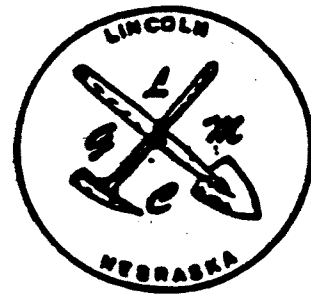


# THE PICK & SHOVEL

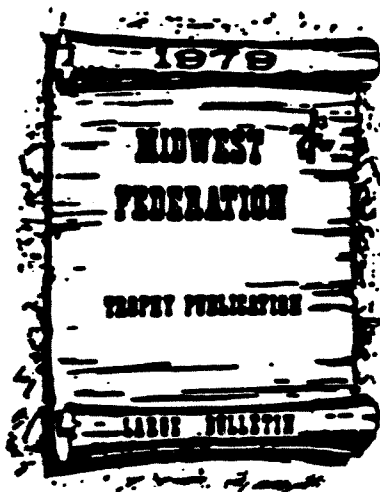


October 1984

1987

In this issue . . . .

Nominating Committee Report  
Sunshine News  
Program Summary  
LGMC Juniors



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)  
Friends of the Museum

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

1987 ELECTED OFFICERS:

President.....Kevin Schwartman	1134 West Avon Ln Lincoln, 68505	464-3059
1st Vice Pres.....Janet Wright	3715 S. 33rd St. Lincoln, 68506	488-1884
2nd Vice Pres.....Jim Farks	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.....Fred Holbert	2822 S. 13th St. Lincoln, 68502	423-5639
Board Member.....Shirley Rockel	1134 West Avon Ln Lincoln, 68505	464-3059
Board Member.....Tom Simmons	2970 South St. Lincoln, 68502	488-1619
Board Member.....Marie Taylor	910 New Hampshire Lincoln, 68508	476-3707

NOMINATING COMMITTEE -- 3 years: Dave Heffelbower, Wm. Rockel  
2 years: Irl Everett, Claude Scott  
1 year: Vera Lyman, John Lewis  
Linda Parks, Chairperson

LONG RANGE PLANNING AND BY-LAWS COMMITTEE:

1 year - Jim Taylor, Irl Everett      3 years - Bob Wright, Linda Parks  
2 years - Claude Scott, Phyllis Parks      Linda Parks, Chairperson

STANDING COMMITTEE CHAIRPEOPLE:

Calling.....Phyllis Parks	Membership.....Shirley Rockel
Education.....Roger Pabian	MWF Liaison.....Marie Taylor
Field Trips.....	Programs.....Janet Wright
Historian.....John & Lillie Lewis	Scholarships.....Marie Taylor
Hospitality.....Ed Ridge	Xmas Party.....Marie & Susan Taylor
Housing/Property.....Claude Scott	1987 Rockhound/Yr....Dave Heffelbower
Jr. Activities.....Janet Wright	1987 Annual Show....Jim Marburger
Librarian.....Jim Parks	1988 Annual Show....Roger Pabian

AUDITING COMMITTEE 1986.....Lois Hunt, Bruce Simon  
Shirley Rockel, Chairperson  
Phyllis Parks, Treasurer

PICK & SHOVEL STAFF:

Editors.....Board of Directors  
Co-ordinator...Vera Lyman, 420 N. 56 st. Lincoln, NE 68504 (NAOESCI Reporter)  
Circulation....Dave Heffelbower  
Rays of Sunshine..Gail Clare Scott  
Reporters....."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 PAGE

October							1987				
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	31					

OCTOBER MEETING: Saturday, Oct. 24, 1987, 7:30 P.M.  
Bethany Park Shelter, Cotner & Vine

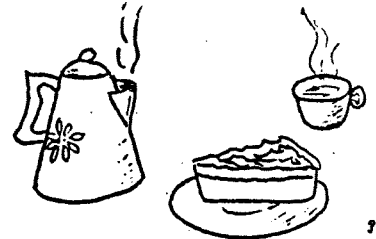
Bring a dessert to go with cider & coffee.

Dress as your choice of Earth Science specimen.

PROGRAM: Grand Canyon Slides by Irl Everett.

JUNIOR MEETING: 7:00 P.M. Bethany Park Shelter

November Board: Monday, November 2, 1987. 7:30 P.M.  
American Charter, 40th & South Sts.



CHANGE OF ADDRESS: Correct your Who's Who -  
Robert M. Oliver to 5048 J St., 68510

DUES ARE DUE before January 1, 1988 and you may start paying them after  
November 1, 1987. \$5.00 per adult or \$11.00 per family.

