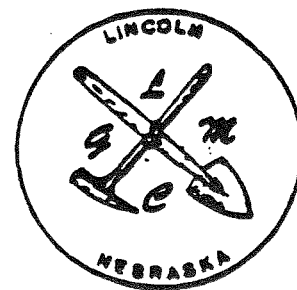


THE PICK & SHOVEL



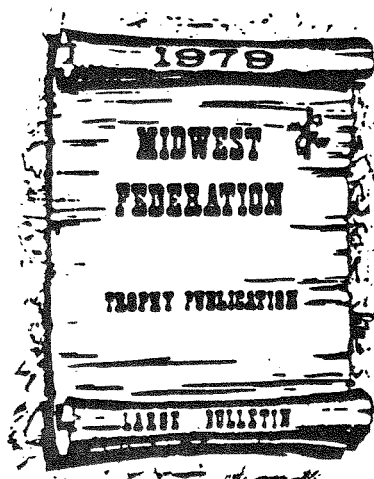
APRIL 1985

In this issue

"NEBRASKA HIGHWAY No. 2"

"PERSPECTIVE"

"OUR NATIONAL PARKS & MONUMENTS"



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) (Life membership)
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

1985 ELECTED OFFICERS:

President	Claude Scott	4917 Normal Blvd.	Lincoln, 68506	488-0739
1st Vice Pres....	Roger Pabian	315 'D' St.	Lincoln, 68502	474-2034
2nd Vice Pres....	Linda Parks	2435 S. 19th St.	Lincoln, 68502	476-6798
Secretary.....	Vera Lyman	420 N. 56th St.	Lincoln, 68504	464-6089
Treasurer.....	Phyllis Parks	2435 S. 19th St.	Lincoln, 68502	476-6798
Board Member....	Mark Mercier	3316 'R' St.	Lincoln, 68502	476-6242
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, 68508	488-1884

NOMINATING COMMITTEE -- 3 years: Vera Lyman, John Lewis
2 years: Jim Parks, Ervin Marshall
1 year: Richard Haney, Wilfrid Wittmann
Jim Taylor, Chairman

LONG RANGE PLANNING AND BY LAWS COMMITTEE:

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

STANDING COMMITTEE CHAIRPEOPLE:

Calling.....	Phyllis Parks	Membership.....	Linda Parks
	Marie Wells	MWF Liaison.....	Marie Taylor
Education/Publicity...	Roger Pabian	Programs.....	Bob & Mary Walker
Historian.....	John & Lillie Lewis	Scholarships.....	Marie Taylor
Hospitality.....	Susan Taylor	1985 Rockhound/yr...	Roger Pabian
Housing/Property.....	Claude Scott	1985 Annual Show....	Vera Lyman
Junior Activities.....	Janet Wright	1986 Annual Show....	Fred Holbert
Librarian.....	Jim Parks	Christmas Party....	Marie Taylor

AUDITING COMMITTEE 1984.....John Abel, Ervin Marshall
Virginia Green, Phyllis Parks, Treas.

PICK & SHOVEL STAFF:

Editor.....David Heffelbower 1819 Washington, Lincoln, NE 68502
Asst. Editor....Vera Lyman 420 N. 56th St. Lincoln, NE 68504 (NAOESCI)
Sunshine Corner..Susan Taylor
Reporters.....Julius Young, "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.

Calendar of Events

GENERAL MEETING: 7:30 P. M. , April 27th, 1985
 Nebraska Center, 33rd & Holdrege

JUNIOR MEETING: 7:00 P. M. Same Location

BOARD MEETING: 7:30 P. M. May 2nd, 1985
 Nebraska Hall, Room 115
 UNL Campus, 17th & W Sts.

* * * * *

NOTICE OF CHANGE OF MEETING DATE:

MAY GENERAL MEETING: 7:30 P. M., May 18th, 1985
 Nebraska Center, 33rd & Holdrege

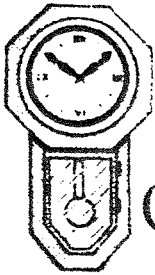
* * * * *

APRIL 26 - 28: Hastings Gem & Mineral Club
 Annual Show
 Adams County Fairgrounds
 Hastings, NE

May 4th & 5th STATE SWAP
 Hosted by 100th Meridian Club
 Dawson County Fairgrounds
 Lexington, NE

Regional Show Schedule 1985

CALIFORNIA	EASTERN	MIDWEST	NORTHWEST	ROCKY MOUNTAIN	SOUTH CENTRAL
Ventura California July 26-28	Charleston W. Virginia June 20-23	Sioux Falls South Dakota July 18-21	Burley Idaho August 2-4	Denver Colorado Sep. 13-15	Wichita Falls Texas April 5-7



TIME CHANGE

-----Just a little reminder. Suddenly the clocks will all "spring" ahead one hour at approximately 2:00 A.M. on Sunday, April 28th. However, this will not affect our meeting on Saturday, April 27th. Just remember to retire one hour sooner that evening or you'll lose 60 minutes of "shut-eye"!

* * * * *



On Monday evening, April 8th, 1985, the American Legion awarded Glenn Lyman the honor of being chosen as "Officer of the Year". The award was granted for more than 30 years of service and dedication to Law enforcement.

Congratulations
Glenn
from L.G.M.C.

* * * * *

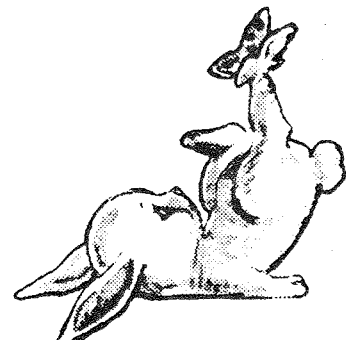
HOW'S THIS FOR AN EASTER EGG?

MOSCOW.....Jeweler Carl Faberge made an exquisitely designed Easter egg for the czarina in 1884. The gold shell was enameled over a white body and when the shell was pulled open a yellow yolk of pure gold was revealed. The yolk could also be opened, revealing a hen crafted from white and yellow-tinted gold. Red gold formed the beak and comb; rubies served as eyes. When the hen was lifted from her nest a tiny egg-shaped ruby pendant was disclosed.

- via Gems



HAPPY EASTER



President's Message

The Lincoln Gem and Mineral Club has just finished with another very successful annual show. The displays, attendance and programs were all very good. I want to thank everyone again who spent so much time and hard work planning the show and following through to make it a success.

Please mark your calendar that the regular May meeting will be held the 18th, which is one week earlier, because of Memorial Day being observed on the 27th.

I urge every member to be present at the regular monthly meeting on April 27th. We have an important issue to act upon. We delayed action at the March meeting since there were so few members present. The issue is "what are the wishes of the general membership of the Lincoln Gem and Mineral Club in regards to support and help for the University if Nebraska State Museum?".

We will see all of you on April 27th.

Claude

Please be sure to attend the general meeting on April 27th. At this meeting we will debate and act upon the proposal the the Club become a dues paying member of The Friends of The State Museum. In light of the recent flap over funding for museum operations during the current legislative session, the board wanted the input of its membership on this issue.

