

# THE PICK & SHOVEL



FEBRUARY  
1986

In this issue

....MEMBER-abilia = Adeline Nolde

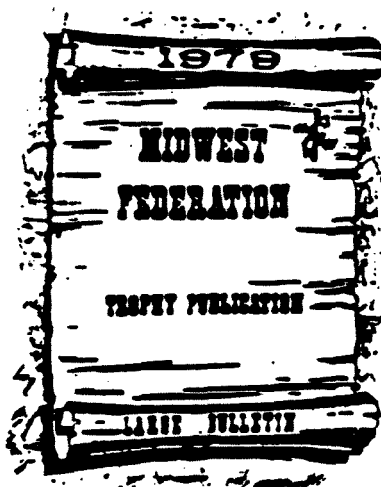
THE OLD WOMAN METEORITE

It's ELEMENTary!

From your Librarian

THE LAND OF THE SOUTHWEST INDIANS

Jackson Lake Archeological Program



OFFICIAL PUBLICATION OF

Lincoln Gem and Mineral Club, Inc.

P. O. Box 5342

Lincoln, Nebraska 68505

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

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

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

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

1986 ELECTED OFFICERS:

President.....	Linda Parks	2435 S. 19th St.	Lincoln, 68502	476-6798
1st Vice Pres.....	Janet Wright	3715 S. 33rd St.	Lincoln, 68506	488-1884
2nd Vice Pres.....	Kevin Schwartzman	1134 West Avon Ln	Lincoln, 68505	464-3059
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.....	Nelia Miller	1101 Rosewood Dr.	Lincoln, 68510	489-6093
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: Irl Everett, Richard Miller  
2 years: Vera Lyman, John Lewis  
1 year: Jim Parks, Ervin Marshall  
Claude Scott, Chairman

LONG RANGE PLANNING AND BY-LAWS COMMITTEE:

1 year - John Abel, Roger Pabian  
2 years - Jim Taylor, Irl Everett  
3 years - Claude Scott, Phyllis Parks  
Claude Scott, Chairman

STANDING COMMITTEE CHAIRPEOPLE:

All-American Award...	Janet Wright	Librarian.....	Jim Parks
Calling.....	Phyllis Parks	Membership.....	Shirley Rockel
	Marie Wells	MWF Liaison.....	Marie Taylor
Education.....	Roger Pabian	Programs.....	Kevin Schwartzman
Field Trips.....	Tom Simmons	Publicity.....	Roger Pabian
Historian.....	John & Lillie Lewis	Scholarships.....	Marie Taylor
Hospitality.....	Ed Ridge	XMAS Party.....	Janet Wright
Housing/Property.....	Claude Scott	1986 Rockhound/Yr....	Janet Wright
Jr. Activities.....	Nelia Miller	1986 Annual Show.....	Fred Holbert
	Janet Wright	1987 Annual Show.....	

AUDITING COMMITTEE 1985.....Lois Everett, David Heffelbower,  
Ervin Marshall, Shirley Rockel,  
Phyllis Parks, Treas.

PICK & SHOVEL STAFF:

Editors.....Board of Directors  
Co-ordinator...Vera Lyman, 420 N. 56 St. Lincoln, NE 68504 (NAOESCI Reporter)  
Circulation...Dave Heffelbower  
Sunshine Corner..  
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.

February 1986

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9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	

# Calendar of Events

March 1986

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9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

**GENERAL MEETING**

The February meeting will be held at 7:30 P.M. in the Norfolk Room of the Nebraska Center, 33rd and Holdrege Streets.

Our 1986 Scholarship presentations will be made.

**YOUTH MEETING:**

7:00 P. M. in the Norfolk Room.

**MARCH BOARD MEETING:**

Monday, March 3, 1986, 7:30 P.M. in the community room of American Charter Savings & Loan, 40th and South Streets.

**28th ANNUAL SHOW:**

Set-up Friday March 14, Ag Hall, Fairgrounds

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1 9 8 6 S H O W S & S W A P S F O R Y O U R C A L E N D A R

- March 7 - 9 Greater Kansas City Gem & Mineral Show, Kansas City Market Center, 1775 Universal Avenue, Kansas City, Mo.
- March 15-16 Lincoln Gem & Mineral Club Show. Set-up Friday, March 14th. Nebraska State Fairgrounds Agricultural Hall, North 17th St.
- March 22-23 Cedar Valley Rock & Mineral Society Show, Iowa "GOLD" and Other Treasures, 1211 Wiley Blvd. S.w., Cedar Rapids, Iowa
- September 6 -7 State Gem & Mineral Show hosted by Fort Kearney Rock Club.
- September 13-14 State Swap hosted by Northwest Nebraska Rock Club in the Crawford area.

## Regional Show Schedule

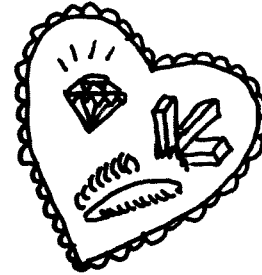
The 1986 dates and locations for all Regional Shows and Conventions. The combined American Federation Show and Convention will be held in South Bend, Indiana, in conjunction with the Midwest Federation Show and Convention.

<b>CALIFORNIA</b> Sacramento California June 25-27	<b>EASTERN</b> Providence Rhode Island Oct. 25-26	<b>MIDWEST</b> South Bend Indiana July 17-20	<b>NORTHWEST</b> Medford Oregon Aug. 8-10	<b>ROCKY MOUNTAIN</b> Phoenix Arizona Nov. 21-23	<b>SOUTH CENTRAL</b> Corpus Christi Texas March 7-9
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"HAPPY VALENTINE'S DAY" from the Sunshine Corner:

- - Love is the answer  
That everyone seeks -  
Love is the language  
That every heart speaks -

Love can't be bought,  
It is priceless and free,  
Love like pure magic  
Is a sweet mystery!



A \$ 10.00 Memorial was sent to Ollie this month in memory of Wilfrid Wittmann.

\* \* \* \* \*

THANKS, Mr. Brauch. I appreciated the specimens you donated to my identification case. Look for them at the March Show.

Sincerely, Anne Crawford

On behalf of the Junior Club, we would like to thank the people who donated some really special specimens to the Juniors. There were some great things donated and we are really excited!

THANK YOU to: Ken & Judy Mefford  
Blue Hill, NE

Grand Island Club

Roger Pabian

Thank you for returning the LGMC surveys from the January Pick & Shovel, page 9. I'll be calling on some of you who I haven't heard from. Results will be available in March.

Lyn

\* \* \* \* \*

H E L P ! ! !

Morrill Hall needs volunteers in many areas; special exhibition attendants, gift shop, the Encounter Center, and clerical tasks. To find out more contact Kathy Bohling at 472-6365.

