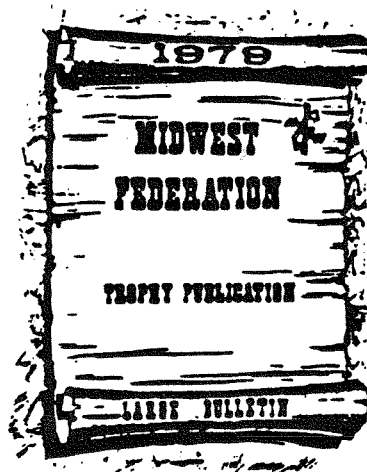


THE PICK & SHOVEL



April
1984

In this issue . . . Letter from Dawsons
Birthstone: DIAMOND
"VIEWS OF A VANISHING FRONTIER"



OFFICIAL PUBLICATION OF

Lincoln Gem and Mineral Club, Inc.

P. O. Box 5342

Lincoln, Nebraska 68505

LINCOLN GEM AND MINERAL CLUB, INC.
P.O. BOX 5342, Lincoln, NE. 68505-0342

The purpose of this corporation shall be to study, promote an interest in, and disseminate knowledge of lapidary and various earth sciences including but not necessarily limited to geology, paleontology, and mineralogy. It shall be a particular purpose of the corporation to provide education in these fields to its members and the general public, particularly youth and student groups.

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

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

1984 ELECTED OFFICERS:

President	Howard Taylor, Jr.	910 New Hampshire	Lincoln, 68508	476-3707
1st Vice Pres....	Claude Scott	4917 Normal Blvd.	Lincoln, 68506	488-0739
2nd Vice Pres....	James Null	6515 Fremont	Lincoln, 68507	467-2763
Secretary.....	Vera Lyman	420 N. 56th St.	Lincoln, 68504	464-6089
Treasurer.....	Phyllis Parks	2435 S. 19th St.	Lincoln, 68502	476-6798
Board Member....	Linda Parks	2435 S. 19th St.	Lincoln, 68502	476-6798
Board Member....	Jim Stewart	1339 Eastridge Dr.	Lincoln, 68510	489-2867
Board Member....	Marie Taylor	910 New Hampshire	Lincoln, 68508	476-3707
Board Member....	Janet Wright	3715 S. 33rd St.	Lincoln, 68506	488-1884

NOMINATING COMMITTEE -- 3 years: Jim Parks, Ervin Marshall
2 years: Richard Haney, Wilfred Wittman
1 year: Vera Lyman, Frank Rule
Roger Pabian, Chairman

LONG RANGE PLANNING AND BY LAWS COMMITTEE:

1 year - Jim Parks, Phyllis Parks 3 years - John Abel, Roger Pabian
2 years - Marie Taylor, Vera Lyman Roger Pabian, Chairman

STANDING COMMITTEE CHAIRPEOPLE:

Calling.....	Marie Taylor	Membership.....	Linda Parks
	Phyllis Parks, Marie Wells	MWF Liaison.....	Marie Taylor
Education/Publicity...	Roger Pabian	Programs.....	James Null
Historian.....	John & Lillie Lewis	Scholarship.....	Marie Taylor
Hospitality.....	Susan Taylor	1984 Rockhound-of-yr..	Roger Pabian
Housing/Property.....	Claude Scott	1984 Annual Show.....	Roger Pabian
Junior Activities.....	Ron McColery	1985 Annual Show.....	
	Janet Wright	Christmas Party.....	Marie Taylor
Librarian.....	Jim Parks		

AUDITING COMMITTEE 1983.....Virginia Green, Vera Lyman,
Ervin Marshall, Phyllis Parks, Treas.

PICK & SHOVEL STAFF:

Editor.....Judy McColery 2928 S St. Lincoln, NE 68503
Asst. Editor....Vera Lyman 420 N. 56th St. Lincoln, NE 68504 (NAOESCI)
Sunshine Corner..Susan Taylor
Reporters.....Julius Young, Roger Pabian, "CLUB MEMBERS"

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



Club Calendar



April							1984
S	M	T	W	T	F	S	
1	2	3	4	5	6	7	
8	9	10	11	12	13	14	
15	16	17	18	19	20	21	
22	23	24	25	26	27	28	
29	30						

JUNIOR MEETING: Saturday, April 28, 1984 at 7:00 P.M.
Nebraska Center, 33rd & Holdrege

GENERAL MEETING: Saturday, April 28, 1984 at 7:30 P.M.
Nebraska Center, 33rd & Holdrege

PROGRAM: "FRANK RULE AND HIS HOBBY"
by Frank Rule

BOARD MEETING: Thursday, May 3, 1984 at 7:30 P.M.
910 New Hampshire (Taylor home)

* * * * *

AREA SHOWS AND SWAPS:

April 21-22 Central Rock & Mineral Club
SHOW Hastings, Ne

May 5-6 100th Meridian
SWAP Lexington, Ne

June 2-3 Fort Butler Rock Club
SWAP Hebron, Ne

June 9-10 Northeast Ne Rock & Mineral Society
STATE SWAP Norfolk, Ne

June 16-17 Homestead Gem & Mineral Club
SWAP Beatrice, Ne

* * * * *

Regional Show Schedule

CALIFORNIA	EASTERN	MIDWEST	NORTHWEST	ROCKY MOUNTAIN	SOUTH CENTRAL
San Diego	Tidewater Beach, VA	Milwaukee Wisconsin	Anchorage Alaska	Tulsa, OK	Waco, TX
July 12-15	Aug. 10-12	July 5-8		June 8-10	March 30-31 April 1

HAPPY EASTER

Hello from the Sunshine Corner!