The Editor

THANKS

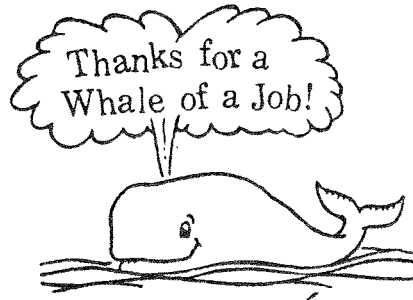
As I turned the calendar page on Monday morning to April 1, the final details of the '85 Gem and Mineral Show were closing in on me, and the true realization struck that another annual Show is again history.

After all bills are paid, it appears that our show will again be another financial success. The actual amount is not known at this time. Even if the dollar amount should perhaps show a red indicator, my personal feelings are that it was a "great success".

The many compliments bestowed upon us by dealers, demonstrators, fellow rockhounds and visitors far outweighs the financial pendulum.

My sincerest "THANKS" to my Show Committee for their dedication and support. Also to Club members who assisted whenever needed. Thanks to dealers, demonstrators, exhibitors, people who presented programs and all visitors. These factors all contribute to a successful endeavor such as this.

Your '85 Show Chairman
Vera



* * * * *

LOOKING AHEAD

TO 1986

Now that the '85 Show is history, we will begin looking ahead to the '86 Show. Most of you already know that Fred Holbert will be our Show Chairman and will be seeking your support and assistance. Be ready to lend a helping hand.

As experience lends itself, the '85 Committee will have some helpful hints which will afford some excellent improvements, even if they sometimes seem small or trivial.

The dates for the '86 Show have already been set and each of us can make plans accordingly. (April 5 & 6, 1986)

Here's to you, Fred! An exciting and rewarding challenge.

With "BEST WISHES FOR SUCCESS"

From your predecessor & committee,
Vera

LINCOLN GEM & MINERAL CLUB * Board of Directors - March 7, 1985

The meeting was called to order by President, Claude Scott at the Nebraska Hall, Room 115, at 7:30 P.M. with 8 Board members and David Heffelbower present.

Minutes of the February Meeting were read with motion for approval by Roger Pabian, 2nd by Phyllis Parks. Motion carried.

Treasurer's report was read with motion for approval by Vera Lyman, 2nd by Roger Pabian. Motion carried.

SHOW BILLS: For approval and payment.

\$ 64.80 Roger Pabian, Display Ad in Daily Nebraskan

Paid but presented for approval:

\$ 250.00 Francis Latimer, for expenses incurred to come to Show and demonstrate carving.

\$ 30.66 Jim Taylor, Dealer Chairman expenses
(4.40 - postage, 26.26 - phone calls)

\$ 69.80 Schwarz Paper Co., Table covering & tickets
(53.81 - 5 rolls table paper, 15.99 - 6 rolls tickets)

Motion for approval by Roger Pabian, 2nd by Marie Taylor. Motion carried.

CLUB BILLS: Paid but presented for approval:

\$ 149.30 NE Center, (Jan, Meeting-Swap Room - 90.00
Refreshments - 59.30)

\$ 30.00 NE Center, Feb. Meeting Room

\$ 128.76 U of N, Printing Pick & Shovel (Dec. 15.55)
(Jan. 49.88 Feb. 63.33)

For approval and Payment:

\$ 62.50 U.S. Post Office - Roll of 12.5¢ precancelled stamps
(500)

\$ 200.00 Janet Wright - Scholarship award at '85 Show

\$ 200.00 Lee Pivonka - Scholarship award at '85 Show
(from Club Education/Scholarship Fund)

\$ 29.21 Phyllis Parks - (Misc. copy, 1.38 & 5.49
receipt book 6.73, Analysis pad 4.17,
plastic forks 1.44 (Jan Mtg), stamps, Treas. 2.00
Stamps, swap flyers 8.00)

\$ 33.00 Security Storage, 1 mo. 10 X 10 storage bldg.

\$ 33.00 Security Storage, Deposit for bldg & security key
(returned when we relinquish building)

\$ 3.33 Dave Heffelbower, additional postage for Feb. P & S
(on 11¢ precancelled stamp)

Motion for approval by Roger Pabian, 2nd by Marie Taylor.
Motion carried.

OLD BUSINESS:

President thanked Jim Stewart for offering his garage for storage.

President Claude Scott presented stencil he had made to mark Club Cases.

- continued

Board of Directors - March 7, 1985 - continued.

The extra \$ 1.00 paid by Mr. & Mrs. Lester Hunt to go into Club Education/Scholarship Fund.

BANKING:

First National CD #173309 which came up for renewal on March 7, 1985 has been renewed with CD#186674 with a base amount of \$ 15,000. for 6 months at 9.23%. Interest will be paid by check to savings or Transmatic account.

Based on Jan. 1 balance of \$ 18,684.30
(\$ 15,000. into new CD \$3000. into Money Market Savings Acct
00-540188 at NBC
\$ 684.30 into checking at NBC

Board decided to return and cancel Bank-in-the-Box card because there is a fee for the card and the treasurer has no need for it.

NEW BUSINESS:

Motion by Roger Pabian that we recommend to General membership at March meeting that LGMC become member organization of Friends of Museum. Annual fee is \$ 10.00. 2nd by Linda Parks. Carried.

Audit is not done. Claude Scott will appoint a new chairman in John Abel's place if he is not going to take care of this.

Question of dues for Lincoln Community Arts Council. Claude Scott will check with Helen McGowan and tell them to send us a bill.

MEMBERSHIP:

Rev. & Mrs Pfeiffer paid membership dues. Motion to reinstate Mrs. Pfeiffer by Marie Taylor. 2nd Vera Lyman. Motion carried.

SHOW REPORT:

Finalization of all committees by Show Chairman, Vera Lyman. Show should go well.

President announced that this was last chance for All-American Award, in Janet's absence.

Meeting adjourned. Next meeting to be at NE Hall, Rm 115.

Respectfully submitted,

Vera Lyman
Vera Lyman, Secretary

LINCOLN GEM & MINERAL CLUB - General Minutes - Mar. 23, 1985

The Meeting was called to order by President Claude Scott in the Fremont Room, NE Center at 7:30 P.M. with 6 Board Members present. He thanked everyone who took part in the annual show.

Show Chairman, Vera Lyman then presented Bill Highfield, Murdock, NE with the 30" x 40" oil painting of the Indian Scout, by Francis Latimer. He was the winner of the Raffle with ticket #24.

Since the March Pick & Shovel was not out, minutes of the Feb. meeting were read. Motion for approval by Marie Taylor, 2nd by Linda Parks. Motion carried.

Treasurer's report was read. Motion for approval by Jim Taylor, 2nd by Janet Wright. Motion carried.

HOSPITALITY REPORT:

Susan Taylor reported 19 members present. Guests were Bill Highfield, Nene Sow and Greg Lyman.