FOR SALE:

Jim Parks has some Witchita cases for sale for \$ 25.00 each.

If interested, call 476-6798 (evenings)  
466-5440 (days)

# President's Message

Members and friends,

What a wonderful day for the Lincoln Gem and Mineral Club. Our January Swap was a big success thanks to the efforts of Richard, Nelia, and Garen Miller who organized the activities.

A special thanks to the Wrights, the Millers, and the McColerys for their assistance with the junior activities.

During the swap we made some new friends (hopefully some new members) as well as much time with the old friends. A special thanks to those of you from other clubs who spent the day with us.

Our 31st Anniversary meeting was a lovely end to our day. We learned that the Friends of the Museum have had some success with the administration. To further the clubs involvement with Morrill Hall, we will tour the Museum in February.

Our March show plans seem to be shaping up nicely. Get your displays ready -- it's only a matter of days!

Jim Grapes from the Fort Kearney Club reported on the upcoming state show. Let's see if we can't work out a group display from the Lincoln Gem and Mineral Club.

Melissa Connor from the Midwest Archeological Center gave a delightful program on a dig in the Jackson Lake, Wyoming area. I hope we hear more from her on this project which will continue this summer with more field work.

The evening concluded with our 31st anniversary cake (delicious!! Thanks, Vera) and conversation among our old and new friends.

So what's next? The February meeting we will celebrate with those chosen as LGMC scholarship recipients for 1986, then on to the show!

*Lyn*

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## Don't Miss This!

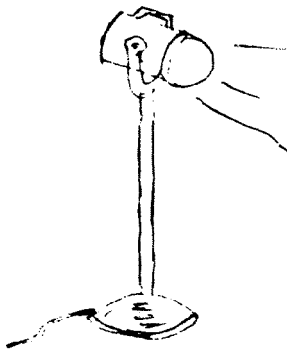
We are up-dating our 1986 mailing list for The Pick & Shovel and wish to have confirmation that all copies are being used by the recipients.

Club members who have not paid your dues-red check mark on your label and you will receive no more copies unless you send dues and reinstatement.

If you receive a courtesy copy please let us know if you wish to remain on our mailing list - small c denotes courtesy.

Exchange (small e on label) please be sure that the proper person in your club receives the bulletin or send us a corrected address. We shall discontinue sending bulletins to any clubs that are not now mailing us an exchange bulletin to our P. O. Box 5342, Lincoln, Ne. 68505.

MEMBER-abilia



Hats Off - to our good friend Adeline Nolde! This year marks her 25th year in Lincoln Gem & Mineral Club. We are thinking that they have been very busy and interesting years for Adeline with the many club and university related projects in which she has been involved.

Soon after joining LGMC Adeline participated in silversmithing classes taught by Mr. Lee Stachura along with quite a few other LGMC members. Well remembered are the wonderful silver pieces displayed by that group and we know that Adeline's originality and artistry as well as her expertise made her a very distinguished person at the several shows where her craftsmanship was displayed and where awards were given.

We know that Adeline is a valuable asset to the University of Nebraska, Lincoln Engineering Department and that she loves her work there.

Last year she was honored by the Future Farmers of America at their banquet as the original designer of their FFA Insignia and was given a wonderful plaque denoting her contribution.

Adeline made many contributions to enhance our Pick & Shovel over the years and they were sincerely appreciated. She also had many interesting happenings which might have added a chuckle or two if they had been made in the form of story. John & Lillie mentioned a hesitant nasturtium and a lost bag of gem purchases.

I personally think quite often of the 'Mutual admiration society' or as she puts it "Your Secret Admirer" when she sends greetings to one of our very well known clubmembers. Good friends become better as the years pass by.

Congratulations Adeline on your many achievements and we hope that you will have many more to share with us.

contributed by Phyllis Parks

\* \* \* \* \*

Notes were received from members in other localities -

Ray Lambert sent his 1986 dues from Colorado and is planning to be in Lincoln for our annual show in March. We hope he makes it.

Irl & Lois Everett sent a wee note from Texas and besides enjoying the fun in the sun they have been busy with some shows and have more planned. We miss them and look forward to their return in the spring.

\* \* \* \* \*

At the January meeting it was so great to have former members Glenna McGinnis and Norma Miller appear and celebrate the anniversary with us. Both ladies were very active, hard working members for the club in the late 60's and the 70's and many of us share a wealth of memories with them. We hope they will continue to find some time to share with us.

\* \* \* \* \*

THE GEM CANNOT BE POLISHED WITHOUT FRICTION, NOR MAN PERFECTED WITHOUT TRIALS.  
-- Chinese Proverb via G I Nugget

LINCOLN GEM & MINERAL CLUB, INC. - BOARD OF DIRECTORS - Jan. 6, 1986

The meeting was called to order by our new President, Linda Parks on Jan. 6, 1986 at 7:30 P.M. at the American Charter Bldg., 40th & South Sts. There were 9 Board Members present; Claude Scott & Jim Stewart from '85 Board; and Roger Pabian & Dave Heffelbower.

Minutes of the Dec. Meeting were read. Motion for approval by Janet Wright, 2nd by Marie Taylor. Motion carried.

Treasurer's report was read. Motion for approval by Tom Simmons, 2nd by Fred Holbert. Motion carried.

BILLS: Presented for approval: (1985)

\$ 327.01 NE Center (Suspense) Christmas Dinners  
(256.25 paid by members = 41 @ 6.25) 2 Program guest dinners=12.50  
62.58 UN Printing - Dec. P & S

Motion for approval by Tom Simmons, 2nd by Marie Taylor. Carried.

Presented for payment & approval ('85 Show)

\$ 58.84 NE Revenue Dept. - Sales Tax on Gate Receipts at Show

Motion for approval by Kevin Schwartzman, 2nd by Vera Lyman. Carried.

Presented for approval: (1986)

\$ 50.50 MWF Dues (48.50 + 2.00 for Jrs.)  
2.00 MWF - Secretary's copy of directory  
33.95 NAOESCI Dues  
100.00 Friends of Museum  
25.00 Lincoln Arts Council (formerly known as Community Arts Council)

Presented for payment & approval: (1986)

\$ 85.21 Page Trophy - President's Plaque (60.69)  
- Rockhound of Year Plaque (24.52)  
8.00 Sec. of State, Allen Beermann - Filing Fee for Registered Agent  
62.50 Dave Heffelbower - 500 pre-cancelled stamps (½ Jan. Feb. Mar.)  
9.07 Phyllis Parks - Copies & Postage  
9.45 Jim Parks - Library Addition - "Volcanoes"  
3.83 Vera Lyman - P & S Copies

Motion for approval by Tom Simmons, 2nd by Marie Taylor. Carried.