How fortunate are those who share the blessings of friendship---- They involve many things-above all, the warmth of understanding, the comfort of companionship, and the joy of appreciation.



-Robin St. John

* * * * *

Get well cards were sent to Dr. C. Bertrand Schultz and Jim Null

Suze Sunshine

* * * * *



NEWS FLASH ABOUT LEE PIVONKA!!!!

Lee will be working this summer for Moly Corp. Company, a Denver based company. He will be stationed at Westcliffe, Colorado, working in the Sangre de Cristo Mountains. He will be taking core samples and supervise drilling for rare earth elements. In August he will resume his last year of studies for his Masters degree in geology at the Colorado School of Mines in Golden.

* * * * *

ROCKHOUND GLOSSARY

- GEOLOGIST: Person who learned about rocks in school.
- ROCKHOUND: Person who learned about rocks the hard way.
- PEBBLE PUP: Smart-mouth kid who knows more about rocks than you do.
- FIELD TRIP: Impossible trek to inaccessible place for nonexistent specimens.
- GEOLOGIST PICK: Handy gadget that you don't need and leave at home when you do.

from the Boondocker and others via The Cycad Jan. 1984

President's Message

Another show of the Lincoln Gem and Mineral Club is now history. This years show was of the same quality as all of those that our club has had in the past. The club received a letter from Mr. and Mrs. Claude B. Dawson which contains the same comments that were made by many other people at the show. This letter has been included in this issue of the Pick and Shovel. Take a moment to read it then give yourself a "pat on the back" you all deserve it!

I want to take this opportunity to "THANK YOU" to the members of the Lincoln Gem and Mineral Club for the many interesting and education displays that they provided. A special "THANK YOU" to all the members of the 1984 Show Committee for their hard work. Congratulations everybody on another job well done!

Another season of shows and swaps has started in Nebraska. Please attend as many as you can. People from other clubs support our club activities so lets support theirs in return. See you at the April Meeting.

Jim

* * * * *

DID YOU KNOW:

The jewels in a jewel watch are usually rubies or sapphires-
(Osage Hills Gems)

But--most of the jewels used in cheap watches are garnets.
Over 250,000 of the tiny stones are used each month for
this purpose alone. (Gulfport Gems)

AND just pause for a minute to contemplate this--

- 40% of the things you worry about never happen
- 30% are beyond your control
- 12% will happen even if you continue to worry
- 10% are none of your business anyway

The remaining 8% you must face with courage (Gulfport Gems)

PROGRAM An excellent program was presented by Mr. Don Johannes of Naperville, Illinois on "Opals." It was a very interesting and informative program. Everyone seemed to enjoy the program as well as the Johannes family.

* * * * *

If you have a bit of news, SEND IT IN.
Or a joke that will amuse, SEND IT IN.
A story that is true, an incident that is new,
we want to hear from you SEND IT IN.
Never mind about its style, SEND IT IN.
It is really worth your while, if it only brings a smile.
So why not give it a trial? SEND IT IN.

From the Rockhound Scoop - 11/82
and other bulletins
via Pick & Chisel
Jan. 1984

* * * * *

Take time to live, it's one secret of success.
Take time to think, it's the source of power.
Take time to play, it's the secret of youth.
Take time to read, it's the foundation of knowledge.
Take time to laugh, it helps lift life's lot.
Take time to dream, it hitches your soul to the stars.
Take time for friendship, it's the source of happiness.
Take time for God: It is life's only lasting investment.

From Rockhound Newsletter
via The Cycad
Dec. 1983

* * * * *

"Next to being shot at and missed, nothing is really quite as satisfying as an income tax refund."

F. J. Raymond

* * * * *

Welcome, Newcomers

Please add the following new members to your WHO'S WHO!

C. David Heffelbower
1819 Washington 68502
475-4713

Kevin Schwartzman
1134 West Avon Lane 68505
464-3059

Claude B. Dawson

ROUTE 1, BOX 208A
DORA, MISSOURI 65637
417-261-2499

April 4, 1984

Lincoln Home & Mineral Club, Inc.
c/o Howard J. Taylor, Jr.
910 New Hampshire St.
Lincoln, Nebraska 68508

Dear Friends:-

As we sit here thinking, there
is no other way to say it but
you folks are tops in our book.
We have never felt as welcome
as we did at your entire show.
The breakfast, the cake, the coffee,
the doughnuts were wonderful
but it was the people with
your smiles that make us so
happy to have been with you.
Please place our name on your
list of happy dealers who wish
to be invited back next year.
Sincere thanks again to all the
workers.

Claude & Joy
Dawson

Board of Directors - Mar. 1, 1984 - continued

(Linda Parks) Requested formal invitation to Program Speakers by Claude Scott.

Requested help from Junior members with Sat. Night Social.