SCHOLARSHIPS:

Janet Wright introduced Nene Sow, who was chosen by Board as one of our annual scholarship recipients. Marie Taylor, Scholarship Chairman, then presented Nene with a \$ 150.00 check. Nene missed our Sat. Night Awards dinner because she thought it was on Sun. night.

OLD BUSINESS:

President announced that our Club properties are now stored at 1920 Knox St.

Linda Parks brought up discussion of joining Friends of Museum. Marie Wells gave lengthy report on financial need and stated the Friends of Museum Board of Directors voted in favor of supporting museum. Motion by Irl Everett that we wait until April meeting when more members are present. 2nd by Susan Taylor. Voted with show of hands. President's count was 8 for, 5 against. Motion carried.

Motion by Wilfrid Wittmann that we definitely make decision in April on Museum issue. 2nd by Marie Wells. Motion carried.

Question of delays on Pick & Shovel. Dave said March issue will be mailed out Monday. There will be no problem with the April issue.

NEW BUSINESS: None

SHOW REPORT:

Vera reported the Show went very well. She thanked everyone who helped; a special thanks to Jim Taylor for all his assistance.

ANNOUNCEMENTS:

President Scott announced that the Walkers have resigned as Program Chairmen. He is not going to assign anyone to fill their vacancy. Feels there are enough resources among Club members. If you have a program, please get in touch with 2nd Vice, Linda Parks.

General Minutes - March 23, 1985 - continued

Hal & Darlene Jansen have 10 Pony Showcases for sale for \$ 30.00 each.

Letter from "Art in Park" at Hastings, Chautauqua Park. June 30, 1985, 10:00 A.M. to 5:00 P.M. (6' x 12' space by reservation only). Requested Club members to participate in their annual event.

Janet Wright announced that the Juniors earned \$ 44.00 on their Grab Bags at the Show. She received letter from Rev. Pfeiffer noting they had used his different sands at last year's show. Copy of letter will be in Pick & Shovel.

Marie Taylor announced that Dick (Dick's Rock Shop/Colorado), one of the dealers at our Show this year, had borderline heart attack and was admitted to a Lincoln Hospital. Plans to be able to go home on Monday.

No further business, meeting was adjourned.

Janet Wright presented an interesting program of her studies and findings in the Ogallala area.
Refreshments of coffee and cookies were served.

Respectfully submitted,
Vera Lyman
Vera Lyman, Secretary

Lincoln Gem & Mineral Club, Inc.
Treasurer's Report April 1, 1985
March 1 - NBC Checking Acct. 347.53

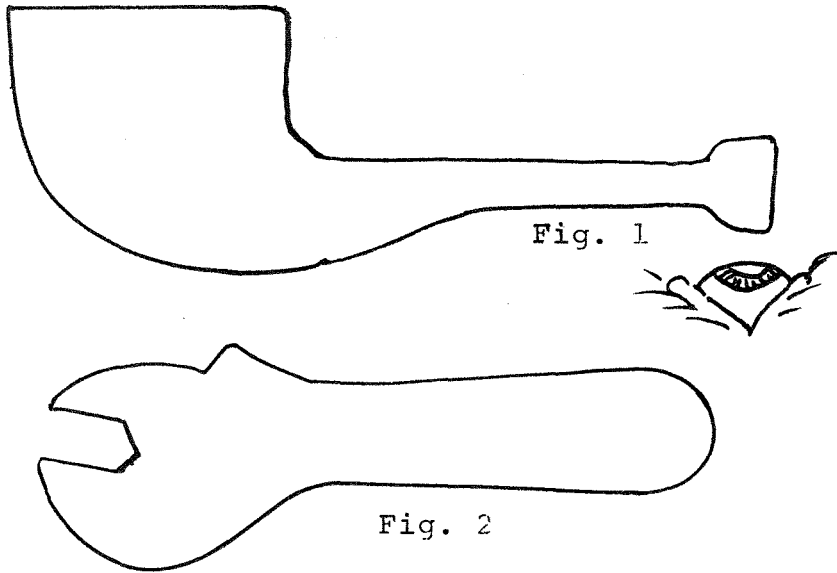
March Receipts-
1985 Mambership Dues 51.00
1985 Show 3039.21
Jr.Activities show 44.00
FNB to NBC checking 1214.67
(Reinvestments)
4348.88

March Payments-
Meeting room 30.00
Storage 66.00
Pick & Shovel 194.59
Show 1054.02
Misc.exp. 29.21
2 scholarships 400.00
1773.82

March 31, 1985 NBC Checking 2922.59

PERSPECTIVE

At the recent Kansas City Show, my good friend, Bill White, of Independence, Missouri, gave me a couple of preformed cabochons that are illustrated in figures 1 and 2. Bill has a diamond wire saw and he is able to cut out some of these exotic shapes. Bill has won the AFMS trophy in cabochons and his grandson, Marty, has won this same trophy in the junior division.



Bill and I often discuss a subject I will refer to as cabochon theory. Here, we simply treat a cabochon as if it were a large collection of points in a curved space.

We should also give a few minutes to something called perspective, for an object may not appear to be what it is or what appears to be may be something it is not.

A lapidary may gain some insight into this by taking a common object and rotating it in space so that many different views can be seen. Try this with an oval cabochon to see the variations.

Figure 1 above is obviously a pipe and Figure 2 is a small crescent wrench. Properly tilted, each could be made to appear as elongated rectangles or a shortened rectangle. This can be accomplished simply by tilting the above objects in space. Each of the above objects also occurs in a plane in space, and if we take the pipe in Figure 1, and tilt the entire plane in which the pipe exists in a clockwise direction from the top of the page, the new perspective gives us a periscope. If we were to tilt the same pipe 45 degrees counterclockwise, it might appear as an old-fashioned ear trumpet.

This little exercise has considerable practical application not only in the workshop but also in the field. Often a fine agate, fossil, or crystal will not appear as such when it is seen. It is a good practice to work over the outcrop from several different directions. What may not show from one direction will be apparent from another. "Museum views" are rarely encountered in the field. One needs to learn how something appears from many different points of view. Even the terrain can dictate to the collector what path to take over the outcrop or gravel bar. Develop other pathways than the very obvious ones. The perspective that we can develop in the shop and in the field is not an inborn instinct but is something we can all have simply by changing the direction we walk or the orientation of an object in space or the orientation of the space in which the object exists. Try it.



Thanks! →

Andrea

Thanks!
Garen Miller

Thanks
Phil Abel

THANK YOU!!!
Thank You
Scott & Carina
McClery

With greatest
appreciation,
Anne Renee Crawford

Mr. & Mrs. Lewis

Mr. & Mrs. Wells

Rev. & Mrs. Pfeiffer

Jim Null

Thanks
Reagan
Wright

and all of the adult members
for your support of the Juniors.
A special thanks to those named for
their contribution of specimen
material.

NEBRASKA HIGHWAY No. 2

"In the spring the rockhound's fancy lightly turns to thoughts of travel," and scrounging spots for rocks, minerals, gemstones and fossils. The questions are: where to go, and where are the "best diggin's." Old No. 2 is one of our favorites. Its path through the Sand Hills was not easy to travel until recent years; because powdery, dry sand is a difficult traction surface. The rule is—"Stay on the hard-surfaced roadways."

