thursday, June 13, Friday, June 14, and Saturday, June 15, and will open at <sup>7</sup>10:00 A.M. and close at 6:00 P.M. on Sunday, June 16.
- REMOVAL OF DISPLAYS:** No exhibitor may dismantle or remove his display before 6:00 P.M., June 16, 1974, without the written consent of the displays chairman or his authorized representative.
- USE OF SPACE:** Exhibitors may not assign, sublet, or share in whole or in part the space allotted to them except with the knowledge and approval of the displays committee.
- RESTRICTIONS:** The Lincoln Gem and Mineral Club reserves the right to restrict any exhibit which for any obvious reason is objectionable, and also to prohibit any exhibit, which in the unanimous opinion of the displays committee, may hinder the general character and atmosphere of the show. This restriction includes persons, things, printed matter, political matter, socio-economic matter, sales material, or any other material which may detract from the general character and atmosphere of the show. Distribution of advertising matter in any part of the show is strictly forbidden without the written authorization of the show committee. In the event of such restriction or eviction, the Lincoln Gem and Mineral Club, its members, officers, or authorized agents will not be liable for any refund of exhibitor expenses.
- SECURITY AND LIABILITY:** Lincoln Gem and Mineral Club will furnish around the clock security in all buildings and will take all reasonable and expected precautions to protect the property and person of each exhibitor. However, it is mutually agreed that the Lincoln Gem and Mineral Club, its members, its officers, or its authorized agents shall not be liable to any exhibitor for any damage to or for the loss of or destruction of any exhibit in whole or in part. This includes the property of any exhibitor or injury to his person resulting from any cause. All claims for any such loss, damage, or injury is expressly waived by the exhibitor. Submission of this signed application for exhibitors space constitutes acceptance of all of the rules and regulations as outlined above
- SPECIAL SECURITY ARRANGEMENTS:** Those exhibits requiring special security arrangements or exhibitors wishing to hire private security officers should contact George Balke, Security Chairman, 1722 North 59th Street, Lincoln, Nebraska 68505.

# Lincoln Gem and Mineral Club, Inc.

P. O. Box 5342

APPLICATION FOR DISPLAY SPACE

Lincoln, Nebraska 68505

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

"The Place to Go in '74"



Please complete a separate application for each exhibit!

Name \_\_\_\_\_ Parent Club \_\_\_\_\_  
Address \_\_\_\_\_ Federation \_\_\_\_\_  
City, State \_\_\_\_\_ Zip Code \_\_\_\_\_

I agree to abide by the terms of the Exhibitor's Advisory on the reverse side of this sheet.

Exhibitor's signature \_\_\_\_\_

I will furnish my own case \_\_\_\_\_ in. wide, (including handles) \_\_\_\_\_ in. deep, and \_\_\_\_\_ in. high, and requiring \_\_\_\_\_ Watts elctetricity.

It will require:  table top space  floor space.

All exhibitors must furnish their own extension cords.

Exhibitors are urged to furnish their own cases. A limited number of Wichita cases (30x24x10x6 in.) and Northwest (24x24x48 in.) cases will be available on a first-come, first-served basis.

Check here if you need a case. You will be advised if none are available.

NON-COMPETITIVE EXHIBITOR:  Individual  Society

Type of exhibit \_\_\_\_\_  
(Mineral, Lapidary, Fossil, Working, Etc.)

COMPETITIVE EXHIBITOR: The 3rd Edition of the AFMS Regional and Local Uniform Rules will be used (Orange Book) plus the MWF Supplement Sheet. Rules books and Gem Lists will be furnished for cost (50¢ per set) upon request. Please check if you desire literature.  Rules book (40¢), Gem List (25¢), Both(50¢)

**IMPORTANT:** Persons requesting competitive exhibit space will be sent a standard REGISTRATION AND CERTIFICATION FORM which must be filled out and returned to the host club not later than May 25, 1974.

## REGIONAL FEDERATION COMPETITION

Master \_\_\_\_\_, Advanced \_\_\_\_\_, Novice \_\_\_\_\_, Junior \_\_\_\_\_, Society \_\_\_\_\_, Society \_\_\_\_\_, Junior \_\_\_\_\_.

Division \_\_\_\_\_, Class \_\_\_\_\_.

(Applicant is responsible for selecting his correct division and class!)

## AMERICAN FEDERATION TROPHY COMPETITION - Exhibitors must have earned their eligibility!

Adult \_\_\_\_\_, Junior \_\_\_\_\_, Society \_\_\_\_\_, Junior Society \_\_\_\_\_.

Division \_\_\_\_\_, Class \_\_\_\_\_.