(Phyllis Parks) Would like approval to withdraw any necessary amount needed from Transmatic and/or other funds to put in NBC Checking if the need arises in conjunction with our 1984 Show; due or necessary prior to the show dates, such as change, Ins., supplies for Social, preaid advertising, etc.

Three month penalty from CD's on amount taken out only.

Discussion followed. It was decided that there was enough in Checking to cover any necessary bills except for change for Ticket Sales.

Motion by Vera Lyman that we grant Phyllis Parks approval to withdraw \$ 500.00 from \$ 15,000. First National CD #156946 for Show expense prior to the Show; namely change for ticket sales. Second by Janet Wright. Motion carried.

(Jim Stewart) Requested some ideas how to get LGMC members into spirit of things.

Possibly changing Show Dates to correspond with other city activities, such as Basketball tourney, etc. to draw out-of-towners. Discussion revealed conflicts with dealers, parking, & other Clubs' Show dates.

As a new member, he does not know many people. Would like to order name tags.

Linda to request at Mar. Meeting, list of those who would like to order name tags. Promote all members wearing theirs to meetings to get to know Who's Who.

(Janet Wright) Requested permission to be excused for Mar. Meeting. Will be on field trip.

Requested help with Junior display for Show. Mr. & Mrs. Young have display of sands from every state in nation. Going to display this at Show.

The side program "The Monster Dig" just too long for children. Kaye Young would like to cut it down. It was suggested that she make up a shorter program from original; but not to disturb original program.

(Vera Lyman) Explained mailing of P & S. Mailed by each copy, not by volume weight. Each copy mailed for 11¢ so long as not over 16 ounces.

(Marie Taylor) Requested change of name for Local Club Scholarship/Education Fund. Discussion. Recommendation to come from Audit Committee.

MEMBERSHIPS:

Paul & Bev Rueter - Reinstatement Motion to approve, Vera Lyman, second Phyllis Parks. Motion carried

Sid Rueter - Paid his dues & attended meeting. Previously approved.

Applied for Membership:

Kevin Schwartman - Sponsor - Mrytle & J.D. Young
1134 W. Avon Ln. (attended meeting)

Motion to approve, Vera Lyman; 2nd Claude Scott. Carried.

David Heffelbower - Sponsor - Roger Pabian
1819 Washington (attended meeting)

Motion to approve, Janet Wright; 2nd Vera Lyman. Carried.

The next Board Meeting will be held April 5, 1984 at the Taylor home. Meeting adjourned.

Respectfully submitted,
Vera Lyman, Secretary

LINCOLN GEM & MINERAL CLUB - General Meeting - Mar. 24, 1984

Meeting was called to order by President, Jim Taylor March 24, 1984, 7:30 P.M. at the NE Center.

Minutes of the February meeting were approved as printed in the Pick & Shovel. Motion for approval by Roger Pabian, 2nd Ed Johnson. Motion carried.

Treasurer's report was approved as printed in the Pick & Shovel. Motion for approval by Tom Simmons, 2nd Helena Baegl. Motion carried.

Hospitality Chairperson Susan Taylor announced that 34 Adult and 4 Junior members were present. She introduced the following guests:

Don, Georgia & Chris Johannes - Guests of Taylors

Emma Baegl - Guest of sister, Helena

Mrs. H. O. Paulson - with her husband

Susan announced that Jim Null had been in and out of the Hospital.

President Taylor announced the invitation of all Club Members to the Reception of Florence and Gilbert Lueninghoener in honor of their marriage on March 17th.

NEW MEMBERS:

Announcement was made of the following new members:

David Heffelbower

Kevin Schwartman

Sid Rueter

Bev & Paul Rueter - reinstated

NO NEW BUSINESS

AUDIT REPORT:

1983 Audit report was given by Chairman Vera Lyman. The Treasurer's books were reported to be in order for the year 1983. The following recommendation was made:

At any time when a Budget report, Financial report, Audit report, etc. or monthly Treasurer's report are given orally or handed out in written form; if there are any questions, please ask and they will be answered or explained to the best of our ability.

You should all try to make yourself knowledgeable regarding this aspect of the Club. It is your money, you helped earn it, and all of you should understand what is being done with it.

SHOW REPORT - By Roger Pabian, Show Chairman

A lot of help needed on setup day. (Friday)

Different setup than in years past; orientation from east to west. Displays on south end. Working Demos between displays and dealers.

General Meeting - Mar. 24, 1984 - continued

Table for Juniors.
 Silent Auction with proceeds going to Junior Program.
 Help needed in Ticket Sales, Working Shop, Rock Races, &
 Silent Auction.
 Need lots of displays. Requested 1 display from each member.
 Will try and provide cases for new members.
 Linda Parks passed around "Cake List" for Sat. Night Social.

NAME TAGS:

Message in Pick & Shovel for everyone who has one, to wear their name tags.
 Orders taken. Name badges = \$1.75 Each bar = \$.60

MINERAL CHART:

Marie Taylor showed the Mineral Chart available through the AFMS Federation. Cost is \$10.00 each. Contact Marie Taylor if you desire a chart.