No. 2 was a delight, even before improved facilities tamed the sandy stretches. It extends over greater mileage in our state than the better known I-80. It reaches from the Missouri River at Nebraska City to the South Dakota border northwest of Crawford, in the Oglala Grasslands and Pine Ridge areas, where some of the topography is rather rough. To borrow a hillbilly expression for distance—"Its length in Nebraska is more than just a right smart git." There are no long, steep, hazardous inclines (grades).

The altitude changes are gentle, and hardly noticed over most of the way. Below are some altitude and mileage figures from a recent issue of a road atlas:

Nebraska City (alt. 1029 ft.), 50 miles to Lincoln (alt. 1176 ft.), 98 miles to Grand Island (alt. 1870 ft.), 81 miles to Broken Bow (alt. 2475 ft.), 193 miles to Alliance (alt. 3959 ft.); about 100 miles to S. Dakota line. (Nebraska's highest point is 5426 ft., in S.W. corner of the panhandle—146 ft. higher than "mile-high Denver!")

Most LGMC members know the features along this well-endowed highway, and the interesting places near it. A traveler should try to add as many as possible to the itinerary. They can be most enjoyable also.

Many haste-natured tourists pass worthy places by, always seeking more distant or better-known objectives. They do not all care for the same kind of scenery, historical sites and recreational attractions. Myrtle and I have found this to be true as we traveled over all the states west of the Mississippi River, except Louisiana. (Our eastern travels have been much less extensive.)

My first memories of old Highway #2 date back to August, 1922. A Wayne State College friend and I, in a borrowed Model-T Coupe, returned to our parental homes between Craig and Oakland, Nebraska via Alliance, Broken Bow and Lincoln. We had been on a teaching job search in South Dakota, Wyoming and Nebraska. I contracted at Murdo, S. Dakota to teach science, history, math and English. Furthermore I would coach boys' and girls' athletics, and be Principal of the High School. (salary \$1600.00!) Cecil Davis, my fellow job-seeker, signed up at Hyannis, Nebraska; at that time known as "The Millionaire's Town".

NEBRASKA HIGHWAY No. 2 - continued

We left Alliance in early morning, east on #2, then named "The Potash Highway", and low-gearred 125 miles that day on the unimproved Sandhill road, not yet "hayed". "Hayed" is sandhill jargon for roads one step above "primitive". The wind-blown sand had not changed much since early geologic times. Roads covered with hay gave better traction. We learned that reducing air pressure from 60 to 30 lbs. in those old high-pressure tires also helped the quivering Model-T in our sand-choked snail's pace, in low gear. Ex-Model-T drivers will appreciate Henry's planetary low. Modern cars, tires and paved roads are a blessing.

Modern Potash Highway travelers may not realize how near they are to car trouble until they get off the hard-surface road onto the shoulder, or attempt to drive on an unimproved branch road.

How did No. 2 get the name "Potash" Highway? The explanation involves a bit of World War No. 1 history. (That delightful altercation to end all wars!) The Germans blocked all U.S. imports of strategic potash (nitrates) desperately needed for explosives and agriculture. Potash deposits were discovered in the alkaline lakes along old Hy. #2. Boom towns and factories soon sprang up to recover and process the potash. The war ended and the structures were abandoned. A Lincoln Salvage company gathered much of the junk. Some scattered material may still be seen near Antioch.

Tourists will find many of the Highway No. 2 points of interest mentioned in guide books and maps. Rockhounds are especially fond of the Crawford area. L.G.M.C. has sponsored field trips there, and many fine specimens of chalcedony and agates have been brought home.

Ft. Robinson, near by, abounds with history, geology and minerals. In Sioux County south of Harrison are fossil beds, now a National Monument on the old Ok Ranch of Captain James Cook. The Sand Hills are dotted with recreational lakes, not all alkaline.

The nation's largest man-made forests are along this old Potash Highway, or not far away. Fire partially destroyed one near Halsey twenty years ago, but it has largely recovered. Prepare your R.V. and C.B., and enjoy yourself without leaving Nebraska.

National Geographic Society recently published a hard-back volume "Exploring America's Scenic Highways". Nebraska's Highway No. 2 is one of eight featured.

- Submitted by J.D. Young

OUR NATIONAL PARKS AND MONUMENTS

Surely no travel could be more rewarding than seeing the splendors of the national parks and monuments of our own senic United States. Last summer it was my privilege and delight to see a number of these for the first time. Some of them I had seen from the air, which only whetted my appetite for a first-hand experience. To be the one student in a nine-weeks-long geology class with a professor who had conducted at least twenty-five actual geology field trips over these areas was beyond my wildest dreams.

Gilbert and I left Nebraska for the Northwest the middle of July. Our first major stop was the Gangplank, a narrow strip of I-80 in eastern Wyoming as one travels toward the Sherman Hills. The discovery of this gentle approach with the nearby shattered Sherman granite for ballast enabled the Union Pacific Railroad builders to move much faster than their westward counterparts. The granite rocks to the west of the Gangplank are more than a billion years old (Precambrian), while the sedimentary rocks to the east are only ten million years old (Miocene). Of course we stopped to pay our respects to the tree in solid rock at the top of Sherman Hill, said to have been watered by firemen as the trains passed.

We stopped to picnic in Vedawoo, a mysterious jumble of rocks resulting from spheroidal erosion of the old Sherman granite. It is marked only by a small rest stop marker at the side of the highway and proves to be a delightful surprise to anyone expecting only a rest stop. Dr. Neihardt and Myrtle and J.D. Young and I had picnicked there when we took Dr. Neihardt to exhibit his lapidary work by special invitation at the National Gem and Mineral Show in Salt Lake City in 1969. I think Vedawoo was the one place in the entire trip where I had been that Gilbert hadn't. It is easy to miss.

From Laramie we crossed the range of the Snowy Mountains and stopped at Medicine Bow Peak to survey the vast panorama of meadows and far mountain ranges. On a clear day you can see Long's Peak from there.

Independence Rock and Devil's Gate, through which the Sweetwater River flows, were our next stop. The impact of the stories of the early pioneers over the old Oregon Trail is something everyone should have the opportunity to experience. Imagine the trauma and travail of the Mormon handcart families as they passed that way. What a fascinating, heroic, sad story!

The Big Horn Mountains claimed us next--down Ten Sleep Canyon, up Shell Creek Canyon. There is a little Spanish Point agate shop at the west entrance to Shell Creek Canyon that sells beautiful stuff. The wonderful Buffalo Bill Museum at Cody, Wyoming, has an outstanding collection of western paintings and sculpture, especially Remingtons.

Because of Neihardt's writings I had long yearned to see the Custer Battlefield, southwest of Billings, Montana, on the Crow Indian Reservation. It has been very well developed in recent years as an historic site, with its museum and battlefield. Excellent presentations are given on the battle, the military life of the time, and the Sioux culture. It is very impressive, very touching.