SHOW REPORT:

Fred Holbert, Show Chairman, reported the following on the Show progress. Seeking 12 dealers, tentatively have 5. Raised the fee per dealer to \$ 200.00. Gate fee will remain the same. Asked opinion on Sat. night dinner. Board favored it, so will proceed as last year. Scholarship will not be presented at Show.

Motion by Janet Wright that we award Scholarships at February General Meeting on Feb. 22, 1986 with a special lunch. 2nd by Marie Taylor. Motion carried.

OLD BUSINESS:

Roger Pabian to purchase Poloroid Camera & film for Club by January Swap & General Meeting.

NEW BUSINESS:

Marie Taylor presented copy of thesis from Lee Pivonka for Club Library. She will take it to Jan. General Meeting for other members to see. Lee was our Club Scholarship Recipient at 1985 Show.

Janet Wright - Requested to purchase "Dinosaurs" encyclopedia @ 3.50 for each Junior Member family (6) and 1 copy for Club Library. Had not looked at scrap-books yet for individual juniors.

BOARD OF DIRECTORS - Jan. 6, 1986 - continued

Phyllis Parks - Financial - Reported interest from NBC Money Market - \$ 172.30 and \$ 500.00 from First Federal Transmatic was transferred to checking.

First Federal C.D. matured on Jan. 4, 1986. Motion by Vera Lyman to renew as before. 2nd by Janet Wright. Motion carried.

Phyllis also reported that the Jan. Meeting and Swap will be held in the Nebraska Room. (Ground Floor) Coffee for the afternoon; Coffee and Anniversary Cake for the evening meeting.

Norfolk Room reserved for Feb. & Mar. Meetings.

**LONG RANGE & BY-LAWS:**

Claude Scott will serve as Chairman with Phyllis Parks as the 3-yr member serving on the committee.

**PICK & SHOVEL: Co-ordinator: Vera Lyman**

To be compiled by Board as follows:

Pg. 1 Calendar Page - Linda Parks

Pg. 2 Sunshine Corner Chairperson

Pg. 3 President's Page - Linda Parks

Pg. 4 Member-abilia - Phyllis Parks

Pg. 5 & 6 J.D. Young's article - Vera Lyman

Pg. 7 Juniors - Janet Wright

Pg. 8 Exchange - Jim Parks

Pg. 9 Education - Roger Pabian

ETC. = Programs - Kevin Schwartzman; Field Trips - Tom Simmons; Show - Fred Holbert; Special committee reports by their Chairman. Minutes of Meetings - Vera Lyman; Library - Jim Parks.

**"86 BUDGET:**

Budget as proposed by President was discussed. Motion by Vera Lyman that we recommend to rank & file at Jan. meeting that the budget be approved as proposed by President. 2nd by Janet Wright. Motion carried.

**SWAP:**

Nelia Miller - Information regarding Swap on Flyer. There will be Silent Auctions. Proceeds to go to NAS & Club Scholarship.

**MISCELLANEOUS:**

\$ 100.00 contribution to Friends of Museum regards us as Affiliate Member Organization.

Kevin Schwartzman to check on personal Club name tags - prices and time involved.

Tom Simmons; "When do you want your first Field Trip." Reply; "First 70<sup>0</sup> Day!"

The Exchange Bulletin "Pick & Chisel" reprinted an article by J.D. Young, 11/84

BLACK HILLS' WIND CAVE. Just proves your articles are very interesting. Congratulations J.D. Keep up the good work!

BOARD MEETINGS will be held on the first Monday of each month (instead of Thursday) as long as suitable with majority of members.

Feb. Board Meeting on Feb. 3 at Am. Charter Bldg., 40th & South Sts.

Respectfully submitted,

*Vera Lyman*  
Vera Lyman, Secretary

LINCOLN GEM & MINERAL CLUB, INC. - GENERAL MEETING - Jan. 25, 1986

Pres. Parks called the meeting to order on Jan. 25, 1986, at 7:30 P.M. in the NE Room at NE Center with 8 Board Members present.

A moment of silence was observed in honor of Wilfrid Wittman.

Minutes of the November Meeting were approved as printed with no correction; motion being made by Richard Miller, 2nd by Marie Taylor.

Treasurer's report was approved as printed with motion by Helena Baegl, 2nd by Jim Marburger.

Hospitality Chairman Ed Ridge reported 36 members and 2 Juniors in attendance, with 14 guests present.

President re-introduced officers & board & committee people and thanked them.

Old Business:

1. Board approved \$ 100. donation to Friends of Museum.
2. All American Award Entry - Janet Wright needs your in-put.

New Business:

The 1986 Proposed Budget was presented. Roger questioned amount of meeting Hall rental. Motion to accept budget as proposed by Phyllis Parks, 2nd by Roger Pabian. Carried.

Reports:

1. Marie Wells - Friends of Museum

Organization is 3 years old this month and "cautiously optimistic". There are three interesting displays - interested, call Marie.

Volunteers are needed - gift shop, security, etc. Call the Museum Office.

Oct. 10 - Open House - "Friends" only

June - "Friends" trip to Ft. Robinson area

2. Tom Simmons - Field Trip to Museum

Question of evening or weekend. Decided on Feb. 2, 1986 (Sun.) at 1:00 P.M.

Meet at Museum. Will arrange for special tour.

3. Fred Holbert - SHOW REPORT

Will be "Outstanding"

Need - Horsepower & Manpower

"Need the right people to volunteer." "Need bodies & brains."

Sat. night dinner - will be more affordable and room for more.

Show Flyers are out.

Chairpersons thus far: Roger Pabian - Programs & PR

Phyllis Parks - Tickets

Mike Smith & Jim Null - Set up & tear down - 9:00 A.M.

- Dealers set up at Noon.

Lincoln Demonstrators.

9 Dealers "committed":

Geodon's

DeSotel

Johnson Agate

Wicks

Browns

Custom Gem

West Side

Hinshaws

Bruce Simon

Presentation:

Marie Taylor presented copy of thesis from Lee Pivonka to the Club for the Club Library. Lee was a recipient of a Club Scholarship. Our THANKS TO LEE for this fine presentation.

- continued

LINCOLN GEM & MINERAL CLUB, INC. - GENERAL MEETING - continued

ANNOUNCEMENTS:

Jim Grapes - (Guest in attendance) announced Ft. Kearney Club will be hosting State Show - Sept. 6 & 7, 9:30-6:00 and 9:30-5:00 \$ 1.00 admission  
 Buffalo County Fairgrounds  
 SPECIAL FEATURE: Million dollar Turquoise carving. 125 pounds  
 1100 man hours to carve  
 (see June Lapidary Journal)  
 8 Dealers. 1 dealer - Silver Channel work.  
 Kenfields will display  
 LGMC urged to display & participate. Trailer hookups on the grounds.