'80 NATIONAL SHOW:

A metal 4-drawer file cabinet was made available from the '80 Show. It was suggested that it be given to the Editor and the 2-drawer file cabinet which the Editor presently has, be given to the Librarian, Jim Parks.

ANNOUNCEMENTS:

Frank Rule announced that he and Tom have the tape and slides of Show he presented on Cable TV. They will present it at the April General Meeting.

Junior article by Ron McColery was printed in the AFMS Newsletter.

Scholarship Awards Breakfast on Sun. at 7:45 A.M. Sign up at Show on Saturday.

Board Meeting at Taylor home on April 5, 1984 at 7:30 P.M.

PROGRAM:

An excellent lecture/program on "OPALS" by Don Johannes, Naperville, IL followed.

Respectfully submitted,

Vera Lyman
 Vera Lyman, Secretary

TREASURER'S REPORT: 2-29-84 NBC Checking Balance \$ 521.58

March Receipts:

Membership dues	\$ 17.00
Suspense - Member badges	11.10
Show Rock races	16.75
Show Dealer receipts	825.00
	<u>\$ 869.85</u>

March Payments:

Suspense - badges	\$ 32.15
Mailing - March P & S	24.64
Misc. copy-stamps	8.00
Show set-up & social	41.69
Misc. Show expense	695.15
Junior activities	11.00
	<u>\$ 812.63</u>

New NBC Balance

\$ 578.80

Hominid fossil thought oldest yet

Washington (UPI) - Scientists reported the discovery of a 5-million-year-old fossil bone of a hominid, a human-like creature that dates back 1 million years before the previous oldest known ancestor of mankind.

The National Science Foundation said the fossil, a fragment of a lower jaw with two molars, was found in February in an arid region of Kenya by anthropologists from Harvard University and the National Museums of Kenya.

About 2 inches long and 1 inch deep, the fossil is similar to that of small members of the species *Australopithecus afarensis*, which date back 3 million to 4 million years, the foundation said.

"The fossil gives us positive evidence that hominids are at least a million years older than we previously conservatively estimated," said David Pilbeam, an anthropologist at Harvard who oversees the program.

"I think they may actually go back 6 or 7 million years," he said in a telephone interview. "But it is one thing to speculate and another thing to find them and have proof."

The research program is funded by the National Science Foundation, the Smithsonian Institution in Washington and the Louise Brown Foundation in Cleveland.

Officials said the fossil was discovered in Tabarin, a new anthropological site near Lake Baringo in northern Kenya, about 200 miles northwest of Nairobi.

- via The Lincoln Star
Thursday, April 5, 1984 p.27
submitted by ass't Ed.

Hints:

When you have finished using grinding wheels for lapidary work, ALWAYS turn the water off before turning off the motor. The reason: the water dripping on a stationary wheel will enter the stone. It may cause a fracture. It may even break off the next time it is put to use. Never stand in front of the grinding wheels when you turn on the motor. -OSAGE HILLS GEMS

Try polishing the backs of transparent cabachons. If the cab has inclusions it makes them stand out so much better.

-THE GEMROCK

Inflation hasn't ruined everything; a dime can still be used as a screwdriver! -ARKANSAS ROCKHOUND NEWS

- All via THE TRILOBITE 4/84

Real sorry to hear of the contemplated demise of the TRILOBITE in June of '84. Hopefully by then, someone will decide to "pick up the pieces" and continue the publication. Good Luck!

Your friends via THE PICK & SHOVEL

BIRTHSTONE OF THE MONTH: DIAMOND

The name is from the Greek adamas, "invincible." Diamonds have many uses, but principally as gems and as an abrasive.

Gem varieties of diamond include colorless, which may be colorless or faintly tinted, commonly with yellow or brown and less commonly with green or blue; and fancies, diamonds with decided tint or depth of color. In fancy diamonds, browns are very common, orange, violet, strong yellow (or canary), and yellowish greens are common, and red, blue, and deep pure green are rarest. Black diamonds are rarely used in jewelry, and bort and carbonado, because they are aggregates of very minute crystals, are used only as abrasives. Fancy diamonds of the rarer colors are most valuable. Diamonds are faceted for their ultimate use in jewelry. Principal sources of diamonds are in Africa (Zaire, South Africa, South-West Africa) and Brazil. Some diamonds have been found in Arkansas and California.

India was the earliest source of diamonds. They were discovered in Brazil in 1729, in South Africa in 1867, and in Pike Co., Arkansas in 1906. A few colorless diamonds were recovered along with gold in placer mining of gravels in several northern Mother Lode counties, California.

Diamond also occurs in two quite distinct varieties. Bort occurs as rough rounded masses with radial or confused structure, without distinct cleavage; it is grayish black with a specific gravity of 3.5. Carbonado, or black diamond, is opaque, granular to compact, and without cleave; its specific gravity is 3.1 to 3.3.

Although a substantial proportion of diamonds are mined from placer sedimentary deposits, diamond is actually formed in peridotite of plutonic rocks, where it is associated with olivine, magnetite, and phlogopite.

Diamond is most easily confused with quartz pebbles, but the luster and hardness of diamond will suffice to distinguish one from the other.

THE AUDUBON SOCIETY
Field Guide to
North American Rocks
and Minerals

* * * * *

"Frustration is not having anyone to blame but yourself."