COMPLETE THIS FORM AND MAIL NOT LATER THAN MAY 1, 1974, to:

Roger K. Pabian, Chairman,  
Displays Committee,  
1974 National Gem and Mineral Show  
Lincoln Gem and Mineral Club  
Box 5342  
Lincoln, Nebraska 68505



## HOTELS AND MOTELS - LINCOLN, NEBR.

Name and Address	Eating Facil	Max. Rm. Rate	Min. Rm. Rate	Approx. Dist. to Fairgrounds
ARMSTRONG'S MOTEL 12 Units 7303 West O St., 435-6685	Near	14.00	7.50	7 miles
BUFFALO MOTEL 44 Units 347 North 48th, 466-1931 Pool	Near	24.00	11.50	44 blocks
CARRIAGE HOUSE MOTEL 13 Units 4500 Cornhusker, 434-3127	Near	23.50	10.50	4 miles
CLAYTON HOUSE* 92 Rooms 10th & O Sts., 432-0333 Pool	Yes	26.50	13.50	24 blocks
CLOVERLEAF MOTEL 14 Units 1300 North 10th, 435-2191	Near	14.00	7.00	10 blocks
COLONIAL INN* 65 Units 5600 Cornhusker Hiway, 434-5971 Pool	Yes	20.00	10.50	3½ miles
CONGRESS INN 76 Rooms 2001 West O St., 477-4488 Pool	Yes	15.00	9.00	4½ miles
DELORES MOTEL 12 Units 3510 Cornhusker Hiway, 466-2324	Near	20.00	8.00	3 miles
FAIRVIEW MOTEL 14 Units 14th & Vornhusker Hiway, 432-8041	Near	9.50	7.50	10 blocks
GREAT PLAINS MOTEL* 38 Rooms 2732 O St., 432-3253	Near	25.00	12.00	25 blocks
HOLIDAY INN AIRPORT 108 Units 1101 Bond St., 475-4971 Pool	Yes	25.50	13.50	2¼ miles
HOLIDAY INN NORTHEAST 150 Units 5250 Cornhusker, 434-3171 Pool	Yes	21.50	12.00	5½ miles
HOLLY MOTEL 8 Units 5530 O St., 466-1267	Near	14.00	8.00	4½ miles
LAZY "K" MOTEL 12 Units 1802 West O St., 435-7504	Near	16.00	8.50	48 blocks
LINCOLN HILTON* 240 Units Pool 9th & P Sts., 475-4011 (opens 5-15-74)	Yes	27.00	16.00	20 blocks
MIDTOWN MOTEL 13 Units 2424 O St., 477-6941	Yes	15.00	7.00	22 blocks
NEBR. CENTER FOR CONTINUING EDUCATION 1600 N. 33rd, 434-5981 No TV	Yes	15.00	12.00	17 blocks
OAK PARK MOTEL* 22 Units 926 Oak St., 435-3258	Near	18.00	6.00	10 blocks
RAMADA INN* 140 Rooms 1-80 & Airport Ex., 475-5911 Pool	Yes	26.00	13.00	1½ miles
RADISSON CORNHUSKER* 250 rooms 301 South 13, 432-4471	Yes	24.00	14.00	23 blocks
SAM LAWRENCE HOTEL 60 Rooms 1042 P St., 432-4214	Near	16.00	3.50	20 blocks
SENATE INN* 53 Rooms 2201 West O St., 475-4921 Pool	Yes	20.00	11.00	57 blocks
SHADY LANE MOTEL 12 Units 2345 West O St., 477-1404	Kitcheonettes	10.00	5.00	42 blocks
SHARON MOTEL 14 Units 1717 Cornhusker, 435-9337	Near	14.00	7.00	15 blocks
SHERATON MOTOR INN 128 Units NW 12-Bond St. next to Airport 1-80 Exit	Yes	19.50	14.00	2 miles
SLEEPY HOLLOW MOTEL* 40 Rooms 4848 O St., 434-3166 Pool	Near	24.00	12.00	45 blocks
STARLITE MOTEL 23 Rooms 5200 Cornhusker, 466-1902	Near	14.00	9.00	5½ miles

(continued over)

## HOTELS AND MOTELS - LINCOLN, NEBR.

Name and Address	Eating Facil.	Max. Rm. Rate	Min. Rm. Rate	Approx. Dist. to Fairgrounds
TOWN & COUNTRY MOTEL 52 Units * 3245 Adams (33rd & Cornhusker) 466-2391	Near	24.00	9.00	32 blocks
TRAVELERS MOTEL 15 Units 4040 Cornhusker, 434-9885	Yes	12.00	6.00	4 miles
VILLAGER MOTEL * 200 Rooms 5300 O St., 434-9111	Pool Yes	26.50	14.50	52 blocks
WEST O MOTEL 15 Rooms 1402 West O St., 432-5127	Kitcheonettes	20.00	8.00	46 blocks

Maximum room rate shown is for 4 persons, 2 beds. Minimum room rate shown is for 1 person, 1 bed. Rates for suites and apartments are higher. All prices are subject to change. 3% sales tax is applicable on all room rates.

\* Indicates all color TV  
Information compiled 5-72

## CAMPING INFORMATION FOR 1974 NATIONAL SHOW

STATE FAIRGROUNDS CAMPING  
1500 N. 17th St., Box 81223  
Lincoln, NE 68508 ph (402) 432-5371

Can camp 450 units. 190 with hookups.  
Complete hookups \$3.50 per night. Lights  
and water only = \$2.50 per night. No ser-  
vices = \$2.00 per night.

INTERSTATE CAMP-A-WAY I-80 DOWNTOWN EXIT  
2nd & Superior Sts.  
Lincoln, NE 68521 ph (402) 435-9227

60 spaces - 5 with complete hookups at \$3.50  
per night. Rates are \$2.50 for 2 persons  
per night. \$3.00 for 3-6 persons per night  
Electricity 65¢ extra  
18 acres of ground to accomodate all with-  
out services.