SHOWS & SWAPS FOR YOUR NEW CALENDAR

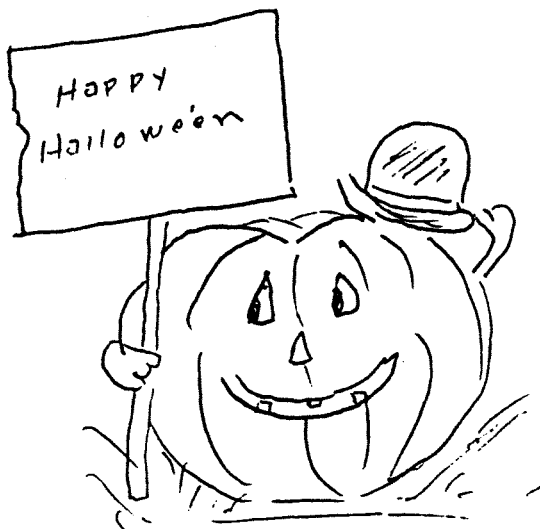
Nov. 20-22 REGIONAL SHOW South Central Gem & Min. Federation, Austin, Texas

Jan. 23, 1988 SWAP LGMC's Annual Indoor-Details later.

March 19-20, 1988 SHOW Lincoln Gem & Mineral Club, 30th show, Lincoln, NE  
PERSHING AUDITORIUM, 226 Centennial Mall South (15th St.)

# Regional Show Schedule 1988

CALIFORNIA	EASTERN	MIDWEST	NORTHWEST	ROCKY MOUNTAIN	SOUTH CENTRAL
Costa Mesa, CA Aug. 26-28		Macomb, IL July 14-17	Kennewick, WA Sept. 9-11	Bismark, ND June 17-19	Shreveport, LA Aug. 11-14



Greetings once again from the sunshine corner.

If you want to be happy,  
Begin where you are,  
Don't wait for some rapture  
That's future and far.  
Begin to be joyous, begin to be glad  
And soon you'll forget  
That you ever were sad.



Over the summer many of our members had health problems but we wished them well. In July Marie Wells returned home after hospitalization. You no doubt heard of J. D. Young's fall and then subsequent illness. As you see Myrtle tells us he is recovering and sporting a beard. Gerald Moore took a fall and injured a knee, calling for surgery and we hope for a quick recovery.

A cynic is a man who knows the price of everything and the value of nothing--Oscar Wilde.

#### Program Summary:

The program for the September 26, 1987 meeting was presented by Jean Penrod of Lincoln who showed slides of some of the handmade silver and gold jewelry she has made and some pieces she brought for display.

She discussed some of the procedures used in making her finished pieces. Among them were the planished surfaces, forged sheet and wire, casting by use of the lost wax method with the use of a vacuum casting machine after the molds are burned out. In using wire, she particularly likes to make forged links for chains some of which she joins without the use of solder and others by linking the pieces and soldering. Jean is fond of incorporating the geometric units such as cubes, spheres and pyramids in her work. This requires meticulous workmanship in order to make the cubes and pyramids fit together to form perfect finished pieces. In viewing the slides we had the pleasure of seeing pieces which had gold and silver combined, some done with sheet metals and others which were either cast gold or cast silver pieces. Some of these had cabachons or faceted stones mounted in the designs, some with bezels and some with prongs.

The program provided an interesting evening and one different from those the club has had in the past.

Our Thanks to Adeline for a  
fine report

## President's Message

Hello Friends and Fellow Rockhounds,

Fall is here again and it is time for our annual Halloween meeting at Bethany Park. We would like to have everyone bring a dessert. Coffee and hot cider will be provided. We also encourage everyone to dressup as their favorite rock or mineral.

Have a good month,  
see you Oct. 24th

Kevin J. Schwartzman

\* \* \* \* \*

## LGMC JUNIORS

We had five Juniors at the first meeting. We looked at the new badges sent to us by Ruth Hammond for Future Rockhounds of America. Everyone agreed that they would like to get a badge at the reduced rate of only two dollars! Andrea Wright gave us a report of her trip to Yellowstone National Park and Quake Lake. Shirley Rockel had been there soon after the earthquake occurred and was able to describe the devastation that had happened. The Juniors enjoyed her first hand report greatly. We will be making extra copies of the directions to make your own seismograph that the Wright girl's picked up at the information station at Quake Lake.

Don't forget the October meeting. We are all going to dress-up as our favorite "GEM or MINERAL". Prizes will be awarded.

HOPE TO SEE YOU ALL THERE !!!!!!!!!!!!!

A LONG STRETCH!