-BITS & PIECES

"VIEWS OF A VANISHING FRONTIER"

Readers may recognize the title with differing degrees of understanding. For those who have visited Omaha's Joslyn Art Museum recently it should bring back delightful memories of a cultural and educational experience. For those not yet acquainted with this multi-million dollar adifice it should stimulate interest in it and the abundant objects and events there. I hope this discourse may be informative to all, and an incentive to visit it if possible. About 40,000 people of all ages have done so in the past few weeks.

There is always an abundance of features to see in this building, covering almost a city block; but recently the place has been extraordinary; with a major display, unsurpassed in the whole world, the Prince Maximilian collection of records and artifacts plus the art of the young Swiss artist, Karl Bodmer. They explored the Missouri River from the Mississippi to the wilds of Montana in 1833-1834, by steamboat. Other western collections in Joslyn include works by Charles M. Russell, Frederic Remington, George Catlin, Alfred Jacob Miller, and others. Many are on permanent loan from InterNorth, Inc.

Much of the Maximilian-Bodmer collection will leave Omaha temporarily after April 8, 1984 until October 1985, for display at Ft. Worth, San Francisco, Washington, D.C., and New York City. There are plenty of interesting attractions in Joslyn to be worth several visits. Myrtle and I have been there many times, but never have had enough hours to see everything. All items are expertly and attractively displayed.

Our most recent visit to Joslyn was on March 29th with Dr. Gilbert Lueninghoener and wife, L.G.M.C.'s former Florence Boring. We went to see the Maximilian Collection before it would be removed for its scheduled tour to the distant parts of the U.S.A. More than a decade ago Myrtle and I took L.G.M.C.'s honorary member, Poet John G. Neihardt, to Joslyn for two events while he was living with us here in Lincoln during the last six years of his amazing 92 year life.

The first event provided a briefing by Dr. Neihardt for folks who planned a sponsored float trip down the Missouri River in Montana through the most scenic part of that great waterway. They were given a personal account of the poet's adventurous voyage in 1908 in an open boat accompanied by a teenage boy. (3 older men "jumped ship" enroute!) That trip was commissioned by "Outing Magazine", and became the theme for Neihardt's prose book "The River and I" in later publication. His journey was downstream from Ft. Benton, Montana to Sioux City, Iowa, and lasted over a month.

The second of our trips to Joslyn Museum with the poet was for a unique showing of photo slides from the above-mentioned float trip. They were projected on one screen beside another which showed slides made from photos of the artist Karl Bodmer's original paintings of the same important places on the Maximilian expedition of 1833-1834.

- continued

"VIEWS OF A VANISHING FRONTIER" - continued

The projections on the two screens showed Bodmer's remarkable accuracy in faithful depiction of scenes by his artistic hand, and the timeless duration of details in the landscape, now recorded photographically!

Joslyn Art Museum is a gift by Sarah H. Joslyn as a memorial to her husband, George A. Joslyn, who was president of the Western Newspaper Union from 1896 until his death in 1916. The couple's gifts toward community projects are believed to be over seven million dollars. After twelve years of planning the museum's construction began in 1928, and opened November 29, 1931. The cost was over \$ 3,000,000, long before today's prices. Mrs. Joslyn gave endowment for its maintenance. At her death in 1940, the residue of her estate was bequeathed for advancement of the museum. Other organizations and individuals have made generous contributions.

The building is constructed of Georgia pink marble, and combines culture of the past with the spirit of the present. Its ten large exhibition galleries and smaller exhibit areas, two auditoriums, a classroom, an art reference library, and a central fountain court serve many purposes. Thirty eight different marbles are in its interior, specially quarried and brought from six foreign countries as well as from several states in the U.S.A.

This is but a small attempt to tell about details of Joslyn Art Museum. Serious visitors should allow ample time to view and read descriptive materials related to each display. Go in the forenoon, obtain lunch there and stay until five o'clock closing time. Don't hurry through without noticing details. Notice the magnificent building's architecture, and the sculptured panels at the four exterior corners. The inscriptions at the four entrances were written by Hartley Burr Alexander, who also wrote those on the exterior of Nebraska's State Capitol in Lincoln,

Members of the Nebraska State Historical Society have received their quarterly Journal Vol. 64 Number 3, Fall, 1983; or one may be purchased at the Society Building. In it are 130 pages devoted to the Diaries of Prince Maximilian and his Missouri River adventure of 1833 and 1834. It should be read before visiting Joslyn Memorial Museum, to make ~~the~~ trip more instructive.

Admission to Joslyn is approximately equal to the price of one hamburger sandwich. (senior citizens get a discount too) Or one may become a member and get free admission, plus many other discounts!

- Submitted by J. D. Young

ATTENTION JUNIORS!!!
PLEASE ATTEND OUR APRIL MEETING!!!

Our last meeting was not well attended. I know some of us have other things to do but please try and come to the meetings.

I want to thank all of you juniors very much for your help in making the junior display area a success at the show. You all had such good displays. Pay heed to the idea that this will not be the last time you're asked to display or become involved in LG & MC activities.

I also want to thank all of the people who helped me with the Silent Auctions. The longer I'm with the club, the more I've noticed the generosity and kindness of the people in it.