Club Announcements:

1. Dues are due.
2. Letter from Evy to Club  
 Letter from Ray Lambert - plans on coming to Lincoln for Show
3. Two Annual Club Scholarships will be presented at Feb. Meeting rather than the Show this year.
4. Flyer - Cedar Valley, Iowa Show in March.

PROGRAM:

Presented by Melissa Connor - UNL Dept. of Archeology

My THANKS to Marie & Susan Taylor for assuming my duties as Secretary & Hostess for serving Anniversary Cake. (#31)

This General Meeting was preceded by the Club's 8th Annual Rock Swap from 12:00 Noon to 5:00 P.M. It was chaired this year by Richard & Nelia Miller and son, Garin.

Respectfully submitted,

*Vera Lyman*  
 Vera Lyman, Secretary

LGMC TREASURER'S REPORT - January 1986	NBC Checking 1-1-86	\$ 115.31
Receipts: 1986 Membership Dues	\$ 198.00	
New member with registration	6.00	
Sub. to Pick & Shovel	5.00	
'85 Pick & Shovel advertising	90.00	
Silent Auctions-'86 Indoor Swap	33.60	
Surcharge-Swapper Bucks	15.29	
Junior activities at Swap	9.75	
	<u>357.64</u>	
Transfer from interest accounts to checking	<u>772.30</u>	1,129.94
Payments: 1985 items on accts. payable	448.43	
MWF Dues & Directory	52.50	
NE Assn. Earth Science Dues	33.95	
Page Trophy-Pres. & Rockhound of Yr. plaques	85.21	
Junior expense - Books	24.50	
Sec. State - Change Res. Agent	8.00	
Postmaster - 2½ mo. mailing P & S	62.50	
Library - New book & Film repair	14.45	
Lincoln Arts Council Dues	25.00	
Friends of Museum dues & donation	100.00	
Jan. Program, cake, swap expenses	50.35	
Security Storage February	33.00	
1986 Show expense	16.01	
Misc. copies, postage, etc.	<u>34.90</u>	988.80
NBC Checking Balance 1-31-86		256.45

## THE OLD WOMAN METEORITE

Do not let the title fool you. Meteorite terminology has not progressed to gender or sex discrimination. It is simply a designation of where this particular outer space object landed on planet earth, in the little-known "Old Woman Mountains" in eastern San Bernardino County "Mountains", in a California desert. It ranks as the second largest iron meteorite found in the U.S.A., and weighs over three tons; 6,070 lbs.

Detailed maps show these little mountains about 50 miles southwest of Needles, California, and west of Lake Havasu City, Arizona. (San Bernardino County is so large that Cherry County in Nebraska seems like a geographical "runt", by comparison!)

This 6,070 pound meteorite was found by three prospectors in 1975 on public land administered by the Bureau of Land Management. Date of its fall is unknown. Technicalities denied their claim to ownership. Such objects on public land "should go to the Smithsonian Institution in Washington, D.C."

After public display in several California cities, and viewed by thousands of persons, it was sent to the Smithsonian in 1978. A 942 pound section was then removed for scientific study, chemical analysis, mineral distribution and rare gas content. Tests indicated a unique transition between two well-known types of metallic meteorites. Scientists hope to learn more about the earth's origin, the Solar System, and the meteorite's environment; over 4 billion years.

The meteorite, minus the 942 lb. sample, was returned to California in 1980, and placed on display, as requested by local residents. A part of the study section, etched and polished, will later be returned, showing the beauty of the interior crystalline structure. The main portion, having been exhibited at a Barstow, California Visitor Center, is now at a San Bernardino County Museum at Redlands where it is to be on display by March 1, 1986.

Some LGMC members may know that our daughter, Kay, formerly part of the staff at Nebraska State Museum (Morrill Hall, Lincoln) became Assistant Director of the San Bernardino County Complex last Spring. It includes several branch museums throughout that huge county with its varied areas of mountains, lakes, deserts, dry lakes (more than twenty) and ranch lands.

Kay has sent to us publications about the meteorite, and some color slides. A page from a local newspaper show a 5½ X 8 inch staff photo of Kay photographing at close range, the 38" X 30" X 34" meteorite before it was unloaded from the big truck that brought it from Barstow to Redlands. The slides show the metallic luster of the specimen, which is mostly iron, about 6% nickel, plus a small amount of cobalt, phosphorus, chromium and sulfur. (Smithsonian anal.)

## THE OLD WOMAN METEORITE - continued

Removal of the meteorite from its matrix in the "Old Woman Mountains" was a problem. Its great metallic content and high specific gravity (density) made it heavy for its size. (It was no mere pebble for an ordinary run-of-the-gravel-pit agate lickert to tote home!) Assistance of the U.S. Marine Corps was given. A rigging team climbed to the site, and a helicopter lowered equipment to them.

A double-thick cargo net was inserted beneath the 6,070 pound mass; a helicopter lifted it, and carried it to a suitable location for observation. Thousands of visitors from all parts of the U.S. came to see it; according to an information sheet from the United States Department of the Interior.

Some general remarks about meteors, meteoroids and meteorites may now be mentioned. Terms like "shooting stars" or "falling stars" are gross misnomers, not to be taken literally, Dictionaries indicate a meteor is a transient firey object streaking the atmosphere or sky, produced by a meteoroid passing through. If it is extremely large and brilliant, and it explodes, it is called a "bolide". They are assumed to come from outer space; source not known for certain. Some come in quantities called showers; and these showers repeat through the years at certain dates and quite regular intervals. These showers are given identifying names of the constellations of stars from which direction they appear to fall (for example the Orionids in October.) Though their origin may be related to comets, they are not the same thing, and must not be confused with them. If a meteoroid or fragments of it fail to burn up by atmospheric friction, and fall to earth, they become meteorites.

Below are some facts from the U.S. Dep't. of the Interior:

Largest known (iron) meteorite - West Africa, 60 metric tons.  
Second largest (iron) brought by Adm. R.E. Peary from Greenland,  
33.1 tons.

Largest (iron) found in U.S.A. - Oregon - now in N.Y. City, 14.2 tons.  
Second largest (iron) found in U.S.A. - Old Woman Mountains, 3 tons.

Largest single specimen from Meteor Crater, Arizona,  $\frac{1}{2}$  ton

- Submitted by J.D. Young

P.S. "Twinkle, twinkle little "falling star" - how I wonder what  
you are, - - - -!" (and where from?)

*Joy.*

It's ELEMENTary!