## TRAILER PARKING ONLY

RAINBOW TRAILER PARK  
1801 Cornhusker Hwy  
Lincoln, NE 68521 ph (402) 435-3417

Hookups, trailer dumping station, showers,  
flush toilets

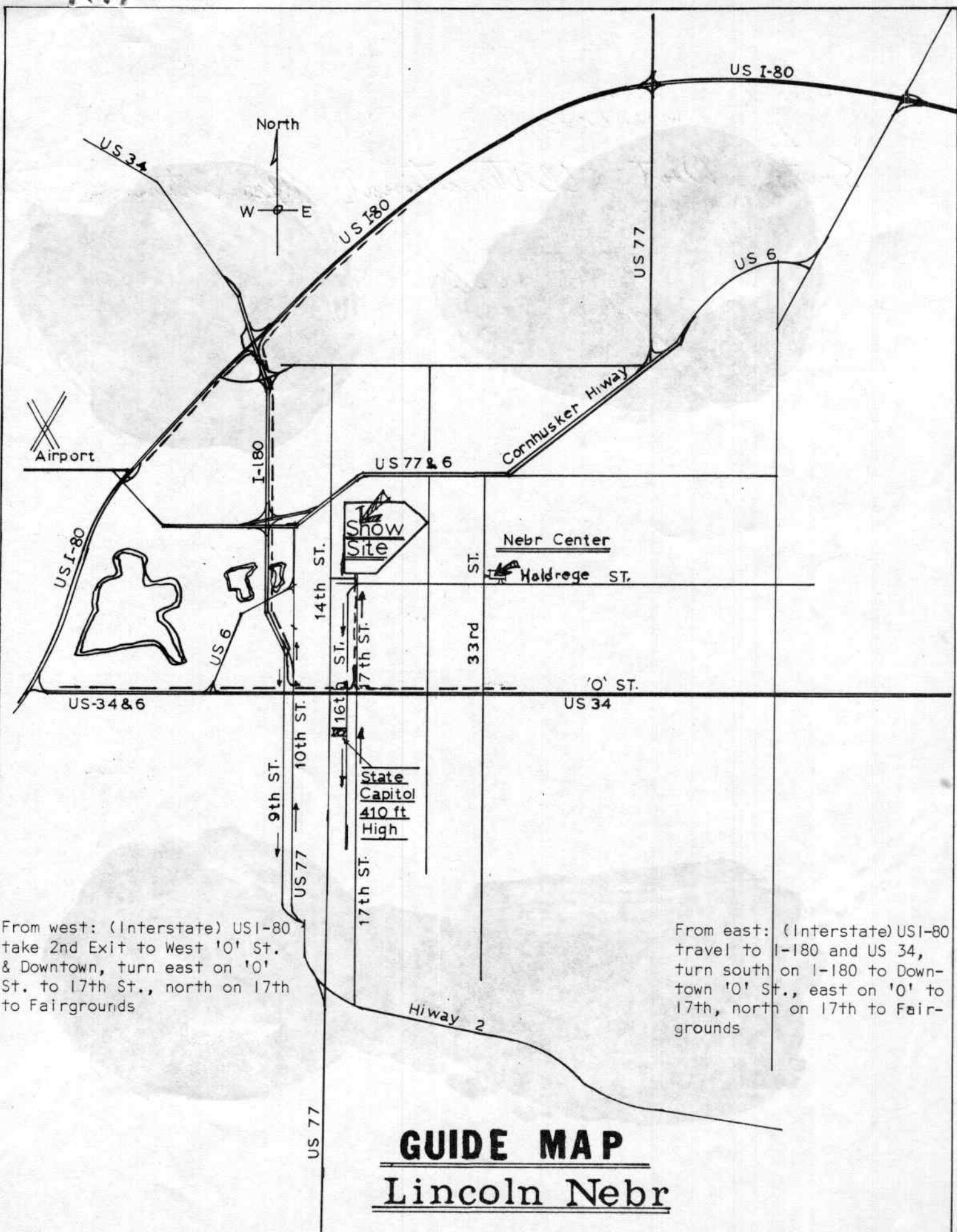
SKYVIEW TRAILER RANCH  
1030 N. 48th St.  
Lincoln, NE 68504 Ph (402) 466-7403

Hookups, showers, flush toilets

Please write or phone direct for further details on above areas.

PLEASE NOTE...No deposit is required on reservations for camping at  
the State Fairgrounds.

At Interstate Camp-A-Way a deposit of \$3.50 is required  
for full hook-up (only 5 available). Electric site  
required a \$2.00 deposit.



From west: (Interstate) USI-80 take 2nd Exit to West 'O' St. & Downtown, turn east on 'O' St. to 17th St., north on 17th to Fairgrounds

From east: (Interstate) USI-80 travel to I-180 and US 34, turn south on I-180 to Downtown 'O' St., east on 'O' to 17th, north on 17th to Fairgrounds

**GUIDE MAP**  
**Lincoln Nebr**

'74!

1974 NATIONAL GEM & MINERAL SHOW

Dear Manhattan Club Members:

As you know, the 1974 National Gem & Mineral show will be held in Lincoln, Nebraska, June 13-16, 1974. In a recent letter from Mr. Roger K. Pabian, Displays Committee Chmn., they are planning a state display area with displays from each of the 50 states.