We had many nice comments on our sands of the United States display and several visitors offered to send the Junior program some of the sand they had collected from other different areas. One person we would like to thank is Miss Annie Laurie Smith (a friend of Judy's) visited the show and returned later with a bottle of ash from the 1980 eruption of Mt. St. Helens for the display.

JUNIORS..PLEASE ATTEND OUR APRIL MEETING!!!

There will be information given concerning a field trip and other important information as well.

Ron McColery & Janet Wright

Even though I've only been a member for a short time, I've noticed some little hints at different shows and swaps. (That always seem to be the rule rather than the exception.) But please accept the following with tounge in cheek.

1. Never under estimate what a person will pay because there's always a buyer for everything.
2. When you're about to buy something you really want, close your eyes, there might be a gleam in them.
3. You have to recognize a good trade when you see one, but if you have to be told its a good trade there's a very big chance its not.
4. DON'T collect what other people like. (ATTENTION!! Dealers and exhibitors please disregard this.)
5. You find out very quickly that collectors have a compulsive urge to collect, when a storage place is filled a new place will always be found. (The worst thing about collecting is being caught without a storage place.)
6. Try to know more about a rock or specimen then the person your buying it from.
7. Machine oil is not found with known mineral deposits, but (there sure seems to be a lot around at the differnet show.)
8. A special rock or specimen always has more value when somebody else owns it.

Just kidding folks
(HONEST!!!)

JUNIORS...Do you know where minerals go when they die? Into Paint Thinner! It is clearly stated on the can or bucket that paint thinner contains MINERAL SPIRITS!!!

Source unknown, via Rockhound Scoop
Pick & Chisel Jan. 1984

Answers:

April Seek & Find

Agate		
Amberine		Agates & Agate Terms
Amethystine		
Banded	Oriental	Russian
Basanite	Petrified Wood	Scenic
Bavarian	Pipe	Star
Beckite	Plume	Sweetwater
Binghamite	Pom Pom	Tempskya
Bloodstone	Prase	Thunderegg
Boakite	Puddingstone	Turritella
Bouquet	Ribbon	Variegated
Brazilian	Ring	Zebra
Brecciated	Rose	Zigzag
Bruneau		
Cave Creek		
Carnelian		
Cats Eye		
Cer		
Chert		
Coral		
Creolite		
Cyclopes		
Dendritic		
Dinosaur Bone		
Dryhead		
Elephant		
Fairburn		
Fire		
Fish Eye		
Fortification		
Frost		
Geodes		
Heliotrope		
Hemachate		
Horse Canyon		
Indian		
Intaglio		
Iris		
Jasperine		
Jaspilite		
Kalmuk		
Lace		
Laguna		
Lake Superior		
Montana		
Moss		
Myrickite		
Nipomo		
Obicular		
Ochoco		
Oolitic		

P E T R I F I E D W O O D B O E T A G A
 U T E O M N O C A R N E L I A N B B F M
 D I M I E M Y R I C K I T E E O A R E E
 D L P R S W E E T W A T E R T B S U T T
 I I S E R R O S E I M O S S I R A N I H
 N P K P A Q V P B X F B Z N K U N E K Y
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NEBRASKA ACADEMY OF SCIENCES MEETING REPORT

The Nebraska Academy of Sciences held its 94th Annual Meetings on Friday, April 13, and Saturday, April 14, 1984, at the Olin Hall of Science on the Nebraska Wesleyan University Campus. The Earth Science Section was well attended and 15 papers dealing with the various earth sciences were presented. Most of the papers presented dealt with the geology of Nebraska, and a quick run down of these follows below.

Hal DeGraw spoke on the Cretaceous Niobrara in Northwestern Nebraska. The paper dealt with subsurface geology and its outcrops on the Chadron Dome. DeGraw presented a detailed stratigraphic sequence of these strata and showed eight lithologic units and five disconformities within this study area.

R. F. Diffendal, Jr., spoke on the developmental history of Quaternary Pumpkin Creek in Banner and Morrill Counties. Diffendal showed that the nature of the gravel deposits showed that Pumpkin Creek once flowed farther east than it currently does.

Richard Williams spoke on late Cenozoic sand and gravel deposits in northeastern Nebraska and indicated that three distinct petrofacies could be recognized in the study area. Each of the petrofacies could be related to a separate source area, and ancient river systems that deposited the various petrofacies could be determined.

Dr. C. Bertrand Schultz spoke on sand dune distribution in the modern world and related these occurrences to glaciations and climatological cycles of the ice ages.

Janet Wright spoke of carbonate and silica enriched horizons in the Osallala Formation in western Nebraska and compared these horizons to soil profiles. Janet told of rhizoconcretions being indicators of fossil soil horizons and told of several different kinds such as root molds and root casts.

With Royal Mapes of Ohio University and Darwin Boardman of Texas Technical University as co-authors, I delivered a paper on a molluscan community from the late Pennsylvanian age Dry Shale in Richardson County, Nebraska. The community contains a great variety of fossil molluscs including clams, snails, and ammonoids. They represent a fairly deep water environment that was in a deep trough near a subsiding but emergent Nemaha Arch in southeastern Nebraska.