A little platinum goes a long way. An ounce of this precious metal can be formed into a strand of wire reaching from New York City to New Orleans, a distance of about 1,000 miles.

via The Hound's Tale, June '87

Be mannerly and perlite.

Don't have a big apatite for things that come in quartz.

To eat pyrite, use your fork.

Don't try to be a tufa or as hard as flint.

If you must be a wulfenite, find yourself a ruby and don't gypsum  
poor fellow out of his opal.

Willemite but jasper never would.

Schist remember, keep paddling or you'll zinc.

from Osage Hills Gems 4/87

## **STATE SHOW REPORT**

The Nebraska State Show was sponsored by the Prairie Rockhounds of Ogallala on September 26 and 27. It was a very fine show with many excellent exhibits. The music boxes and pictures made by Howard and Harvey Kenfield were outstanding attractions. Other displays of note included spheres and marbles and some excellent examples of agatized and opalized woods from such classic localities as the Blue Forest of Wyoming and the Triassic Chinle Formation of Arizona. One exceptional although small display featured dendritic and plume agates from several areas of the United States including Woodward Ranch of Texas and Eagle Rock of Oregon.

The delegates meeting took place on Saturday afternoon and there it was voted to buy the printer for the Gem Palette editor, Henry Hohnholt. The 1988 State Show was awarded to Omaha.

Saturday evenings festivities were homemade ice cream and cake that was served up with traditional Ogallala hospitality. All in all, it was a very delicious capping off of a delightful day in which I was able to renew many old acquaintances and make many new ones.

### **TOPEKA SHOW**

On Saturday, October 11, Fred Holbert and I made our way to the Topeka, Kansas, show. There were many excellent displays and dealers there and we each left about a weeks wages behind at the latter. We both came home with some excellent agate to add to our growing hoards. There were several excellent displays of quartz crystals that showed some of the many of this mineral's twinning modes. Many of the quartz crystals on display were backlighted to show some very large fluid inclusions.

### **OMAHA SHOW**

Unfortunately, the Omaha and Topeka shows were scheduled for the same weekend. Although this created some additional travel for several of us show-goers, the conflict did not seem to distract from the size or quality of either event. Omaha, too, had many fine dealers and displays, and a second weeks wages was left behind there.

### **1988 SHOW**

Promotional material for our own 1988 show was distributed at all of the above events. Several dealers for our show have also been contacted there. Dealer chairman, Fred Holbert, says that several dealers have now been contracted.

Roger Pabian

LINCOLN GEM & MINERAL CLUB, INC. - BOARD OF DIRECTORS - Sept. 5, 1987

American Charter-40th & South Sts.-Mon. Sept. 5, 1987, 7:30 P.M.

8 Board members present & Roger Pabian, Show Chrm. Janet Wright absent.

Minutes of the May meeting were read with approval motion by Tom Simmons, 2nd by Fred Holbert. Carried.

Treasurer's report read with approval motion by Fred Holbert, 2nd by Marie Taylor. Carried.

'87 Show Bill - Paid but presented for approval.

\$ 1,299.00 NE State Fair Park (Set-up 125. 550. per 2-day Show Cleanup 5 hrs.  
50. Electrician 2 hrs 24.)

Motion for approval by Marie Taylor, 2nd by Vera Lyman, Carried.

'88 Show Bill:

\$ 100.00 deposit on Pershing Auditorium for Show Site.

Motion for approval by Marie Taylor, 2nd by Vera Lyman, Carried.

BILLS: Paid but presented for approval:

\$ 57.24 UNL Printing - April P&S-  
62.50 Postmaster - - Roll of 12½¢ cancelled stamps  
33.00 Security Storage - June \$ 33.00 Security Storage - Aug.  
33.00 " " - July 33.00 " " - Sept.  
20.15 Vera Lyman, (Copies-4.69 Typewriter Ribbons & Glue Stick - 15.46)  
55.23 UNL Printing - May P&S  
5.50 Shirley Rockel - Stamps

Motion for approval by Fred Holbert, 2nd by Tom Simmons, Carried.

OLD BUSINESS:

NAOESCI Delegates to State Show & Meeting:

Tentative: John Harrison or Jim Marburger

Jim Null

Mike Smith

Dave Heffelbower

NEW BUSINESS: Meetings:

General - Sept. 26 - Norfolk Rm - NE Center

- Oct. 24 - Bethany Park Shelter House w/ Halloween Party (Costumes)

- Nov. 21 - NE Center

Motion by Vera Lyman to set meeting for November 21 subject to approval  
by rank & file.