The Madison Buffalo Jump State Monument, overlooking the Madison River south of Three Forks, Montana, was next on Gilbert's photography list. (All the while he was teaching me the geology, Gilbert was photographing it in slides of panoramic views to project on the planetarium dome at Midland College in Fremont. Each scene has to be photographed in matched sets of right, center, and left. These have to be mated and masked just exactly to project on the doubly-curved planetarium dome. The projections are then used for teaching geology and for giving programs for interested groups. When the slides are finally ready, we will invite the Lincoln Gem and Mineral Club.)

The Madison Buffalo Jump is a poignant reminder of the Indian way of life. It is said that Indians came for hundreds of miles to use this jump. Conditions for selecting such a site had to be just right--a broad expanse where buffalo herds could graze, narrowing to the top of a steep bluff, off which the unwary buffalo could be stampeded by bands of Indians threatening them from either side. The resultant kill and butchering took place below. There are several buffalo jumps in Nebraska, including one just south of Fremont, though none as famous as this.

Following the Madison River northward, we came to Three Forks and Trident, where the Madison, Jefferson, and Gallatin Rivers join to form the Missouri River. Usually we think of a river as starting with a rivulet which grows larger and larger as tributaries feed into it. Not so the Missouri. The three branches join to form the Missouri. It is a beautiful, full grown river--not muddy--at its very headwaters. Here it flows clear and sparkling through the beautiful Missouri River Canyon.

We saw the falls at Great Falls, Montana, and were saddened by the defunct refinery of the Anaconda Copper Company at Black Eagle Falls, so named by Capt. Meriweather Lewis. The little timbered island he described is still there, but the deliberate destruction of the Anaconda refinery and now the closing of the even greater Kennicott mine operations near Salt Lake City are an unwelcome reminder of change. The Giant Springs just east of Great Falls, with its tremendous flow of water at 300 lbs. per square inch pressure, is almost more spectacular than the Falls themselves. Among our favorite attractions at Great Falls, however, was the Charles M. Russell museum, home, and studio.

East Glacier, Montana, was really our beacon through all these travels, and it was somewhat awesome to me to see not only the majestic Northern Rockies but the old railway station and the grand old lodge where my mother and father had gone on their honeymoon seventy years before. Until now, Mother's accounts had seemed like some storybook tale. The bear grass still does; we saw not one spike on the entire trip.

But the scenery was spectacular and the geology equally so. Our side trip up Marias Pass to the Roosevelt Monument gave us good views of the incredible Lewis Overthrust. It is here that a great plate of Precambrian rock has been thrust eastward over the younger Mesozoic and Paleozoic formations of the great plains. The overthrust block has moved eastward at least fifteen miles over the younger rocks. The forward edge of the overthrust is clearly delineated for miles as it forms the east rampart of Glacier National Park.

The little town of St. Mary, home of long-time friends of Gilbert's, was our first Glacier National headquarters. From there we explored Two Medicine Creek and Trick Falls, Two Medicine Lake, the beautiful Upper St. Mary Lake with its quaint little Goose Island, and were appropriately impressed by the mountains and glaciers. The trail to Iceberg Lake was closed because of recent bear maulings, but Grinnell Glacier with its waterfalls was lovely. However, Gilbert was dismayed to see how much the glacier has retreated since he saw it first in the middle 1930's. Even then it had already shrunk into two glaciers rather than one. One of the most memorable experiences was the boat ride on Waterton Lake in the Canadian end of the park. It was cloudy, foggy, even rainy all day; but that lent an air of majesty and mystery to the fjord-like scenery, giving everything the air of a Japanese landscape. It was a great experience too to "dine" there in the imposing Prince of Wales Hotel.

To reach West Glacier, where Gilbert also used to stay in earlier days, we took the spectacular Going to the Sun Highway, considered by some to be one of the ten most breath-taking drives in the world. Surely the building of that highway ranks among the greatest engineering feats of all time. The sweet cherry country, mile after mile along the east side of Flathead Lake on the way to Missoula and Butte, Montana, was a great contrast; but the huge, juicy black-red fruits were most welcome. Butte, however, was another reminder of the sad state of our copper industry.

Virginia City and Ennis (great rock shop!) were fun stops on our way to another somber spectacle, the Madison Canyon slide area of the August 17, 1969, earthquake, Earthquake Lake and Hebgen Reservoir. The tragedy was an awesome introduction to the beauties of Yellowstone National Park, and I'm glad we saw it first.

The mystery of Yellowstone must surely be the dominant impression to anyone who sees this national park. I had long supposed that Old Faithful was primarily what the park was all about. I wasn't disappointed in Old Faithful, but my real love is the Canyon of the Yellowstone with its subtly alive colors. Following closely are Minerva's Terrace of Mammoth Hot Springs and the Porcelain Basin. For cool contrast try Hayden's Meadows and views of Specimen Ridge through high powered binoculars (trails there are now closed). Diversify a little with a side trip up to the rugged Bear Tooth Plateau outside the park. Yellowstone has greater diversity than any other national park we have visited.

Specimen Ridge deserves more consideration. Twenty-seven successive forests of petrified trees are buried there in pyroclastic materials. These layers are now exposed by erosion on the sides of the ridge.

The Tetons were the crowning glory of the trip. No wonder they are referred to as the Grand Tetons. I can feel why, though I can't actually see why. They aren't the largest. They probably are not the most beautiful. Is it because they are so neatly and compactly arranged that one can get a better grasp on them and incorporate them more fully into ones being? Whatever the reason, I know I shall want to return again and again. The view of the Cathedral Group (Grand Teton, Teewinot Mountain, and Mt. Owens) across beautiful Jenny Lake is the superb memory. The Chapel of the Transfiguration with its altar cross silhouetted against the background of the majestic Tetons perhaps best expresses

the spirit of these mountains.

A cabin for the night at Dubois, Wyoming, with the romantic Wind River at our back door marked the beginning of our return to Lincoln by way of Ft. Laramie and Scotts Bluff. We had been gone four weeks. We could hardly wait for the necessary three weeks of washing, bill paying, letter answering, and re-packing to pass so we could set out on Part II of our love affair with our national parks.

--Florence Boring Lueninghoener

Dear Gem Friend:

3022 So Wheeling

Aurora, Co. 80014

Feb 23, 1985

It was by way of
some of the L.G.M.C. we

learned you had a very interesting
display at the 1984 Show. We were hap-
py that you could use some of our
accumulations to have something
of interest.

Several years ago we had a map
of USA with specimens of soils and
sands for each state, plus extras
from other nations. They were in small
medison bottles.

The Pick & Shovel keeps us in-
formed of the activities and with
the 1985 Show you may have still
something to display

Greetings to all our friends
of the L.G.M.C. March Show 16-17

Mildred & Ray Pfeiffer
3022 So Wheeling Way
#307 Aurora, Co 80014

Midwest Federations NEWSLETTER



Published monthly except July and August as a service to member clubs. All news and articles should be sent to the Editor, Mrs. Betty Smith, 10807 Mary Ann, Zeeland, MI 49464. All subscription orders should be sent to Parrot Printing Service, 2125 Forest Ave., Des Moines, IA 50311.