Each display is to include the state flag, state geological map, a sample of the state gemstone, state rock, state mineral, and state fossil. If none of these have been designated, (as in Kansas), a rock, gemstone, mineral, and fossil that is typical of the state may be used. Each display would utilize a 2' x 2' x 4' enclosed case to be furnished by the host (Lincoln) club. In addition to the state geological materials, the display may also include drawings, photos, paintings, etc., of such things as the state bird, state flower, state animal, etc.

We need a club to volunteer to work up this display. In my travels to various club shows throughout the state, I do not recall seeing a display such as this. Would your club be willing to provide this display for the National Show in Lincoln? In Roger's letter, he says, "In case that club has no member who will be attending the show on opening day or will be able to set up the display before the show opens, we can make arrangements to set up the display for that club if the material is sent to us in advance. Each club furnishing such a display will receive a participation rosette."

Here is an opportunity for your club to receive national recognition for your efforts. Will you please talk about this at your next meeting, and let me know your decision. With the national show just 'next door' in 1974, we certainly want to have Kansas represented. If more than one club in the state wishes to do this, the first affirmative answer I receive will be the club to prepare this display. I will be anxious to hear from your club soon, and will pass the information on to Mr. Pabian.

Sincerely,

Mrs. Louellen Montgomery  
RMFAS Director- KansasREMEMBER THE GOOD OL' DAYS?

Dear Editor:

Seventy years ago folks boiled coffee and settled it with an egg. The only reds known were reds with a flannel and a boy didn't think he had to have a vehicle in which to pursue happiness.

People were more interested in the contentment of each other than they were in cows.

Ladies rode sidesaddles and when the preacher said a truth the people said, "Amen." A candidate had to be economy-minded to get elected to office.

Neighbors asked about your family and meant it. And when a man dressed for the evening, he put on his nightshirt. Folks used toothpicks and were still polite; and the neighbors got fresh liver at hog-killing time.

Two or three people could meet without passing the hat. In those days poison "Sodium floride" was not added to drinking water. Parents were only babysitters and men worked for an honest living instead of wishing for

A Reader

via Enid Gem &amp; Mineral Society

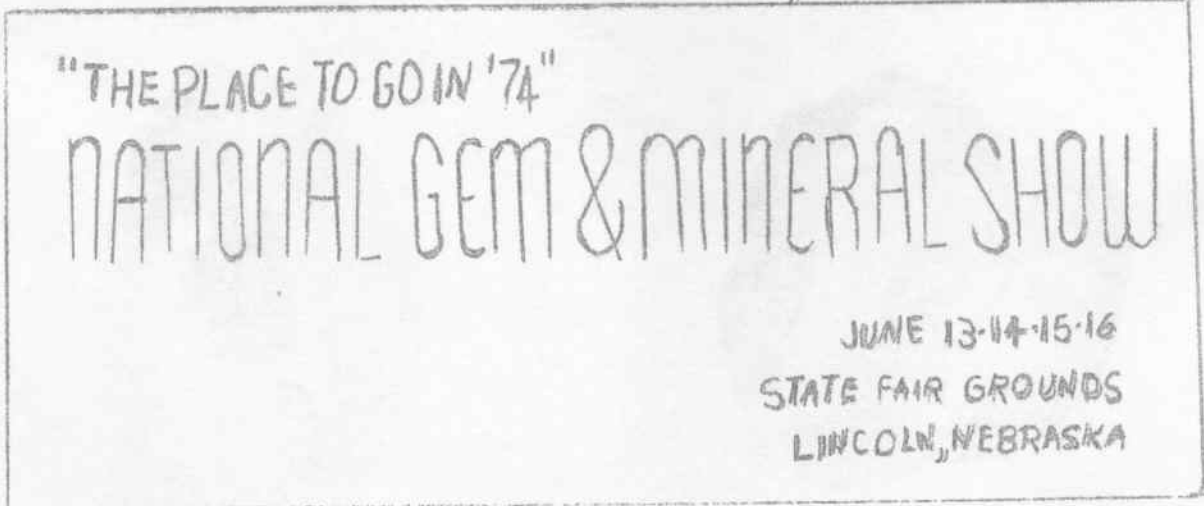
COMING EVENTS

Sept 22-23

Arbor Valley Gem and Mineral Club -annual  
show- Nebraska City, Nb. Memorial Bldg.

Sept 28-29-30

Platte Valley Rock and Mineral Society -  
STATE SHOW -North Platte, Nb. National  
Guard Armory



## Febr. Minutes

The Fort Kearney Rock Club held their regular meeting Febr. 5, 1973 at the Blue Flame Room.

The meeting was called to order by president Karl Friskopp.

Minutes were read and approved as read. The treasurers report was given and accepted.

Laverne Lange gave a committee report on the ideas for helping the Lincoln Club with the 1974 show. They recommended making 300 table favors and at least 2 center pieces. Have a field trip to get material for making the favors and have at least one meeting just for working on favors and the center pieces.

Wilma Henrichs made the motion to accept the committee's report. It was seconded by Arvene Miller. Motion Carried.

Betty Mae Friskopp explained the new system for checking out books from the Club library.

Velma Silver read a thank you card from Dorothy Rodehorst and family.

Wilma Henrichs read a letter from the rock club at Oklahoma City, Okla. who will host the Rocky Mountain Federation Show, June 15th thru 17th, 1973.

She also would like for each member of the Kearney Club to write an article on "How, Why and When they became Rockhounds". She would like to have them in within the next two or three months.