E	T	I	H	C	A	L	A	M	M
V	N	B	R	O	N	Z	E	A	O
I	E	P	Y	R	I	T	E	G	T
T	M	U	I	N	A	R	U	N	A
C	E	A	L	L	O	Y	E	E	K
A	L	U	M	I	N	U	M	T	C
O	E	M	G	I	N	O	O	I	O
I	E	C	O	P	P	E	R	T	C
D	A	E	L	T	I	N	H	E	A
A	R	A	D	Z	I	N	C	L	E
R	M	U	I	N	O	T	U	L	P

Find these words in the matrix:

- |           |               |
|-----------|---------------|
| alloy     | malachite     |
| aluminum  | metal         |
| atom      | ore-2         |
| bronze    | peacock (ore) |
| chrome    | plutonium     |
| copper    | pyrite        |
| element   | radioactive   |
| gold      | tin           |
| lead      | uranium       |
| magnetite | zinc          |

When you've found all these words, another will appear in the leftover letters.

JUNIOR MEETING at 7:00PM FEBRUARY 22 in the NORFOLK ROOM

The Juniors enjoyed their day at the Winter Swap. Each one of them went home with new specimens donated by club members and cut into slabs by Jim Parks. The Juniors also took home extra copies of the Lapidary Journal ( happy reading kids! ) Ten young people accompanied us on our indoor field trip to Morrill Hall Museum. We watched a slide show about the Lincoln Gem and Mineral Club's work in excavating and preparing the Plesiosaur on display at the museum. After watching the slide presentation we went to the Dinosaur Room to see the actual thing.

I'm proud to tell you that the Juniors earned more money than they spent this last year. Money was earned at the swap and the annual show selling grab bags. We did not have to dip into our \$50 budget at all. As a reward the Juniors will receive a reward at the February meeting.

SEE YOU ALL THERE \*\*\*\*\* J.L.Wright

\* \* \* \* \*

FIELD TRIP

The Field Trip on Sunday afternoon February 2, 1986 was a true success.

A total of 29 members attended plus drpp-ins. Due to great interest shown, more trips are being planned, including trips to Planetarium and also Nebraska Hall.

Field Trip Chairman  
Tom Simmons

From your librarian -

We have a new book in the library. VOLCANOES by Robert Decker & Barbara Decker, Dartmouth College, 1980, W. H. Freeman & Co. Publishers. This is the text book on the subject.

Lee J. Pivonka, clubmember, has presented us with a copy of his thesis, GEOCHEMICAL DETECTION OF SULFIDE-BEARING VEIN STRUCTURES IN A DISTURBED SURFICIAL ENVIRONMENT, CENTRAL CITY DISTRICT, COLORADO. This is a handsomely bound volume with special map compartment. Our special "Thanks" to Lee for this addition to our club collection.

Not only is Jim bringing Library Books to meeting to be checked out but also exchange bulletins - Look 'em over - good stuff maynard.

Those wishing to help fill out the Lapidary Journal Collection (1961 to present) we need -

for year 1983 - Jan. Feb. Apr. May, June, July, November  
for year 1984 - Jan. Feb. Mar. Apr. May, June, Sept. Oct. November  
for year 1985 - All.

\* \* \* \* \*

From some of the Exchange bulletins -

DID YOU KNOW

A CENTIMETER is roughly the width of one's finger?  
A METER is roughly the distance from floor to door-knob?  
A GRAM is approximately the weight of a paper clip?  
A MILLIMETER is about as long as the thickness of a dime?

--From Diablo Diggin's, via Mineralog, via Dinny's Doin's

READY TO GO HUNTING FOR DIAMONDS? ? ? ? ?

It has been known since 1975 that diamonds can be found in southeastern Wyoming rock formations known to geologists as "kimberlite intrusives." Now the state Geological Survey has published a report detailing conditions of two newly-discovered formations.

The report, titled "Geological and Geophysical Investigations of Kimberlite in the Laramie Range of Southeastern Wyoming," costs \$2.50. Send order to the Geological Survey of Wyoming, Box 3008, University Station, Laramie, WY 82071.

Two newly discovered kimberlite formations are now being tested by grease-tabling extraction methods to determine whether or not they contain diamonds.

To date, nearly 100 kimberlite intrusives have been discovered in the region--and at least 12 contain diamonds.

Fortune-seekers and get-rich-quick buffs might find it worth their while to obtain a copy of the Survey's latest report.

contribution of Nell & Rawley Stockton, via Scottsbluff, Ne. Rock Picker

SHOP HINT - Marking Specimens

Use a spot of typist white correction fluid and write with a ballpoint pen the identifying mark. This is impervious to water and most acids.

via Pegmatite & Capper Gabber by way of Tule Smoke Signals

HANDY HINT: Keep your tools from rusting. They are a large investment and need to be maintained properly. Place several strips of ordinary chalk in the tool box. It will absorb the moisture and keep everything free from rust.

from Pike County Rockhound News via Gem City Rock News

## THE LAND OF THE SOUTHWEST INDIANS

Another long cherished dream came true for me last September when Gilbert and I visited the Indian villages of the Southwest and the ancient ruins from which their history derives. Our first major objective was Mesa Verde, long familiar to Gilbert, but which I had never seen. After driving from Denver down through Colorado Springs and Pueblo to Walsenburg, we took the southern route across the Colorado Rockies, planning to stop at Bayfield and Gem Village. Some of the LGMC members will remember the Shipleys, who came from there as dealers at our annual shows around 1968 to 1970. Dressed in buckskin and turquoise, Mr. Shipley used to demonstrate his P.D.Q. compact lapidary equipment.

I had heard several years ago that Mr. Shipley had died; but at the little lunch counter in Bayfield we were told that the elderly Mrs. Shipley still lived there in town, though she had sold the business. We were assured, however, that Shipley's Mineral House was still open. Not so. The peeling paint, crumbling stucco, dusty windows, and fading signs attesting to wonderful closeout bargains were all that remained. It must have been well worth a visit in earlier days when its gem and lapidary classes were nationally advertised.

Still, the disappointment at Gem Village could not destroy our pleasure in the roadside geology of U.S. 160. A nice bonus was LaVeta Pass, where I had happened to be the first pilot to fly through early one morning on the way to Bakersfield, California, for the All Women Transcontinental Air Race, and had been allowed to feel a brief moment of importance by a request to radio back a report of the weather in the pass. However, Wolf Creek Pass, between South Fork and Pagosa Springs, was much more spectacular, perhaps because of the unstable volcanic rocks that are prone to slide. White ash beds near here came from what was probably once a tremendous volcano, perhaps sixty-five miles across.

Pagosa Springs was interesting because the springs just south of the San Juan River are hot, providing hot water to heat the nearby motel and other buildings. The siliceous sinter precipitate has none of the beauty of the travertine in such other hot springs as in Yellowstone. So on to Durango and, surprisingly, a modern shopping mall, small but with some especially lovely art work. Don Woodard's Indian Trading Post at Cortez, Colorado, featured in a fairly recent National Geographic magazine, proved to be a more reliable source of reasonably priced authentic Indian arts and crafts.