Eric Gustafson of Chadron State College spoke on the fauna of the Chadron Formation of Oligocene age near Chadron. He described several interesting fossil carnivores from that region as part of a new local fauna.

All in all, the session was very interesting. Discussions of some of the other papers will follow later.

Roger Pabian

Education

THE REFRACTIVE INDEX

Rather than reviewing a specific stone this month, we will look at a property of all gem stones---in fact, all substances. That is the index of refraction or the refractive index, simply abbreviated R.I. The refractive index is simply the quotient of the velocity of light traveling through air or space divided by the velocity of light traveling through some other medium such as a gem, a body of water, or a piece of plastic. The velocity of light is 186,000 miles per second. If light travels through some medium at say 93,000 miles per second, that substance has a R.I. of 2.00 or $186,000/93,000$, or velocity of light in air/velocity of light in medium.

Many gems have characteristic refractive indexes. Quartz is easily identified by its R.I. of 1.544-1.553. The R.I. index of corundum gems varies from 1.762 to 1.770. Natural spinel has an R.I. of 1.720, but its synthetic counterpart has an R.I. of 1.730. Spinel is probably the only stone that has differing R.I.s for its natural and synthetic forms. The R.I. of natural and synthetic corundum is the same, 1.762-1.770.

A gem may have one, two, or three refractive indexes. If a stone has a single R.I., it is said to be isotropic. Light travels through the isotropic stone at the same velocity in all directions. If a stone has two R.I.s, it is said to be uniaxial; in one axis of the stone, the velocity of light remains fixed, but its velocity varies either up or down to meet the fixed velocity. If upward, the stone is positive-- if downward, the stone is negative. Thus a stone may be said to be uniaxial negative (U-), etc. The optic axis is the axis along which the velocity of light travels at a fixed velocity.

If a stone has three refractive indexes, it is said to be biaxial. The light travels at a fixed velocity along two axes of the stone and at a variable velocity in all other directions. If the variable index is nearer the lower index, the stone is said to be positive, and if it is nearer the higher index, it is said to be negative. Thus, the stone may be described as biaxial positive (B+), etc.

The refractive index is one of the most important properties that the gemologist can use to identify stones. It is usually measured with a refractometer, but its value can be bracketed by using fluids. If a stone has the same R.I. of an immersion fluid, it will vanish when it is immersed in the fluid. Since flaws in stones have different R.I.s than the stone itself, faceters immerse their rough material in fluids to find the flaws and to find the optic axis as all of this must be known to properly facet a stone.

We will have a refractometer and immersion fluids at the meetings to demonstrate this property of gems.

Roger Pabian
Education

Midwest Federations NEWSLETTER

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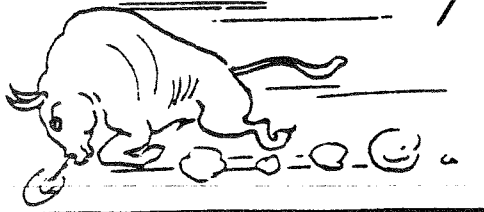
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APRIL 1984 - Issue No. 243

FROM THE PRESIDENT'S CORNER

Ref



Oops, I goofed and Bette Smith will probably print the picture of the bull that she is saving for just such an occasion. Somehow, I failed to notify our newsletter Editor that the position of Chairperson of the History and Archives has been changed. To ease the handling of the archives and to save money and travel time, Mrs. Cheryl Caponera, 2330 Collins Street, Blue Island, IL 60406, is now heading up the Historian and Archives Committee. The Archives are housed in Blue Island, Illinois, and Sheryl has complete access to the area. Send all club

bulletins and club histories to her.

Betty Myers has not been ousted or forgotten, she is assistant on several other committees. We can't afford to lose good people like her.

I wish to remind all MWF Clubs and interested persons that our main work of the year is done at the two Executive Council Meetings (one Spring and one Fall) and at the Executive Council meeting with all the club delegates at the annual Convention. The Wisconsin Geological Society has now sent the information for this years Convention, July 5 to 8, 1984, in West Allis, Wisconsin.

Select your delegates and get them registered. This is a centrally located area and let's have a good turnout of delegates. Your delegate brings many things to the Convention and returns to your club with a lot of information. Your club delegate is your club voice and when your club receives the minutes of the meeting - pass them on to your delegate. They will prepare him/her for the meeting.

Let's show that we appreciate the work of the host club and have a big turnout in West Allis.

Our Sympathy to the family of William H. deNeui. Bill was born in Tyndall, South Dakota on March 2, 1900 and passed away February 15, 1984.

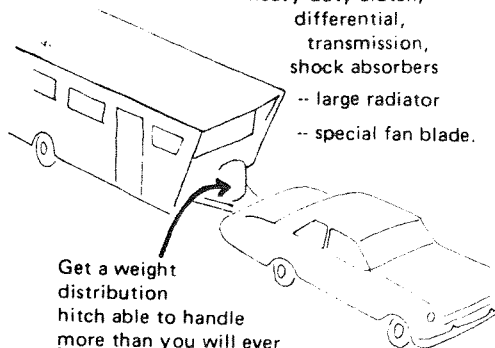
He was an honorary member of the Midwest Federation of Mineralogical and Geological Societies; Past President of American Federation of Mineralogical Societies; AFMS Scholarship Foundation and the Minnesota Mineral Club.