We had three guests, Mr. and Mrs. Paul Shavlain and Aldin Alquist of Axtell. Mr Alquist joined the club.

As there was no other business, Beulah Jennings made the motion that the meeting adjourn. Seconded by Arvene Miller.

Archie Kring Jr. gave a demonstration on making cabochons.

Lunch was served by the murrish's and the Henrichs.

Verta Miller. Sec.

## March Minutes

The Fort Kearney Rock Club held their regular meeting March 5, 1973 at the Blue Flame Room.

The meeting was called to order by vice-president, Margaret Hohnholt. Minutes were read and approved. The treasurers report was given and accepted. An open letter on the city library written by Mr. Norman was read.

A letter from the Earth Science Club of Chadron on their first Annual rock show was read. The show dates are April 28th and 29th at the Kline Campers Center. We were invited to bring displays if we wish to do so.

A letter from the Lincoln Club was read by Wilma Henrichs on center pieces and favors for their 1974 show.

A letter from the Ogallala Club inviting us to their open house show on March 31 and April 1st at the Holiday Inn in Ogallala.

As there was no other business the meeting adjourned.

The program was rock bingo.

Lunch was served by the Krings and the Jennings.

Verta Miller Sec.

Next regular meeting April 2, 1973. Everyone be there.



# Lincoln Gem and Mineral Club, Inc.

P. O. Box 5342

Lincoln, Nebraska 68505

*H O S T T O*

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

"The Place to Go in '74"

*Members of*



June-

Please note that although the two letters here are dated in 1974, the Lincoln Gem and Mineral Club membership voted the bequest to the Neihardt Center in calendar 1973. Shortly after Dr. Neihardt's Death, another Neihardt-named organization came to light. We wanted to be sure our bequest was going to the right organization and delayed mailing it until we were sure.



Roger

*and  
Community  
Arts Council  
of Lincoln*

Irl Everett of the Lincoln Mineral & Gem Club will be at our March meeting to let us know what they are doing in forming the National Show for 1974 and what other clubs can do to help.

*Rear Trunk - Febr. '73*

Irl Everett to speak at next meeting.

As most of you are well aware - Lincoln Nebr. is hosting the National Gem and Mineral show in June of 1974.

Two members of our club attended a meeting in Kearney called by the steering committee.

And now at our next regular meeting, Feb. 19th, we will have Irl Everett show Director and a member of the steering committee here to speak to us and perhaps answer a few questions.

Lots have a good turn out. *From The ROCK-ETTER - Febr. '73 North Platte*

*Hastings*

#### 1974 NATIONAL SHOW

*Central Neb. Rock + Min. Soc.*

A meeting to discuss the 1974 National Rock Show to be held in Lincoln, Nebraska, was held at the Nebraska Savings & Loan Building in Ogallala, May 5th.

Leonard and Pat Hill, our Club Members, attended.

Leonard Hill is President of NAOESCI, our State Club and called a meeting for Members at this Ogallala Meeting.

Door prizes were won by Jan Ferringer and Dorothy McDowell.

*From Rear Trunk - Omaha*

*74 Show*  
Irl Everett from Lincoln Gem & Mineral Club reported on the mechanics of having the 1974 National Gem & Mineral Show in Lincoln June 13-16. He described the magnitude of the entire endeavor. There will be one mile of dealers in four buildings. Fifty retail dealers, and thirty wholesale dealers. The Lincoln Club is asking other Nebraska Clubs to provide some of the materials needed for the show:

- Favors
- Center Pieces
- Advertising in Newspapers
- Provide own club cases and Banners

#### THE PLACE TO GO IN 1974

Pre-Registration June 13-14-15-16 at the State Fair Grounds in Lincoln, Nebraska.

Due to price changes and inflationary controls, the prices of the meals involved in the various functions cannot be established until after January 1, 1974. Therefore pre-registration applications will be available after that date. You may obtain these by writing Norma Miller, Registrations Director, 931 Cottonwood Drive, Lincoln, Nebraska 68510.

*Cedar Valley Inn - Cedar Rapids, Iowa*

*Rockette Valley  
Plateau Valley  
Rock + Min. Soc.*

A 1974 show was discussed. Ruby Price moved we forgo a show next year and concentrate our efforts to helping the Lincoln Club

with the National Show. Seconded by Ralph Hart; motion carried.

FAVORS FOR 1974 NAT'L SHOW

Our club has decided to furnish some favors for use by the Lincoln Gem & Mineral Club at dinners during their National Gem & Mineral Show in 1974.

Dorothy & Art Henry and Margaret Frankl were appointed as a committee to decide on the number and kind of favors. The committee decided to supply 150 favors. The favors are to be small mushrooms carved from Nebraska horn coral. These will be glued on cards which will be furnished by the Lincoln Club.

It is suggested that all members who can, make one or two mushrooms and give to a committee member. The carvings can be made in one or two pieces. Or a cluster of two or three small ones may be used as long as they are small. If made in two pieces, the stem can be coral or crinoid stem. Be sure and glue good with epoxy.

If you need coral, ask a committee member.

Suggested size and shapes:



Use your imagination but keep them small.

If everyone makes one or two, we will all have a small part in helping make the National Show a success and will advertise our good State of Nebraska.