PRESIDENT
James Edwards
106 Somonauk
Park Forest, IL 60466

1ST VICE-PRESIDENT
William Parch
P.O. Box 180
Fountain City, WI 54629

2ND VICE-PRESIDENT
Mrs. Esther Mullaly
30018 Dawson
Garden City, MI 48135

SECRETARY
Miss Jean Reynolds
107 Tuttle Avenue
Clarendon Hills, IL 60511

TREASURER
Mrs. Kitty Starbuck
7636 V Avenue East
Vicksburg, MI 49097

MARCH

1985 - Issue No. 252

OUTSTANDING ACCOMPLISHMENTS BY TWO ILLINOIS CLUBS

Illinois State Director Assistant, Carl Dach, and two of his clubs, The Ken-Rock Gem & Mineral Society and The Blackhawk Rock Club of Rockford, are to be commended for outstanding contributions to their community and to our hobby.

For twenty years Carl personally taught lapidary classes, totaling more than 400 students, at the Ken-Rock Community Center. After his retirement he gave up this work so he could be free to travel. Realizing the public's continued interest, Max Ford, President, and the members of the Ken-Rock Gem & Mineral Club took over these classes with members taking turn at teaching. Their classes are full with some students doing outstanding work. This club also made a \$100.00 contribution over Christmas to the Empty Stocking Club in Rockford.

The Blackhawk Rock Club advanced their MWF Scholarship status over 3000% in 1984 along with donating \$500.00 to the Empty Stocking Club and making headlines in the Rockford Register Star.

Rock clubs doing such fine community and club work as these two can only be an asset to our hobby. Carl Dach is not only the assistant State Director responsible for these two clubs but also an active member of both.

Bill Myers, Illinois State Director

LEGISLATION/ENVIRONMENT - LOOKING AHEAD IN '85

Congress is back with a few new members and ready to start their committee deliberations. With the reelection of a popular President, most of the past policies will be continued. The Interior Department will place some Federal lands up for leasing in the potentially rich areas for gas, coal, oil and minerals. Our domestic supplies of gas and oil are not meeting our economic demands and we depend on imports.

Some legislative action on acid rain will probably occur this year but its effective date will be about five years later. Another component in acid rain is nitrogen oxide from automobile exhaust and the only solution is the removal of older model cars. The Chicago ban on leaded gas is now being considered by Maryland. Increased lead levels in the blood can cause learning problems in children in metropolitan areas.

There appears to be no easy solution to the asbestos dilemma in schools and public buildings. EPA finds that the number of asbestos fibers floating in the air exceeds their limits. School boards and municipalities have a real dilemma because of parental concerns of years of exposure of their children to this environment. It's a \$2 billion problem.

New legislation is expected on herbicides/pesticides. Tumor warning labels are already approved in Iowa and Nebraska. Also EPA is drafting a proposed rule to prohibit the use of glycol esters in consumer products such as varnish, paint remover and glues. Glycol esters cause potent reproduction effects and are associated with kidney, liver and nervous system disorders.

John Boland, Chairman Legislation/Environment

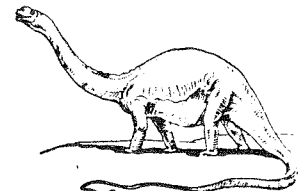
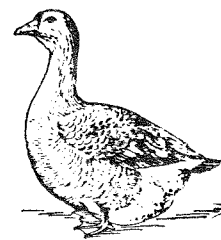
WELCOME NEW MEMBERS

THE MAPLEWOOD MINERAL CLUB was organized in January 1965. They meet at the White Bear Lake Community Service Building in White Bear Lake, Minnesota. The current President is John L. Howard, 3517 Hilltop St. in the same city. Their bulletin, the Maplewood Mirror, is Edited by Marcia Hooper, 6266 15th St., North St. Paul, MN. We welcome these 115 members to the Midwest Federation.

ATTENDING THE MIDWEST FEDERATION

MEETING IN MARCH?

bring your money, and come prepared to have a good time. The Financial Committee made up of Bill and Marian Parch, Bob and Esther Mullaly and Kitty and Marve Starbuck are going to have a "live" and "silent" auction to set up an ENDOWMENT FUND for the Midwest Federation. Lots of neat things from dinosaurs to Canadian Geese



will be on the auction block...so come and join the fun!!

See you there...

Kitty and Marve Starbuck, Chairman
Finance Committee Ways and Means

A BASIC GUIDE TO JUNIOR ACTIVITIES (by Diane Dare) is a real bargain at \$1.50. It is available from the Director of Supplies, Nanette Aiken, 219 Park Drive, Glenwood, IL 60425. Nanette has many other books, pamphlets and supplies on hand....

FIELD TRIP INFORMATION (IN CONNECTION WITH THE MWF SHOW AND CONVENTION)

Submitted by June Zeitner

Advance registration is required for post show activities. Because of the difficulty of taking large groups on dusty trails, and often in fragile environments, or with limited parking, each field trip has to be limited. Assignment of trips will be on a "first-come first-served" preregistration basis. To make the trips available to as many people as possible they are planned on a share-the-ride basis. Please indicate if you will be willing to leave your car at the meeting place and ride to the collecting site with someone else, or if you will be willing to take additional collectors along in your car. If there will already be four adults in your car please indicate. It will only be possible to attend one guided trip per day, however maps will be available for self-guided trips any day. If you cannot be assigned to your first choice trip, please let us know other choices. For Field Trips 1 through 5 and for the Murdo Open House and Swap fill out the first part of your blank and mail to MAXINE WILSON, Murdo, South Dakota 57559. For Field Trips 6 through 10, plus the Fossil Collectors Open House at Black Hills Institute and the Museum of Geology Meeting for Micromounters with Bill Roberts, please register with JUNE ZEITNER, (second half of your blank) 5203 South Canyon Road, Rapid City, South Dakota 57702

You will be responsible for making your own reservations for accommodations. Each club is being sent a book with motels, campground, restaurants and tourist attractions in South Dakota. If you need more help call MAXINE 604-669-2256 or JUNE 605-341-6656.

From July 22 to July 27 we recommend the following. Starred attractions will give a discount or free admission with club membership card.

- | | | | |
|------------------------|----------------------|-----------------------|-------------------|
| Rushmore-Borglum Story | - Keystone* | Mount Rushmore | - Keystone (free) |
| Mammoth Site | - Hot Springs (free) | Needles Drive | - Custer |
| Museum of Geology | - Rapid City (free) | Badlands Nat. Mon. | - Wall |
| Wind Cave Nat. Park | - Hot Springs | Homestake Mine Tours- | Lead |
| Jewel Cave Nat. Mon. | - Custer | | |



HOW TO REGISTER. Column 1. Please enter the number who will be traveling with you for events you wish to attend. Column 2. Number the field trips for a particular day in your order of preference. Print or type your name and address on the back of the blank. Mail to correct addresses above. REGISTER NOW.