- Dec. 5 - Christman Party

- Annual Jan. Swap

Motion by Phyllis Parks that we try to get Swap Chairman for Annual  
meeting on Jan 23, 1988. 2nd by Jim Parks. Carried.

President to solicit Chairman at Sept. Meeting.

SHOW REPORT: Roger Pabian, 1988 Show Chairman - Presented excellent report.

Show dates: March 19 & 20, 1988 Set-up on March 18

Pershing Auditorium

\$ 1800. fee for 2 days - includes tables, electricity, custodial,  
chairs, PA. (may have to cover own tables)

Fred Holbert - Dealer-Demo Chairman (Dealer Fee - \$ 225.)

Numerous details being worked out re: parking, concessions, etc.

Announcements read. Meeting adjourned.

Respectfully submitted,

*Vera Lyman*

Vera Lyman, Secretary

LINCOLN GEM & MINERAL CLUB, INC. - GENERAL MEETING - Sept. 26, 1987

NE Center - Norfolk Rm. - September 26, 1987 - Meeting called to order at 7:45 P.M.

May Minutes approved as printed. Motion by Irl Everett, 2nd by Fred Holbert. Carried.  
Treasurer's report approved as printed. Motion by Fred Holbert, 2nd by Billie Heffelbower. Carried.

Hospitality Report: 28 adults, 5 Juniors and 2 guests present.

No Old Business:

New Business:

Voted to set November Meeting for Nov. 28th.

Oct. Meeting - Bethany Park Shelter House - Oct. 24, 7:30 P.M.

Bring a dessert - Coffee & cider furnished.

Irl Everett will present slide program.

Juniors will come in costume as favorite rock or mineral. Adult members encouraged to do the same.

NEBRASKALAND magazine mentioned LGMC as a partner in fossil dig at Lake Mac.

#### COMMITTEE REPORTS:

Show Report: Fred Holbert reported basic reasons for moving from Ag Hall to Pershing Auditorium.

Library Report: Jim Parks reported on new book for library. Donated by Linda Parks - "The Dinosaur Heresies" by Robert T. Bakker, Ph.D.

Nominating Report: Claude Scott reported nominations from the Committee Meeting. (See page 4 of this issue P&S). Motion by Fred Holbert to suspend rules and anyone having nominations, just voice nominee. 2nd by Phyllis Parks.

Nomination for Board member: David Heffelbower by Billie Heffelbower.

Motion that nominations cease by Shirley Rockel, 2nd by Janet Wright. Carried.

President announced that Friends of Museum will open NE Hall Collections to public from 7-10 P.M.

Flyers of various shows available. Club photos for viewing.

Janet Wright introduced Jean Penrod. She presented an excellent program on "Metal Working".

Respectfully submitted,

*Vera Lyman*

Vera Lyman, Secretary

Treasurer's Report September 1987                      NBC Checking 9-1-87     \$ 90.91

Cash Receipts - none

Payment -    October Meeting Room     25.00

NBC Checking, Balance 9-30-87                      65.91

## QUARTZ, THE GREAT IMPOSTOR

October is the month of halloween, the day that children put on masks of creatures and goblins to hide their true identity for the moment. The American Gem Society recognizes opal and tourmaline as the birth stones for October. Perhaps, we should consider quartz to be a better representative of the month for the many masks that it can assume to hide its true identity. I recently completed teaching a mini-course on quartz family minerals through the Department of Geology at the University of Nebraska. I think that I learned more than the students as the experience enabled me to take numerous isolated facts about  $\text{SiO}_2$  and develop some organization to my thoughts on this mineral. (Note that I suddenly refer to quartz as  $\text{SiO}_2$  above. This is because the name quartz may be too inclusive as it is currently used.)

Because quartz takes on so many forms, mineralogists were slow to recognize that things like rock crystal, agate, jasper, and cristobalite, for example, were all variations on the same theme, namely the chemical formula  $\text{SiO}_2$ . The older literature abounds in elaborate classification schemes for quartz minerals---even the classical popular work "Quartz Family Minerals" by Dake, Fleener, and Wilson is bogged down in classifications when dealing with the cryptocrystalline and amorphous forms of quartz. Most of these varieties of quartz derived their name from probably the most unscientific basis, color.

We shouldn't fault the authors of "Quartz Family Minerals" for their seemingly unscientific approach. Their bibliography shows that they consulted the literature available then and wrote from what they understood to be true in their day. If it had even been developed then, the electron microscope would have been in its infancy and a very expensive instrument to investigate something so mundane that it makes up 12% of the lithosphere in its various forms. Things like quartz diagenesis were not really understood in mineralogy in 1938 when "Quartz Family Minerals" first appeared.