Mesa Verde, cliff house ruins of the ancient Anasazi, was my first introduction to Indian history that reads like a storybook. The incredible ingenuity of a race of people surviving in such dry and inhospitable lands as southwestern Colorado and northeastern Arizona defies imagination. Before the abandonment of the ruins around 1200 A.D. as the result of prolonged drought and increasing cold, there were many more people living in these lands than there are today.

Canyon de Chelly, occupied and abandoned at roughly the same times as Mesa Verde, tells more of the story, but Canyon de Chelly has more beauty and more water. In fact, one sees on the floor of Canyon de Chelly the farms of the later invaders, the Navajos, still in primitive style of operation. The Navajos live there only in summer. In winter the cold air settling into entrapment in the canyon forms a giant

icebox. The mystery really is: How could the Anasazi get in and out of their pueblo dwellings so high in the cliffs, dwellings so placed that they would catch the low, slanting rays of the sun in winter, yet be sheltered by overhangs from the vicious, direct rays in summer?

Chinle, at the mouth of Canyon de Chelly, gave us one of our most interesting mornings of the trip--in a laundromat, of all places. There were at least fifty washing machines arranged in rows back to back, with an appropriately large number of dryers lining the outside walls. The place was almost deserted at the time of our early morning arrival. Before long it was nearly packed with entire families of Navajo Indians--mothers, fathers, children, grandparents--with huge baskets (mainly plastic), boxes, and bundles of clothing. The younger people wore jeans; older women were dressed in their traditional velvets. They were clean, quiet, and busy, with all but the youngest and the very old pitching in to help. Though each machine gobbles up a number of quarters, it was the only alternative in a land where all water has to be hauled for miles and a pickup truck is valued above other means of transportation. We felt privileged to be part of the life of the community for a little while. Another real privilege in Chinle was spending an evening with a delightful life-long friend of Myrtle and J.D. Young who is a nurse at the fine Indian Health Center there.

On our way from Mesa Verde to the beauties of Canyon de Chelly, we stopped at the Four Corners for the experience of standing in Colorado, Utah, Arizona, and New Mexico at the same time. The drive from there to Chinle was an amazing mixture of barren land, beautiful red rock formations, and sands of coral red alternately blown in great dust storms and drowned in desert downpours. The few little hamlets we passed had names more romantic than the towns which bore them--Teec Nos Pos, Mexican Water, Rock Point, Round Rock, Many Farms, though Many Farms has the first institution of higher learning in the United States owned and controlled by Indians. Chinle was a welcome haven in the mud, which had by then turned dingy.

Miles and miles of nothing, with a beauty all its own. We were much interested in the historic old Hubbell Trading Post, still in operation just west of Ganada. In 1878 John Hubbell bought this trading post and played a central part in establishing Navajo rug weaving as an industry. It was he who was responsible for the proliferation of the bright red, cream, black, and gray designs, using aniline dyed wools, that became so popular. Now there is more of a desire for the softer colors, a return to using wools dyed with native dyes; but these are more time consuming to make.

Completely surrounded by the huge Navajo Reservation is the much smaller, much different Hopi Reservation with its ancient pueblo dwellings built on top the mesas south of Black Mesa. My interest was aroused some thirty years ago by an illustrated magazine article telling the ancient story of the besieged Hopi in the pueblo of Walpi on the high top of the very narrow First Mesa. As the story went, they needed protection from the threatening Spaniards and, even more close at hand, the marauding Navajos. The Hopi invited a small band of the more aggressive Tewa from the Rio Grande pueblos to share their mesa top and protect them. The story seems to depend on who is telling it. As I was savoring the thrill of the old sacred dancing stone and the ancient

pueblos, some rooms still occupied by the elderly, our guide was recounting the tale, except that in her version the Tewa came asking for protection. Walking the narrow pathway still in existence between the two pueblos, Walpi and Hano, one is reminded that for generations there was no socializing, no intermarriage, between the two tribes on the tiny mesa top. But here too things change. Now there is even an intermediate pueblo, Sichomovi, in between.

For anyone that close, the Grand Canyon is an irresistible lure, so our favorite "little nothing" town, Gray Mountain with its super Navajo fry bread, was our next base. This time we had great visibility at the South Rim of the Canyon and were able to sit for hours, using binoculars and a Zoomar telescope to study the formations and the changing colors. We were fascinated by the changes in plant life from top to bottom of the 6,000 foot deep canyon. The vegetation ranges from the Sonoran Desert of Central Mexico at the bottom to the Hudsonian of Hudson Bay, Canada, at the top.

As we passed Sunset Crater and skirted Flagstaff on our way to Phoenix, we were tempted by happy memories but couldn't stop. Primarily, Phoenix was on our way to Tucson to see the fabulous observatory complex on top of Kitt Peak some forty miles southwest of there, but it was great to visit with transplanted Nebraska friends in the Phoenix area. It was good to know that Ralph and Rosa Lee Ulrich are doing well, and to visit with Art and Velma Bloyd. All of them remember LGMC so warmly. One of our really special experiences was visiting the very fine, big Arizona State Mineral Museum, where Art is a director and served as our guide. It, and Art, are well worth a visit.

Then--on to Kitt Peak. But that story will have to wait.

--Florence Boring Lueninghoener

#### Jackson Lake Archeological Program:

At our last meeting, a very interesting program was given by Melissa Connor of the University of Nebraska Department of Archeology. Her talk was entitled "The Jackson Lake Archeological Program". The dam at Jackson Lake (in western Wyoming) was judged to be unsafe due to an active fault (which produced the Grand Tetons) and an unconsolidated layer of mud underlying the dam itself.

Water was drained from the lake to release pressure from the dam. As a result, a large number of early human artifacts were re-exposed. Miss Conner and several students spent the summer searching for, and studying these artifacts.

The inhabitants were believed to be an Aboriginal people who spent the spring, summer and fall seasons in the Jackson Lake area. The area was popular for thousands of years due to its sources of food (such as the cannas plant) and for its nearby sources of Obsidian (volcanic glass) from which many of their tools were made. Artifacts found in this area, such as projectile points and Cody Knives, are dated by styles which are diagnostic of a specific time period.

Scrapers, on the other hand, are not often datable through this method. Instead, the obsidian used for the tools is tested for the amount of hydration the obsidian has been subjected to since it was chipped. Scientists use this information to determine how long ago the tool was made.

The third type of dating method used was radiocarbon 14 dating, which were made from organic materials like wood and bone. C14 dating was also used on charcoal from excavations of "fire cracked" rocks. These rocks were used by the early inhabitants as a heating element and were found in excavations about one square meter in size.

Field work at this sight will continue every summer up until 1988, when its workers will hopefully have a better idea of how these people lived and how their economy changed over the thousands of years this area was used by them.