Art Henry

LINCOLN SHOW TO BE HELD

The Lincoln Gem and Mineral Club is holding their 15th annual show May 12 and 13 at the state fair grounds. Competition is an important part of the show, since the Lincoln club is preparing to hold the National show in 1974.

Details of the exhibits, classifications and judging were handed out by Roger Pabian, who judged the Vermillion Show. This is an excellent opportunity for Siouland members to try out their own exhibits before our own October show, and for new hobbyists to get their 'feet wet' in the Novice classification.

The national show will be at Lincoln June 13-16, 1974. Why not get a calendar and mark it now?

*via Monthly Friend*

*The Pioneer - Beatrice*

1.

OCTOBER MINUTES

Meeting was called to order by Pres. Richard Becks. There were 11 members and one guest, Ralph Ulrich, present. The secretary report stands as written in the bulletin. The treasurer report was read with a balance of \$251.58.

Mrs. Ellsworth, who was a delegate to North Platte, reported the Homestead Gem & Mineral Club can host the state swap in 1974, if we set our dates two weeks ahead or after the National Show in June. It was decided to move our swap dates to June 29 & 30, 1974.

Mr. Taylor of Lincoln wants our club to cooperate in buying white hats at \$1.00 each, to wear at the show in June, 1974. This was tabled till the November meeting.

Everyone is to bring rock specimens to put on the cards for the Lincoln Club at the next meeting. This will include small chalcedony roses, sliced horn coral, Nebraska petrified wood, jasper, or agate. Esta Lee Tegtmeier said she would bring some glue.

Richard Becks said he got a card from Mr. & Mrs. Everett Dunn. Everett Dunn had been in the hospital.

Lincoln Gem & Mineral Club, Inc., wants our club to display in the National Gem & Mineral Show, June 13-16, 1974. Applications must be filled out and given to the secretary, to be sent in, at the next meeting.

The door prize, a Brazilian agate, was won by Ralph Ulrich, Lincoln. Ralph Ulrich gave a talk on displays.

Mary Maxson  
Secretary

QUOTES FROM 1974 SHOW DIRECTOR IRL EVERETT:

"...Who can display? Anyone who is a member of a Gem & Mineral Club. Everyone can display in the non-competitive section. Those who want to compete for trophies and ribbons can get full details from Roger Fabian, Director of Displays, Box 5342, Lincoln, NE 68505..... CASES: We ask all who can to furnish their own case...those who are unable to bring a case, we will have to furnish one...but we want to hold this to a minimum...the case thing will be..greater..than we have ever (had). ....a few lines on the dealers...we havethought of all phases of the hobby...the dealers ..will be of a caliber above average and will cover all the needs...the dealers will plan to go all out on this show. So expect to see the best and newest things in the hobby....."

\*\*\*\*\*  
DON'T FORGET: HOMESTEAD G & M CLUB ELECTIONS IN NOVEMBER!!!!



# THE LITTLE GEM

## THE PRAIRIE ROCKHOUNDS NEWSLETTER

Ogallala, Nebraska

April 1973

Over six hundred people viewed the Gem & Mineral exhibit hosted by the Prairie Rockhounds at the Holiday Inn March 31st and April 1st in Ogallala. All displays were by the Prairie Rockhounds with the exceptions of a case of carved eggs exhibited by Mrs Salma Hammond of Bushnell and the State Association case. This show also gave members their first view of how the new cases looked on the new tables & with the orange drapes around them.

We received many compliments on the show ranging from "very nice" to "fantastic". One compliment we value highly came from Roger Fabian, President of the Lincoln Gem & Mineral club, who called our show "very Professional". The Kenfields pictures made of petrified wood proved to be a major attraction & they received lots of praise.

The demonstrations of silversmithing, by George Steudler, and rock sawing, by Matt Beckius were very popular with lots of Questions asked.

A dinner was held Sat. nite, March 31st, at the Holiday Inn with 30 members & guests present. Speaker of the evening was Roger Fabian who discussed and answered questions regarding their big show at Lincoln in "72". The object of the show was to help create interest in the rock hobby and to show the many beautiful things that can be made from them. We feel this was accomplished.

by Bob & Maxine Young

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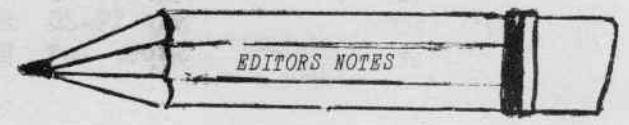
### NEWS OF MEMBERS

The Watsons traveled to Denver to view the Ice Capades and returned in time to view the paintings and show at the High School Auditorium.

The rainy weather may keep George Steudler out of the field, but not away from the grindstone. George & Edith have worked up some very nice cabs from Arizona & Nebraska petrified wood. George finished them off with his hand crafted silver mountings.

The Beckius', Steudlers and Kenfields were the members attending the Central Nebraska Mineral & Gem show at Hastings this month.

A talk with Tom Reeves this month reveals Tom has been working up some material.. We viewed some of his jewelry recently completed.



This past month we made some jewelry & assembled another picture. Done lots of sawing, of course there is lots of sawing required in our stone pictures. After about 20 hours of sawing the saw needs cleaned, thats an unpleasant job, as the oil is like tar. Its well worth it after a picture is completed.

We exhibited a few of our pictures at the Evening with the Arts show this month. This is an annual affair sponsored by the Professional Womens Club of Ogallala. Many outstanding pieces of art were on display. Have been invited to exhibit in Chappell in June.