In May of 1987, a book simply titled "Quartz" by Michael O'Donoghue was published in England in a series called "Butterworths Gem Books." This little tome really provides the quartz student with a compendium of developments in quartz research since 1938. O'Donoghue places more emphasis on optical properties of the various quartz varieties than did his predecessors. He treats diagenesis (physical and chemical processes that act upon a particle) as an important area in understanding the quartz "flow chart" if I may use that term loosely. A lot of progress has been made in understanding quartz, but many questions are yet to be phrased and many answers are yet to be found.

Quartz, in its many masks, is the mineral for this month. Members are urged to bring examples to display. Cases will be furnished.

Roger Pabian

PATRONIZE YOUR ADVERTISING DEALERS

MEXICAN MINERALS - SLABS - TUMBLED 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 \$10.50 per full page per insertion, paid in advance.

1/2 page \$5.25, 1/3 page \$3.50, 1/4 page \$2.75 (min). These ads will be placed throughout the bulletin as space permits.

Subscriptions to THE PICK & SHOVEL are \$3.00 per year mailed.

Dues to LINCOLN GEM & MINERAL CLUB are as follows:

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

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

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

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

# Midwest Federation NEWSLETTER

Member of The American Federation of Mineralogical Societies

OFFICERS 1986-1987



President  
Mrs. Esther Mullaly  
30018 Dawson  
Garden City, MI 48135  
313-427-6790

First Vice-President  
Mr. Paul Clifford  
2955 Berkshire  
Cleveland Hts., OH 44118  
216-371-2749

Second Vice-President  
Dr. Benjamin Moulton  
R.R. 21 Box 103  
Terre Haute, IN 47802

Secretary  
Miss Jean Reynolds  
107 Tuttle Ave.  
Clarendon Hills, IL 60514  
312-323-1682

Treasurer  
Mrs. Kitty Starbuck  
7636 V Avenue East  
Vicksburg, MI 49097  
616-649-1991

Published monthly  
Except June, July, August

OCTOBER 1987 - Issue No. 273

Mrs. Lois McMahon, Editor  
2S621 Gray, Lombard, IL 60148

Dear Friends,

From time to time we have heard the question asked, "What does the MWF do for us?" Well ---

The purpose of an organization is to enable the members to attain goals which they would be unable to attain alone.

General Purpose of the MWF (Art II of Articles of Incorporation)  
"To promote popular interest and education in the earth sciences, and in particular in the subjects of geology, mineralogy, paleontology, lapidary and other related subjects, and to sponsor and provide means of co-ordinating the work and efforts of all persons or groups interested therein."

To understand what the MWF does for us, let us try to imagine what it would be like if the MWF & AFMS did not exist. Clubs would function in isolation from one another - dependent on commercial publications and dealers for any information they might get about the hobby. Contacts with other clubs would depend on individuals. Information concerning shows, field trips, programs, etc. would not be passed on in any organized manner. We would learn of programs by word of mouth and they would be obtained, when available, from various sources. Bulletin exchanges would depend on some form of person to person contact to get started. Mailing lists to other clubs could become meaningless in a few years because of officer and membership changes. There would be no organized access to "experts" in the various fields of the hobby. Each club would stand pretty much alone.

One of the greatest values of the federations is that they make it possible for the separate clubs to communicate with one another. They can exchange information and ideas. They can invite others to attend their meetings and shows.

The MWF's Directory, Newsletter, Mailing List and Convention all help to make possible this communication between clubs. They also allow information on legislation, collecting sites, new discoveries and techniques to be passed from the MWF or AFMS or clubs. When time is important, this can usually be done much sooner than is possible through commercial publications. With the Federation, it is possible for the clubs to talk with one another directly or through the Federation.

To answer the need for assistance in programming, operations, etc. the MWF publications and Film Library came into existence. The various MWF Committees were charged with helping find answers to club and individual questions. They exist to help each of us learn about and enjoy the hobby. User fees, when charged, are set at a level that returns to the Federation approximately what it costs to provide the service. The programming resources provided by the Federation would be difficult or impossible to obtain from any other source.

In conjunction with the AFMS and MWF, the clubs have created the Scholarship Fund and Uniform Rules both of which would be far less effective if done on a local basis.

Additional information on the services provided by the MWF can be found on pages W-4 thru W-11 of the 1987 - 1988 Midwest Federation Directory.

Here and now is the time for each of you as individuals and/or clubs to ask questions (again and again if necessary) of any one or all members on the Executive Committee who have accepted their positions with the dedication to helping YOU.

GET YOUR \$1.00's WORTH!