By Kevin Schwartman

MWF NEWSLETTER - January 1986

HAVE YOU SEEN THIS SLIDE PROGRAM?

The Midwest Slide Library has a set of slides called "The Midwest Fossil Finders Honor Roll" This details pictures of fossils and locations of finds in the Midwest Area. Example: Alpena, MI, Sylvania (Silica) Ohio, and the Braidwood/Pit 11 "ironstone concretions" of Illinois. Order as other slide programs from Louise Stinnett, Program Request Chairman. Note from Cecilia Duluk, Holotype Committee.

Also--Have You Had The Mineral Heritage Commemorative U.S. Postage Stamp Display? The stamps were issued in 1974 and first day issue was at the National Gem and Mineral Show in Lincoln, NE. They were modeled by Leonard Buckley and Frank Waslick. This display can easily be sent to a club for you show by mail or UPS. It must be displayed in a locked case at least 24" in length. Contact the Special Displays chairman, Beverly Millard, 10298 W. Ford Ave., Zion, IL., 60099.

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BLM and Forest Service To Swap Land In Wyoming

The governor of Wyoming requested the BLM and the Forest Service prepare a socio-economic and analysis as well as, an environmental statement on a proposed interchange of 35 M acres of land. The interchange in the state is part of a larger interchange planned by the Interior Dept. The BLM would assume management of the Prescott National Forest in Az., the Humboldt National Forest in Nevada, and the Big Horn National Forest in Wy. The BLM now manages 420 M acres of mineral estate. That figure will drop, if the plan is approved by Congress, to 215 M acres. The Forest Service will be responsible for administering 205 M. acres of mineral estate. The Forest Service will handle 100% of the underground-coal mining and leasing. BLM will handle 65% of hard-rock mining claims; 85% of surface coal leasing; 95% of oil and gas leases and wells, and 90% of geothermal leasing.

Some public opposition to the interchange idea stems from fear among the mineral industry that the Forest Service does not advocate leasing as easily as BLM does. They feel the Forest Service is more concerned with timber development and recreational activities. John Boland.

\*\*\*\*\*      \*\*\*\*\*      \*\*\*\*\*      \*\*\*\*\*      \*\*\*\*\*      \*\*\*\*\*      \*\*\*\*\*      \*\*\*\*\*

PRF-SHOW BUS TRIP TO AMISH LAND--NELSON SHORT TO LEAD THIS DAY LONG TRIP

This Trip includes a visit to: Shiphewana Auction and flea market; Amish acres historic farm and resturant; movie on Amish life; eat some Amish cooking; take a conducted tour of the farm. This is 80 acres of "old order" Amish which acquired a land grant in 1834. Bus-boarding at front door of Notre Dame U at 9 a.m. Parking lot nearby. Price of all day trip is \$20.00 each --trip, huge lunch, and tour with sales tax, gratuity included.

Reservations necessary by May 1st . Date of trip July 16, 1986 and we leave from South Bend, In., in front of University. Send reservations to Nelson Short, 27 Endicott Dr., Howell, MI 48843. Send remittance with reservations.

ALL AMERICAN CLUB PROFILE POINTS LISTED

Dr. Benjamin Moulton, RR 21, Box 103, Terre Haute, IN., 47892, has submitted the points which must be used as a guideline for competition as an All American Club. This is the first of two articles on the club listings:

1. Service to members and visitors at meetings--  
Do You: Have by-laws? Hospitality and welcoming committees? Provide displays, Have 'show and tell' times? Club vests? Pins? Reports of various types given?
2. Service to members away from meetings--  
Do you: Have field trips announced early in the year? Planned and reported on? Have a shop for members? Qualified instructors? Library? Meeting rooms? What is bulletin size. Send on along with other material.
3. What about Club publicity?  
Do you: Utilize radio, TV, and posters for advertising your club activities and shows?
4. Service to other clubs--  
Do you: Take exhibits to other clubs and shows? Help judge shows? Go on joint field trips? Use other club's publicity effectively? Exchange programs?
5. Service to Federations---  
Do you: Have members on the Federation level? Earn funds for the Scholarship or Endowment Funds? How does your club help the AFMS or the MWF?
6. Service to Community and nearby areas---  
Do you: Talk to classes in schools, donate educational specimens? Exhibit at museums and libraries? Assist Sr. Citizens or service organizations?
7. Service to Distant Communities---  
Do you: Do any work with colleges, pen pals, field exchange students, or people in institutions? Save stamps, labels?
8. Service to/ involvement in public agencies---  
Do you: get involved with BLM, Forest Service, Nature habitats, wilderness areas? Create any project for state or federal agency? Send exchange of letters-copies only.

Ed Wilponen -- New AFMS President for 1985-1986

Ed Wilponen of Spokane, Washington, is the new AFMS President. He has been active in the rockhound hobby since 1963. Mr. Wilponen has served the NFMS as president, v chair of public relations, and on rules committee. He and his wife, who served as NFMS secretary and Newsletter editor, are kneedeep in their hobby. Ed is also a judge in both lapidary and faceting in many shows. His sons have received awards in lapidary, so the entire family is into the rockhound hobby.

Besides lapidary, Ed is a ham radio operator and likes gardening, fishing and hunting. A busy person indeed. We wish him a good year in his endeavors.

Students Selected For 1985-1986 Scholarship Grants Announced

AFMS Scholarship Foundation grants, totaling, \$1,500 each, have been issued to 12 graduate students, according to announcement from Louellen Montgomery, Pres. of the Foundation. These recipients are listed in the Lapidary Journal, so the editor is choosing to list only the MWF students here: Barbara Liukkonen, B.A. in Geology at Carlton College, Northfield, MN. Working on MS at U of MN, Duluth with research on watershed characteristics in two small lakes in MN and how these processes influence water chemistry. Martin Wangensteen, a graduate of Macalester College, St. Paul, MN. He too has a BA in Geology, and is at the U of MN, Duluth, as he researches geohydrological investigations to determine environmental impact of metal laden leachate around landfills.

The 1984 students, Stacia Spaulding and Linda Rankis, completed their graduate work this past summer. Donald C. Shields was selected to receive the second year of one of these grants. He received his B.S. in Geoscience at Penn State University and is pursuing his M.S. with special emphasis on invertebrate paleontology at the University of Nebraska-Lincoln. James Borovich, receiving the second year of the other grant, received his B.S. in Geology from State University of New York at Oneonta and is working on his M.S. at UN-L where his thesis topic is on evolutionary study of the Pennsylvanian crinoid genus Apogrophiocrinus Moore and Plummer.



Measure your lifetime in blessings,  
Not in the years you have known...  
Yes, measure your lifetime in blessings,  
And you'll always remain in your prime---  
For youth is a feeling you keep in your heart  
Whether seven or seventy-nine.