- 1 2 Sunday Evening July 21
- MURDO AUDITORIUM. Rockhounds Reunion and Open House.
- Monday July 22
- Murdo. Tours of Pioneer Museum and Zeitner Collection. Discount with membership card. Also maps and information.
- Field Trip 1. Weta Agate Beds. Guide Ken Renner. Meet in Kadoka 1:00 p.m. (Limit 70 people in 17 share the ride cars)
- Field Trip 2. Weta Agate Beds. Guide BSESC Club of Mission. Meet in Kadoka 3:00 p.m. Hunting is good until 8:00 p.m. in July. (Limit 70 people in 17 share the ride cars)
- Field Trip 3. Not finalized. Trip will leave from Murdo. Either for fossils or privately owned rock beds. Limit 50 in 12 cars.
- Field Trip 4. Self guided Trip to Conata agate beds. Map furnished. NO limit.
- MURDO AUDITORIUM. Old Fashioned SWAP. All evening. No limit.
- Tuesday July 23
- Field Trip 5. Wall. Scenic geode and chalcodony area. Guide Beverly Hayes. Meet at Wall Dinosaur 8:30 a.m.. Limit 50 in 12 cars.
- Above goes to MAXINE WILSON



- Tuesday July 23
- Field Trip 6. Fairburn area agate beds. Guide Jan Baumeister, Black Hills Mineral Society. Meet at rock beds 9:30 a.m. NO limit. Maps furnished, guide will meet you there.
- Field Trip 7. Big Chief Mine - Micromounters special. Guide Black Hills Institute. Meet in Keystone Parking lot 9:30 a.m. Limit 30 people in 7 cars.
- Field Trip 8. Creston Gravel Pit. Guide Ton Estes, WDGMS. Meet at Caputa 9:30 a.m. Limit 44 people in 11 cars.
- Field Trip 9. Black Agates. Guide Joe Harris, WDGMS. Meet at Scenic 9:30 a.m. Limit 44 people in 11 cars.
- Wednesday July 24
- HILL CITY. All day open house at "Black Hills Institute of Geological Research". No limit. Learn about the professional restoration of fossils. See exceptional specimens.
- Field Trip 10. Railroad Buttes Agate beds. Guide Art Pavin, WDGMS. Meet at Caputa 9:00 a.m. Limit 48 people in 12 cars.
- Field Trip 11. Self guided trip for garnets. Near Custer. Maps furnished.
- Special. Micromounters will have a chance to meet with Mineralogist Willard Roberts at Museum of Geology South Dakota School of Mines. (Probably in evening)
- #6 and following goes to JUNE ZEITNER

There may be other trips added later. We are especially thankful to the friendly members of Western Dakota Gem & Mineral Society and Black Hills Mineral Society, and to all who have cooperated with us in these plans.

June Zeitner

Midwest Federations NEWSLETTER

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



PRESIDENT
James Edwards
306 Somonauk
Park Forest, IL 60466

1ST VICE-PRESIDENT
William Parch
P.O. Box 180
Fountain City, WI 54629

2ND VICE-PRESIDENT
Mrs. Esther Mullaly
30018 Dawson
Garden City, MI 48135

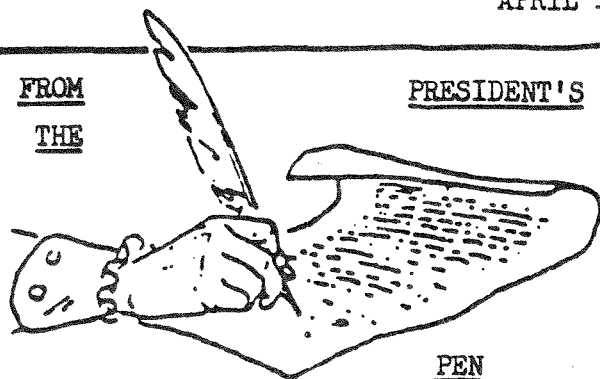
SECRETARY
Miss Jean Reynolds
107 Tuttle Avenue
Clarendon Hills, IL 60514

TREASURER
Mrs. Kitty Starbuck
7636 V Avenue East
Vicksburg, MI 49097

APRIL 1985 - Issue No. 253

FROM
THE

PRESIDENT'S



I would like to brag a little bit about the awards given out to MWF people and clubs at the AFMS Meetings, Awards Banquet and Editor's Breakfast.

In the Original Article category, Junior bracket, we had one winner out of five. In the Adult-advanced bracket the MWF had six out of ten, 60%, Great Heh! In the Adult bracket we got one out of ten. Overall a great job.

In the Club Publications category the MWF did well too. In the New Editor category we were a-

warded two of the ten awards and in the Small-Bulletin category we got one of ten. For the Mini-Bulletin the MWF got four out of ten, 40%, and for the Large-Bulletin we did real well, five out of ten, 50%, with the first three places going to the MWF-Fantastic.

MWF also had the number one person selected by the "Education through Sharing" contest.

It is going to be tough to top that this year but if the clubs keep up their good work and submit the bulletins, articles, and hard working people for these awards, we just may.

It's a great help to other clubs to see what clubs are doing and what they do to win these awards. It inspires them to bigger and better things. I congratulate you all for a great showing.

FEDERATION

SHOWTIME



An Old West Buffalo Barbecue is just one of the many features being planned by the Sioux Empire Gem & Mineral Society for participants in the 1985 Midwest Federation Show and Convention to be held at the Sioux Falls Ramada Inn Convention Center July 18-21.

Ashton Wilson, show chairman, said that plans are nearly complete for programs, special displays, a big swap, and many scheduled meals, including the Awards Banquet. South Dakota clubs are cooperating with Sioux Falls and even the favors are expected to be unusual keepsakes.

Dealers, exhibits, and meetings will be in air conditioned comfort. Several exhibits will emphasize the fine fossils, rare minerals, the beautiful gemstones, and historic artifacts, for which South Dakota is famous. Record fossil and mineral finds will also be included in the programs, along with a look at the unique geology of South Dakota.

Since Sioux Falls is located so near the borders of Minnesota and Iowa, the swap tables should have a wide variety of native materials. The retail and wholesale dealers represent many states and will be showing needed items for every aspect of the hobby.

Among the events for separate interest groups will be an all-day micromount symposium. There will also be demonstrations or programs slanted to amateur paleontologists and archeologists. Following the show there will be several days of field trips in the western part of the state, as well as museum tours, open houses, and other activities.

Although there are several motels in the vicinity of the Ramada Inn it is best to make nearly reservations since July is the heart of a very busy tourist season here.

Submitted by June Zeitner

After several break-in attempts, a jewelry store in California has a new sign... "This area is patrolled by a tarantula". They rent the spider for \$10 a month. They have had no trouble since!!

(The following won MWF Bulletin Contest 1st Place, AMMS Contest 2nd Place. It was written by Esther Dehnke and printed in the Earth Science News - January 1983)

It has happened---COMPUTERIZED MICROMOUNTS

At the September, 1982 Brag Night meeting of the Micromount Study Group, I gave a brief summary of "How I Spent My Summer", which was, purchasing an Apple microcomputer and writing cataloging and inventory programs for Dan's microminerals. I showed the group the printouts I prepared of the several programs which detail how Dan catalogs his minerals. After this presentation, Jean Reynolds asked me to write an article on the use of computers in our hobbies.