*Esther*

## A TINY TICK WITH A NASTY BITE

Recently the Midwest has been invaded by a tiny tick, Ixodes dammini, which carries Lyme disease. The tick is about the size of a pin head and often the host is unaware of the bite until days later. First symptoms are a sudden itching in an area of the skin, followed by a red rash. Unless treated, the rash expands slowly. Its appearance is usually darker red at the edges, having a ring like appearance with a firm spot at the center. Immediate treatment is important, because the longer the delay the longer the treatment to cure is. Within one to three weeks, heart irregularities such as dizziness, weakness, and irregular heartbeat may occur. In about a month, nervous disorders may develop with headaches, irritability and difficult sleeping and concentrating as symptoms. Lyme arthritis, a pain in and swelling of a joint(s), especially in the knees, may occur up to several months after the bite. The disease, caused by a coiled bacterium, Borrelia burgdorferi, is successfully treated by antibiotics. About one person in four does not develop a noticeable rash.

Lyme disease was first recognized in Lyme, Conn. in 1976. It has now spread to 24 states, being carried by birds and mammals. April to October is the normal danger period with May through August the high risk time. Use of tick repellent and wearing appropriate clothing is generally an effective means of combating ticks. If you have been in tick infested areas and experience symptoms of the disease, a visit to your physician is advised.

Lloyd Brown  
MWF Safety & Field Trip Chairman

---



---

## RECOGNITION

The members of the Michiana Gem and Mineral Club became involved in helping with the SPECIAL OLYMPICS held at Notre Dame University. Members of the club spent over 125 hours at a table in the Arts and Crafts area giving out polished stones, shells, pyrite, fossils and LOVE in exchange for their first name and country and their hugs and kisses, and as volunteers at the events to HUG-KISS and cheer the athletes on.

There are about 2,000,000 Olympians, 8 to 85 years of age, that compete and about 4600 of them came to Notre Dame from 33 countries, territories and 50 states. Despite the language differences, →

## EXCITING PALEONTOLOGY NEWS


Recent visits lead to an update on some of the finest fossil displays in the midwest region. One site was published in a photograph of the past week by the A.P. Watch for it in your newspapers. I refer to the Mammoth Site at Hot Springs, SD. This is an extraordinary site in that the preparations started 13 years ago, and only 15% has been explored. It is the world's largest known accumulation of remains of Columbian mammoths. Bones of 41 mammoths have been unearthed since the initial discovery in 1974.

The Hot Springs Gem & Mineral Soc. formed a non-profit corporation and raised money to buy the 14-acre site that was originally to be a development for houses. An amateur, son of an excavator, recognized the significance of the bones being exposed as the work began. A second fund drive resulted in the construction of the \$1.13 million building which now covers the excavations. The site is unique in that the bones and skeletons are in the exact positions where they became entombed in the trap of a sinkhole.

Two other displays, all of vertebrate fossils, are the Black Hills Institute of Geological Research of Hill City, SD, where many fine reptiles are prepared for educational institutions and museums. This display includes the workrooms where work is in progress, and as of this July, included whales from the mountains of Peru. The other very fine exhibition is the South Dakota School of Mines Museum. Many fine dinosaur skeletons, reptile replicas, mammal dioramas all in addition to some fine invertebrate displays, paint a very realistic picture of what the plains of South Dakota and Nebraska, etc. were like during the Cretaceous Period. Very fine for family viewing.

Mary Boland  
Paleontology Chairman

---



---

the club members were able to give the gift of love along with their gifts of rocks and fossils. Perhaps, in the process, they have spread the love of rocks to potential collectors from across the world.

(Condensed from an article submitted by:) Margaret Heinek, President  
Michiana Gem & Mineral Soc.

Midwest Federation

The AFMS Scholarship Foundation issues scholarship grants to two graduate students in each of the six Regional Federations in the amount of \$1,500.00 per year for two years. The Honorary Award Winner in each Federation selects the students who will receive these grants. The 1987 Honorary Award Winner for the Midwest Federation is Jean Peterman Kemp (Zimmer) who selected the following students:

Michelle M. Groven, a native of Gresham, Oregon, received her B.S. in Geological Engineering at Michigan Technological University, Houghton, and is continuing her studies for her M.S. in Geological Engineering there. Her ultimate goal is to receive her Doctorate and become a University Professor.

Michelle graduated from high school in Duluth, Minnesota. During her undergraduate years, she concentrated on rock mechanics and structural geology and anticipates emphasizing this aspect of geology as she works on her Master's degree. Her extra-curricular activities included participation in the Keweenaw Symphonic Band and Orchestra. She held the position of Geological Engineer for Tenneco Oil Exploration and Production in the summer of 1986.