The MWF Jade Gavel, symbol of the MWF Presidency, was made and presented by Bill to the Federation.

Diane Dare, Chairperson of AFMS Club Publications suggests: Why not have your club show its appreciation to your editor by paying for the tickets to the Editor's Breakfast held during the MWF Convention in West Allis.

R.V. SAFETY: **TOWING** Make sure your car or truck is properly equipped and powered. Your serviceman may recommend

- heavy-duty clutch, differential, transmission, shock absorbers
- large radiator
- special fan blade.



Get a weight distribution hitch able to handle more than you will ever pull. Have it installed by an expert.

A conference is a meeting of the bored.

Fossil deposits yield fine oil. Which proves there's no fuel like an old fuel.

In preceding Newsletters new programs were reviewed. Here is a list, by number, with the amount of slides in each program.

- #129 Art in the Rock Hobby 100
- #130 Rancho La Brea Tar Pits 83
- #131 Hunting & Collecting Fossils 31
- #132 A Volcano is Born 31
- #133 Some Common Rocks & Minerals 34
- #134 Ivory & Ivory Substitutes 68
- #135 Colorado Alabaster 59
- #136 How Indians Made Stone Tools 76
- #137 Stonehenge & Avebury Region 100

Retired Programs:

- #1 Rocks of the Earths Crust
- #2 Minerals of the Earths Crust
- #6 American Mineral Heritage Stamps
- #7 Ishpeming Convention & Field Trip
- #64 Lincoln National Show

Add the following to your 1984 Directory:

#127 Beauties in Miniature - 74 Slides. These slides were bequeathed to MWF on the death of Werner Kraus of Detroit, a member of Michigan Mineralogical Society. They were compiled in their present form by Dr. William Cook, Jr., Mineralogy Chairperson of MWF, and a member of Mineralogical Society of Cleveland. "Small can be beautiful" in beautiful mineral specimens, chiefly from North America, some from other countries. These are photographed to show their crystal formations.

#128 Minerals and Mineral Photography. Tells about interests and trials of photographing minerals. A world wide tour of some well-known, some rare minerals and ways of photographing them. This program contains 80 slides and was prepared by members of Micromineral Society of the Cleveland Museum of Natural History and the Mineralogical Society of Cleveland. Contains many good ideas on how to photograph your own collection.

Louise Stinnett, 29462 Aspen Dr., Flat Rock, Mi 48134, Chairperson Program Requests

MAKE PLANS TO
ATTEND
THE
MWF CONVENTION
AND SHOW



LITTLE DIOMEDE, an isolated Alaskan island inaccessible much of the time, may be the only place on earth that has a telephone pole made of a whale's rib. The steep, rocky island has no wood, and when the telephone company needed to rig a pole, a field technician made do with a very serviceable whalebone.

The 115 Eskimos who live on Little Diomedes are among the few persons in the world who are allowed to pay their telephone and other bills with carved ivory instead of cash.

..from Sparks from the Anvil
..via Scribe

Western Illinois University, Macomb, IL, will be conducting an archaeological survey this spring of an unexplored portion of the Mississippi Valley between Quincy and Warsaw.

The survey will be conducted as part of an eight-week archaeological field school during which students can earn up to 15 semester hours of credit in anthropology and physical geography and up to six more hours in evening courses in North American Indians and Archaeology.

Amateurs and local farmers have found artifacts ranging in age from at least 5,000 years to less than 500 years, including pottery from groups which had never been suspected of living in the area.

Glen R. Hanning, Chairperson Archaeology

STONE AGE SCAPELS: Surgeons may soon be using an updated Stone Age tool to perform delicate operations. Anthropologist Payson Sheets of the University of Colorado is working with an eye surgeon to test scalpels modeled on blades ancient Mayans crafted from obsidian (volcanic glass). "The fractured-glass edge is vastly sharper than anything commercially available with a honed edge," Sheets says. The obsidian blades are only four-billionths of a centimeter thick. Though the blades are still experimental, Sheets believes it may be possible to sell them for \$15 apiece. Diamond scalpels cost \$800 and up. The use of obsidian blades has been traced as far back as 2000 B.C. "So what we have," Sheets says, "is almost 4000 years of research and development."

..from Allan Maurer in Omni ..via Readers digest

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Advertising by a rock-hobby business or interest is permitted with approval of the Board, at a rate now set at \$15.00 per full page per insertion, paid in advance. 1/2 page \$7.50, 1/3 page \$5.00 1/4 page \$3.75 (min). These ads will be placed throughout the bulletin as space permits.

Subscriptions to THE PICK & SHOVEL are \$5.00 per year mailed.

Dues to LINCOLN GEM & MINERAL CLUB are as follows:

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

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

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

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

DON'T FORGET: General meeting, Saturday, April 28th, 7:30 P.M.
at NE Center, 33rd & Holdrege

Junior meeting at 7:00 P.M. preceeding
general meeting

See you at the April general meeting . Try to attend!!
An interesting program is planned.

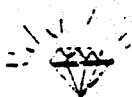
See You There!!!!



H.E.L.P.

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