Computers come in 3 sized, roughly: large, which is room-size and larger; mini, which is about the size of a couple of desks; and micro, which is the size of a typewriter. My computer is in the latter category. A computer consists of several parts, namely, a keyboard which looks like a typewriter keyboard and allows the operator to tell the computer what to do; a monitor on which the operator can read the computer's answers or display games (a TV set may be used instead); a disk drive with which to run and save your program and data; and a printer on which to get a print-out of your data. The computer itself contains a series of silicon chips and electronic 'switches' which do all the calculations and 'thinking' according to your instructions. The disk drive and disk can be likened to a phonograph player and a record. As the needle of the phonograph runs over the record, it transmits the music to its speakers so you can hear the music. Well, the program and data are also stored on a soft, plastic disk, as little electronic 'bits' and 'bytes' of information. When a disk is inserted into the disk drive, the 'head' comes down and 'reads' the electronic data, transmitting it to the monitor or printer so you can see it. If this sounds a bit threatening to you, just look around your house and count all the computers you have---digital watches, push button washers and dryers, ovens, clock radios, the dashboards in your new cars, the fuel-injection engines--the list can go on and on. Computers have sort of snuck up on you!

At this stage in their development, computers do not yet think independently. You can give them a list of alternatives and they will check the data against each alternative to find one that matches. When you put in your program, or instructions, the computer will follow them exactly. If you don't put in the complete instructions, the computer cannot second-guess you. There is no such thing as "computer-error", rather the truth is "people-error".

There are two ways you can program your computer: write your own in the language your computer understands, or, buy a packaged program. This is just like using a cake mix or making a cake from scratch. To make a program from scratch, however, you must learn the language - in Apple's case, it is Applesoft Basic, a version of Microsoft Basic. I have written some of my own, and I have adapted several packaged programs. The ones I've used for Dan's cataloging and inventory programs are CCA Data Management and PFS Report.

Simply, the first thing to do is decide exactly what information you want to input - and then how do you want to get it back! In other words, if you want to record a mineral's name, chemical composition, crystal classification, date of purchase or find, what mine it came from, city, county, district, state, etc., how do you want your printout to look? Do you want it to list all minerals alphabetically by name? Numerically, by the number you assign to each, so you can keep track of your last number? Do you want it to print out all, say, phosphates, or minerals in the hexagonal system, or, minerals from Arizona? Deciding what you want is necessary before you purchase a program to insure that 'that' program can do what you want it to do.

In my case, both of my programs will sort out the information by any of these fields. For instance, it will alphabetically arrange the minerals by name, and then sort all minerals with that same name numerically by their assigned numbers, as the example shows:

ACMITE	#2039	Summit Rock, Klamath Co., OR
	3021	Mount St. Hilaire, Quebec, Canada
	3085	Summit Rock, Klamath Co., OR
ADAMITE	#1088	Mapimi, Durango, Mexico
	1089	Kamareza, Laurium, Greece
	1097	San Rafael Mine, Quartz Mt., Nye Co., NV

So, I have compiled a file for Dan which shows just the mineral names and numbers, so he will always know what number is next to assign to a new acquisition. One file contains the name, number, mine, city, county, state and country, sorted alphabetically by name, subsorted numerically. Another file contains the names and numbers of his duplicates for trading. How you set up your files is up to you. You are constricted only by the storage capacity of the disk and the parameters of the program.

The end result of all this is a set of neat, clean, readable and accessible files. NOW, the big questions are, can you do it, and should you do it. To answer the latter one first, if you keep accurate records now, it would be advantageous to computerize. If you don't keep records, or don't keep accurate and full records, a computer is not going to be of much use to you, since you have to input information in order to output information.

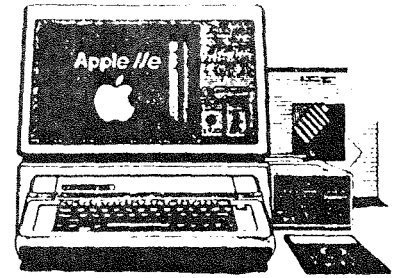
Addressing the first question, if you can type fairly well and can think in a logical, ordered way, you will find computing is easy to do. The hardware (equipment) and the software (programs) come with fairly well documented manuals that will do a good job of instructing you in their use.

If anyone has any questions or comments regarding microcomputers, programs, or cataloging minerals, please feel free to call me. I am also interested in exchanging ideas and information with people who are already using computers.

NEW PROGRAMS: Fossil Finders Honor Roll - 98 slides. Formerly a large Holotype display now reduced to 35 mm slides, this pictures fossils and localities discovered and named for members of MWF. This program underwritten by Midwest Mineralogical & Lapidary Society of Dearborn; compiled by Janice Root and Cecilia Duluk. An "open-end" program to be revised as new minerals and fossils are added to their list. #145

#146 Lavic Siding-Mojave Desert-Jasper and Agate. A pleasant field trip in the title area, with detailed maps and descriptions of the hunting area and material to be found; also pictures of finished gem specimens. 140 slides. Cost of duplicating this program is underwritten by Blue Water Lapidary Society of Port Huron, Michigan. Thank you, kind people.

Louise Stinnett, Chairman Program Requests



PATRONIZE YOUR ADVERTISING DEALERS

MEXICAN MINERALS - SLABS - TUMBELED STONES

Everett Lapidary Shop

THE CAPITOL CITY'S FIRST ROCK SHOP

2941 North 65th

PHONE 466-6204



AUTHORIZED DEALER FOR ALL LAPIDARY EQUIPMENT

"Satisfied Customers Are Our Best Advertisement"

J J & L ROCKS & MINERALS

"Supplies for the novice to the discriminating Rock Hound"

(402) 792-2337

Shop at 330 Locust, Hickman, Ne.

Mail order & Free Catalog, Box 68, Hickman, Ne. 68372

Jim Marburger

John Harrison

CUSTOM CUTTING
FOSSILS

ROUGH
MINERALS
SPECIMENS

CABACHONS
FINDINGS
SLABS

FINISHED JEWELRY
SUPPLIES

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

Advertising by a rock-hobby business or interest is permitted with approval of the Board, at a rate now set at \$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)

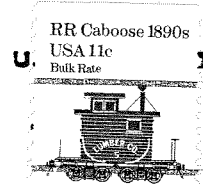
New membership must be approved by the Board, after applicant attends at least one (1) regular meeting of the club, and pay the above dues plus \$1.00 registration fee.



h.e.l.p.

HELP ELIMINATE LITTER PLEASE!

Lincoln Gem & Mineral Club
Box 5342
Lincoln, Nebraska 68505-0342



Editor: David Heffelbower
1819 Washington
Lincoln, NE 68502

Edward Ridge
2507 "A" St.
Lincoln, NE 68502