Deborah A. Schueller, an Alma, Michigan native, received her B.A. in English at Central Michigan University, Mt. Pleasant; her B.S. in Geology at Beloit College, Wisconsin; and is studying for her M.S. in Geology at Michigan Technological University, Houghton. She originally planned to become a technical writer, however, she became so interested in Geology that she looks forward to receiving her Master's degree in Geology and hopefully, later, her Doctorate.

During the summer of 1987, Deborah received a U.S.G.S. summer apprenticeship award at the Denver Federal Center, Colorado, working on isotope geology. She is intensely interested in the formation of the pyroxene-amphibole rosettes, some of which she has collected, from the outcrops in the Henry Mountains, Utah.

Dr. Duncan J. McGregor, the 1986 Honorary Award Winner for Midwest, writes that the students he selected to receive the 1986-87 scholarship grants are continuing their studies for their degrees. Timothy C. Cowman, working on his M.S. in Geology at the University of South Dakota, Vermillion, also worked this past summer with the South Dakota Geological Survey. Todd Salat, working on his M.S. in Geology at the University of Wyoming at Laramie, spent this summer in the field in western Wyoming.

---

News release from Mary Boland, Paleontology Chrm.

This subject is not strictly about paleontology, but an allied field. It does concern our Wisconsin, and visiting MWF clubs who hunt for fresh water pearls in clams of the Upper Mississippi Valley, in particular.

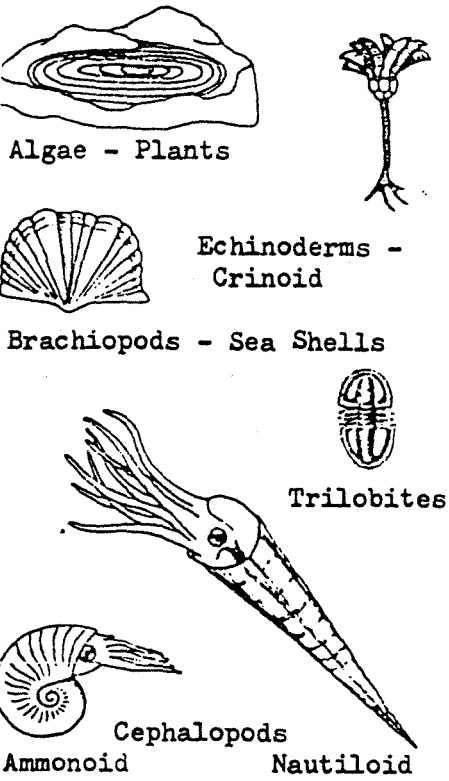
There are some endangered and some threatened species - which one should be aware of. When pearling, be sure you know which species these are. The penalties are severe. A case in point is the "Higgins Eye", *Lampsilis higginsii*. It is an ENDANGERED SPECIES. Recent live records: Pools 3, 7-12, 16 & 17. This reaches from Pool 3, below Minneapolis, to 17, bordering Illinois & Iowa; northern part of Illinois, & southern part of Iowa. I quote from the Endangered Species Act: "Under the U.S. Endangered Species Act of 1973 (PL 93-205) it is illegal to possess any part of an endangered species. For example, it is illegal to possess the shells of either endangered species. Penalties for a violation of the Act include maximum fines of \$20,000 and a year in prison."

Send to the Wisconsin Department of Natural Resources, Madison, WI for a copy of FRESHWATER MUSSELS OF THE UPPER MISSISSIPPI RIVER.

PALEONTOLOGY - THE SCIENCE THAT DEALS WITH PAST GEOLOGIC PERIODS - IT IS BASED ON  
THE STUDY OF FOSSILS

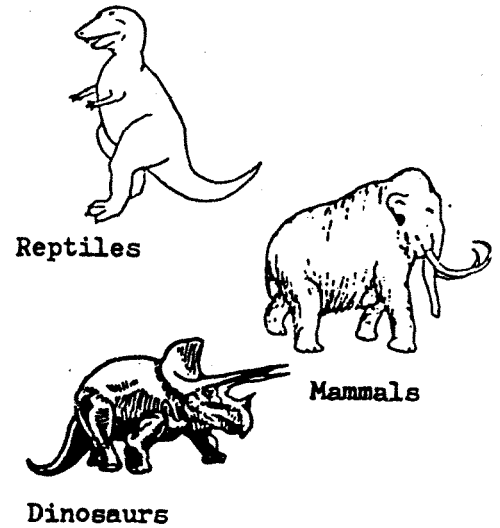
May we, the Paleontology Committee of the MWF, introduce you to this facet of the related studies of this organization of Mineralogical & Geological Societies.