May 12 & 13 will find us exhibiting in Lincoln. Hope to see and visit many of our rockhound friends there. Looking forward to that weekend.

NEIHARDT CENTER

On November 4, 1973, John G. Neihardt, Poet Laureate of Nebraska, and an Honorary Member of the Lincoln Gem and Mineral Club passed away. Dr. Neihardt was an enthusiastic rockhound and lapidary and his work was frequently displayed at the annual shows sponsored by the Lincoln Gem and Mineral Club. In Memory of Dr. Neihardt, the club donated \$100.00 to the Neihardt Center of Bancroft, Nebraska.

February 22, 1974

Carroll Thompson, Publicity Manager,  
Neihardt Center  
5555 "O" Street  
Lincoln, Nebraska 68510

Dear Mr. Thompson:

Please accept on behalf of myself and the Lincoln Gem and Mineral Club the enclosed contribution of \$100.00 toward the Neihardt Center. Our many members enjoyed Dr. Neihardt's continued interest in our club and his intense interest in the lapidary hobby.

As displays director of the 1974 National Gem and Mineral Show, it is my honor to invite the Neihardt Center to participate in this event by offering both table and floor space in the amount of 8 linear feet in order that it may be used to publicize your efforts in realizing the completion of the Neihardt Center.

With best regards.

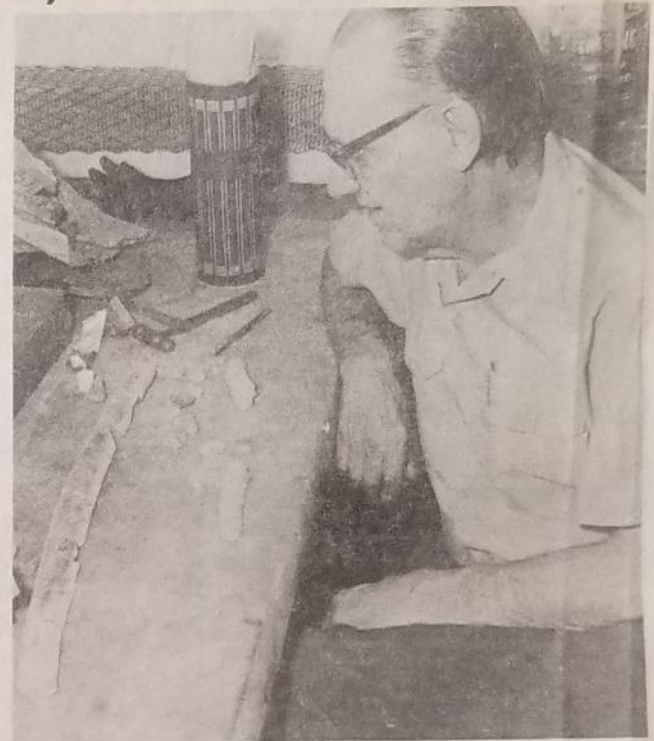
Yours truly,

Roger K. Pabian, Director,  
Displays Committee,  
1974 National Gem and Mineral Show,  
and Past President, 1973,  
Lincoln Gem and Mineral Club

#### MUSEUM VOLUNTEERS

A number of members of Lincoln Gem and Mineral Club spend their Friday evenings volunteering their services to the vertebrate paleontological laboratories of the University of Nebraska State Museum. The club members learn the skill of properly preparing specimens as well as many techniques in fossil identification of late Tertiary vertebrates. The museum gains by having large numbers of fossils prepared and ready to be researched by staff members. The large amount of fossils that can be prepared by the museum volunteers makes computer studies of large populations of fossil vertebrates a reality at Nebraska.

# Rock Hounds Spend Friday Nights Far, Far In The Past



VOLUNTEERS . . . Marjorie Heedick cleaning an oreodont skull, Laurence Van Cleave reaching for a tool and Norm Engelhart studying the task.

By LIANE WETTERER  
Star Staff Writer

The instructions say: "Enter at west door of Nebraska Hall, take elevator to fourth floor. Go through red doors, pull string to ring bell for entrance."

From there the observer takes a long step into the past — make that the deep, dark past of more than 35 million years ago.

A little way down the hall, about nine "rock hounds" while away their Friday nights helping with fossil preparation for the State Museum.

A middle-aged woman with just a fleck of gray hair sits leaning over a pile of tiny bones on the table in front of her.

She examines the fragments one by one, trying to decide how the minuscule pieces fit together.

"It's kind of like a weird jigsaw puzzle," she said. "You never know what you're going to come up with."

The woman, Mrs. Marjorie Heedick, was piecing together the jawbone of an oreodont, a prehistoric relative of the pig, who roamed the Badlands region near Crawford about 35 million years ago.



So far, Mrs. Heedick has put in about 12 hours scraping, cleaning and shellacking the fragile oreodont bones. Eventually the finished project will wind up in either a research collection or as part of the museum proper.

According to Mrs. Dorothy Engelhart, the museum volunteers' unofficial leader, the group got its start in 1964 with the "plesiosaur project."

She said about 45 members of the Lincoln Gem and Mineral Club helped uncover, transport, clean and mount the 120-million-year-old sea serpent, discovered on the Adolph Rezae farm near Valparaiso.

The reptile is now on display from 7:30 to 10 p.m. between the months of September and May.