Larry Sandman

MWF Newsletter  
L. E. Blackburn  
902 E. North St.  
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\* the Federation. \*  
\*\*\*\*\*

The Spring Meeting of the MWF Executive Committee will be held at Cincinnati, Ohio on April 19, 1986 in conjunction with the Cincinnati Show. The meeting is open to all Federation members. Please plan to attend.

\*\*\*\*\*

The Editor Suggests:

It is imperative that those submitting news to me know that: In July at the MWF Council meeting, the Newsletter was limited to 2½ pages of information. This means, items sent to publication must be concise, and cut to the bare minimum. We are in the process of selecting a new printer --so there are changes being made. Thank you. Lois B.

## PETRIFIED WOOD

The term "petrified" when applied to wood is probably not the best usage in the English language. To petrify connotes that some object has turned to stone. Scientists once believed that wood became petrified by a molecule by molecule replacement of the wood by some mineral such as agate, calcite, barite, pyrite, or other material. This would be reasonably difficult as, say, a cubic pyrite crystal might have to adjust its' internal geometry to accommodate perhaps a monoclinic crystal of some organic substance in the wood. More recent research has shown that most petrified wood is simply permeated with the mineralizing agent. If one were to dissolve away the mineralizing agent with some acid or base, the wood would still be there. That is, the wood is simply mineralized. We should replace the term petrified with something more accurate, such as mineralized. We could then say that wood is agatized, pyritized, baritized, or calcified and be true to our meaning each time.

Probably the oldest petrified wood, which is silicified wood, comes from Devonian age rocks in Scotland. Some silicified wood also comes from Devonian rocks in North America. Tidwell (1975, p. 24) states that some fossil land plants are known in late Silurian strata, and that by Devonian, many major groups such as lycopods and ferns.

Throughout Mississippian and Pennsylvanian times, there were a great deal of coal swamps with tree-like lycopods, seed ferns, and true ferns growing in them. Plant remains found in these rocks are often in the form of coal. Some are calcified, however, and a classic example of lapidary material from these rocks is the genus of lycopod called Lepidodendron. Some excellent examples have been collected from the strip mines near Pella, Iowa. An excellent example is on display at the paleobiology gallery at Morrill Hall, and another is to be seen at the Bartels Museum at Concordia College in Seward.

Probably the best known examples of "petrified" wood come from the Triassic Chinle Formation of Arizona. These rocks contain what has become known as the Petrified Forest National Monument. Much of this wood is available to the hobbyist because much of the Chinle Formation is exposed in areas that are not within the monument boundaries. In earlier times, much of this wood was pulverized and used as an abrasive on sandpaper. Fortunately, this practice stopped at about the turn of the century. Conifer trees became more abundant during this time.

In Jurassic time, cycads and conifers became very important land plants. The cycad, really a cycadophyte, is characterized by its diamond like structure and round scars on the surface. The cycadophyte appears to be related to the pineapple but is not.

Flowering plants such as the magnolia became important in Cretaceous time. Cycadophytes and conifers flourished then too. Most of the agatized wood found in Deuel County, Nebraska, and in terrace deposits of the South Platte River came from Cretaceous rocks in Colorado. Some of this wood is probably the most colorful wood for lapidary purposes to be found any place in the world. Most of it is an uninviting shade of gray brown or yellow brown, but a small percentage of this material is red, blue, bright orange or a brilliant yellow. Much has fine contrast.

The Eocene Green River Formation of Wyoming contains excellent examples of agatized wood. This wood is often referred to as Eden Valley Wood. Freshly cut surfaces of it are often black and contrast sharply with a light blue gray chalcedony matrix. The black wood can be soaked in a commercial chlorine bleach and the original colors of the wood can be brought out. Some pieces need soak only a few minutes to regain their natural wood colors and others must soak in the bleach for weeks or even months. If one is polishing a piece of this wood, it is usually best to sand the wood all the way to the pre-polish stage (600 grit or finer) and then soak the wood in the bleach. This is because the bleach job may be only skin deep and a coarse sanding will cause all of the bleached surface to be removed.

The John Day Formation of Oregon and Washington contains many excellent examples of opalized and agatized wood. Many choice museum displays have been made from these fossils.

An excellent publication for the hobbyist is common fossil plants of western North America, by William D. Tidwell. This book is available from the Brigham Young University Press, Provo, Utah. I do not have the current price. It has a very good, descriptive text and hundreds of excellent illustrations. Anyone who professes to have an interest in fossil plants should not be without this fine little volume.

Some mineralized wood is found in the Cretaceous Dakota Group in Nebraska. Most of this is pyritized or carbonized. None is at all suitable for lapidary or specimen purposes if one is looking for beauty. Near Fairbury, Nebraska, some outcrops of Dakota Group shales contain wood and abundant leaf imprints. These shales once in a while yield fossil flowers. David Dilcher at Indiana University is currently studying them. These fossil flowers may be the oldest examples of flower fossils in the whole world. These flowers were first found on a field trip I took with Larry Martin and Bob Lindsay. We presented a short paper on this discovery at the Nebraska Academy of Sciences meeting in April of 1969. We really had no inkling of the significance of the find until 1976, when I was approached by Howard Reynolds of Fort Hayes State University at Hayes, Kansas. It seems that he was doing some reconnaissance work for Dilcher and came across the abstract of our paper at the academy meeting. On memorial day weekend, Reynolds and I went out to the site and found a couple more flowers. By the following fall, Dilcher and his field party arrived on the scene. Quite a few more flowers were collected in a few days. Reports on Dilcher's studies can be found in Natural History Magazine for March, 1984, and Terra Magazine, January/February, 1984. Other publications can be found in various paleobotanical professional journals.

Mineralized wood will be the display materials for the February meeting. Cases will be furnished. Bring examples of specimens as well as lapidary material from mineralized woods.

Roger Pabian

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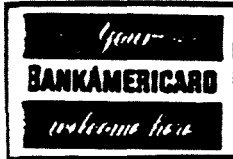
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Subscriptions to THE PICK & SHOVEL are \$5.00 per year mailed.

Dues to LINCOLN GEM & MINERAL CLUB are as follows:

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

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

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

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

DON'T FORGET - to prepare your displays for the Show on March 15-16  
CHECK YOUR MAILING ADDRESS LABEL ON THIS PICK & SHOVEL - Then refer  
to bottom of Page 3 (this issue) for instructions! Thanks.

General Meeting - Feb. 22, 1986 at NE Center, 33rd & Holdrege 7:30 P.M.

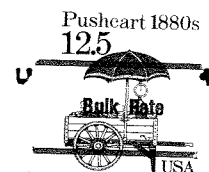


**H.E.L.P.**

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BOX 5342  
Lincoln, Nebraska 68505-0342



Edward Ridge  
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