We present a Geological Time Chart. We illustrate a few samples of the common fossils collected and studied by paleontology clubs, or fossil study groups within MWF clubs. If you do not have such a club, or study group, we would be happy to assist you in forming one. For those already organized, we stand ready to help you in any way we can, and hope we can call on you for assistance when needed, for this endeavor includes us all. We need the assistance of those who have had experiences other than ours.



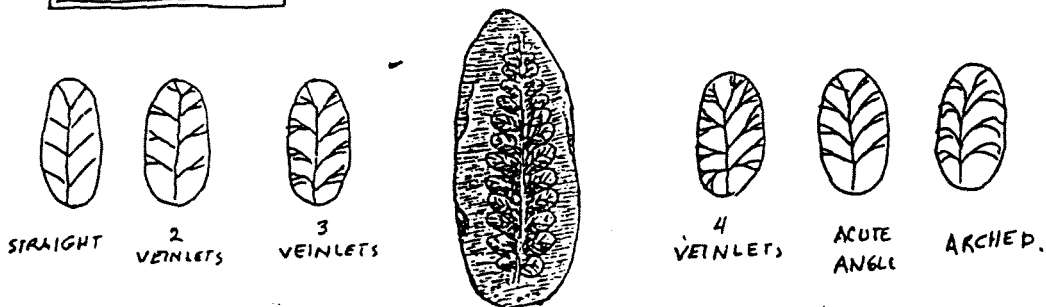
GEOLOGICAL TIME SCALE

ERA	PERIOD	EPOCH	MILLIONS YEARS AGO
Cenozoic	Quaternary	Recent	0.01
		Pleistocene	
	Tertiary	Pliocene	1
		Miocene	11
		Oligocene	25
		Eocene	40
Mesozoic	Cretaceous	Paleocene	60
		70	
	Jurassic	135	
	Triassic	180	
Paleozoic	Permian	225	
		270	
	Pennsylvanian	350	
	Mississippian		
	Devonian	400	
	Silurian	440	
Ordovician	500		
Proterozoic	Cambrian	600+	
		2,500	
Archean			



For more information, contact:  
Mary Boland, Paleo Chrm.  
2211 Valley Road  
La Crosse, WI 54601

**PSARONIUS** (SPORE FERNS - PECOPTERIS)



IDENTIFICATION  
REQUIRES  
EXTREMELY WELL  
PRESERVED  
SPECIMENS

Contact for  
"Keys" Book:  
Jerry Prep  
5858 Woodward  
Downers Grove  
IL 60516

NOMINATING COMMITTEE MEETING: September 22, 1987 7:00 P.M.  
American Charter Bldg. 40th & Shouth Sts.

Members present: Claude Scott, Chairman  
Vera Lyman, Irl Everett, Dave Heffelbower

Nominations for 1988 officers are as follows:

President: Kevin Schwartman  
1st Vice: Fred Holbert  
2nd Vice: Jim Parks  
Secretary: Vera Lyman  
Treasurer: Phyllis Parks  
Board Members: Marie Taylor  
Shirley Rockel  
Tom Simmons  
Gerald Moore

Nominating committee recommends that Long-Range Planning and By-Laws committee members stay with present members since Kevin Schwartman is staying on as president.

Nominating committee recommends that Long-Range Planning and By-Laws committee meet for suggested changes in By-Laws in the very near future.

Respectfully submitted,

Nominating Committee  
Claude Scott, Chairman

P.S. At the September General Meeting nominations were called for by the President from the Floor. The following were added, as follows:

Nomination for Board Member: Dave Heffelbower  
(by Billie Heffelbower)

There had been several earthquake shocks in the area, so an anxious couple sent their son to stay with an uncle who lived some distance away. Two days later the couple received this telegram: "Am returning boy. Send earthquake."

What this country needs is a dandelion that will die just like other garden plants!

The AVERAGE MAN to get by these days has to be something of a contortionist. As witness: He's got to keep his back to the wall and his ear to the ground, his shoulder to the wheel, his nose to the grindstone, keep a level head and both feet on the ground. At the same time, he must look for the silver lining with his head in the clouds -- to say nothing of keeping his eye on the ball.

"If you are feeling low, don't despair. The sun has sinking spells every night, but it comes back up every morning."

DON'T FORGET:

Halloween Party - October 24th at Bethany Park Shelter House!

"Dress" for the occasion!!!!

Remember to bring a dessert!



**h.e.l.p.**

HELP ELIMINATE LITTER PLEASE!

MAIL ALL EXCHANGE BULLETINS TO:

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



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