"We rock hounds like to go hunting ourselves during the summer months," she said. "We all have private mineral and rock collections."

Mrs. Engelhart was studying micro fauna from a concentrate brought back from fossil beds in Montana.

The small animals or groups of animals lived during the late cretaceous period, about 70 million years ago, she said.

She uses tweezers and a giant magnifying glass to sort out bits and pieces of bones and scales from the dirt and gravel concentrate.

After the fragments are sorted and put in bottles, scientists can tell what kind of tiny animals in room 104 of the State Museum, she said.

A member of the Assistant Paleontology Committee, Midwest Federation, Mrs. Engelhart said she would like to see volunteers such as the museum group, recognized as amateur scientists.

"Museum officials almost consider some of us professionals, anyway," she said.

Mrs. Engelhart said the museum volunteers meet weekly

behind the region during that period — probably rats, mice and lizards, she said.

Other volunteers use dental tools, knives or "just about anything that does the job" to restore prehistoric relatives of

horses, camels, sheep and pigs. said.

Fossils usually arrive from the field laboratories wrapped in old newspapers, brown paper bags, plaster casts or sometimes even tissue paper, Mrs. Engelhart

Because of the tremendous backlog of projects, shortage of help and the time-consuming process of preparation, she said, the museum is sometimes years

behind in its work.



Reaching into a pile of neatly tied bundles, she pulled out a plain brown sack. After carefully unwrapping it, she uncovered a wad of yellow bathroom tissue.

Inside that was a tiny fragment of jawbone with three teeth.

"Ah, it's a ramus of an enee-tivore — a jawbone with teeth," she said. "It's like Christmas, isn't it? You just never know."

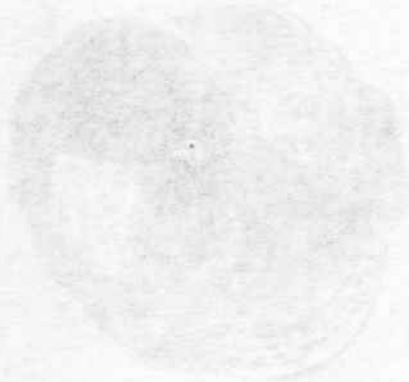



They pull string  
and step into  
far distant past.  
See Page 27



### HOBBY MONTH

The Lincoln Sun Papers recently sponsored a hobby supplement. One of our members, Mrs. Bobbi Allen wrote an article about Lincoln Gem and Mineral Club activities which was published in the Sun, an excellent paper devoted to local news.



# Gem, Mineral Club: A School Girl's Report Started It All

By **BOBBIE ALLEN**

A school girl's report on rocks which required research at the state museum was the

first step toward bringing some 40,000 hobbyists to Lincoln next summer.

The girl's father was so

impressed with what he saw in the geological displays at the museum that he began trying to find others interested in rocks. He finally went to the library, found a book on the subject, and began calling those people listed on the check out sheet at the back of the book.

## Idea That Grew

That select group was the nucleus of the Lincoln Gem and Mineral Club, founded in 1955. Members now number over 160, not including junior members, of which there are many, for this hobby is perfectly suited to family interests.

Commonly called rock-hounds, some of the club members may more specifically be lovers of the out-of-doors, campers, specimen collectors, gem cutters, faceters, jewelers, mineralogists, geologists, crystallographers, petrologists, paleontologists or even archaeologists.

Irl Everett, the father of the little girl who started it all, became so engrossed in the hobby that he eventually supplied a lapidary shop in his basement where fellow hobbyists can find raw materials and equipment.

Everett has presided over the Lincoln club twice, and in 1970 the group honored him by bestowing active life membership.

From its inception the Lincoln Gem and Mineral club has considered education a major part of its purpose; members often give programs and demonstrate lapidary techniques for schools, hospitals and shut-ins. The club maintains several exhibits which are available to schools and student groups. Several years ago members excavated and mounted a plesiosaur for the University of Nebraska State Museum. A group of volunteers works regularly on fossils for the museum.

many phases of such an undertaking is being handled by club members, with help from similar groups across the state. Several buildings are being readied at the state fair grounds to accommodate the hundreds of competitive and non-competitive displays, demonstrations by skilled craftsmen, special lectures and illustrated programs. Promotional packets have been sent to all 1,025 clubs in the American Federation of Mineralogical Societies.

"This will really be the

grand championship of all shows," Everett declared.

Ever since prehistoric man placed pretty pebbles from a nearby stream on a ledge in his cave to admire, men have enjoyed the products of our planet.

"Hobbyists always want to interest someone else," Irl Everett believes, and he feels Lincolmites are fortunate to have the opportunity to view, next June 13-16, the exquisite products of the finest efforts of rock hobbyists from across the nation.



While Everett cuts slabs of Mexican "crazy lace" agate on the saw his wife, Lois, finishes polishing a cabochon of green chrysocolla. (SUN Photo by James Buttkke)

## National Convention

No wonder this enthusiastic club was selected to host the 1974 National Gem and Mineral Show and Convention. For four years now a steering committee has been organizing to accommodate the many exhibitors, dealers, and feature displays which will comprise the national show.

The convention committee is chaired by Ralph Ulrich, with Howard Taylor as vice chairman and Bruce Simon, financial chairman. And the show director is—you guessed it—Irl Everett.

The mass of detail work necessary to correlate the