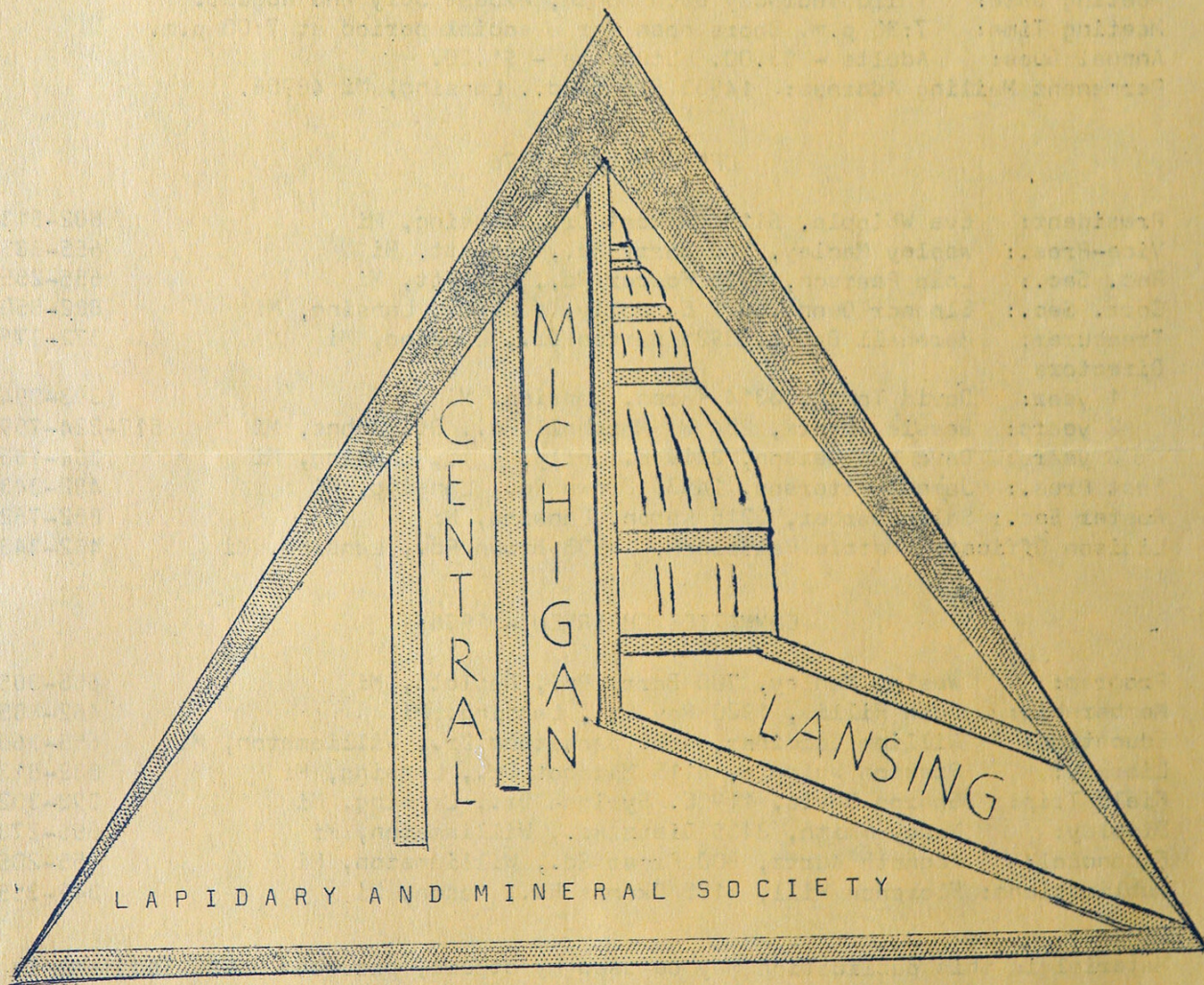


MAR. 1978

ROCKHOUND NEWS



MEMBER OF
MIDWEST FEDERATION OF MINERALOGICAL AND GEOLOGICAL SOCIETIES
AMERICAN FEDERATION OF MINERALOGICAL SOCIETIES

ROCKHOUND NEWS

This bulletin is the official publication of the Central Michigan Lapidary and Mineral Society of Greater Lansing, Michigan, and is published the second week of each month, except July and August.

The Central Michigan Lapidary and Mineral Society is a non-profit organization, meeting to promote interest and increased knowledge in the fields of mineralogy, geology, paleontology, and the lapidary arts. It was organized May, 1957.

Meeting Place: Cafeteria, Everett High School, 3900 Stabler, Lansing, Michigan.
Meeting Date: Third Thursday each month, except July and August.
Meeting Time: 7:30 p.m. Doors open for a social period at 7:00 p.m.
Annual Dues: Adults - \$3.00. Students - \$1.00.
Permanent Mailing Address: 14933 Brown Rd., Lansing, Mi 48906.

OFFICERS FOR 1976

President:	Eva Whipple, 6115 Marscot Dr., Lansing, Mi	882-8136
Vice-Pres.:	Wesley Manley, 700 Barry Rd., Haslett, Mi	655-3854
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Program:	Wesley Manley, 700 Barry Rd., Haslett, Mi	655-3854
Membership:	Ruth Hillis, 1920 Ray St., Lansing, Mi	482-8855
Education:	William Gardiner, 4518 Sandstone Dr., Williamston, Mi	655-3608
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Field Trip:	Sharon Davis, 119 E. Syringa Dr., Lansing, Mi	393-3020
Display:	Nancy Smith, 3435 Dietz Rd., Williamston, Mi	655-2736
Financial:	Kenneth Kurtz, 800 Frost Rd., Williamston, Mi	655-2051
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Midwest Federation's NEWSLETTER



Published monthly except July and August as a service to members clubs.
All news, articles, subscription orders and requests for information concerning publication
should be sent to the Editor, Haydon Peterson, Parrot Printing, 2125 Forest, Des Moines, Ia. 50311

Issue No. 163 - March 1976

Meet Our

Treasurer

Milford J. Sharp of Fairview Park, Ohio is the 1976 Treasurer for the Midwest Federation. He has had financial experience as local treasurer for his union. He has also been a State Director for Ohio.

Mr. Sharp is now a teacher in training of workers in installation and operation of switching equipment for Ohio Bell Telephone Company.



Mr. and Mrs. Milford Sharp

IT'S ALL AMERICAN TIME !

Every club should fill out and mail in its All American entry now. This is also the Midwest Merit Award competition. The blank appears in the November and January AFMS Newsletters and was handed to delegates at Detroit. If your club's Award Chairman can't find a copy, I have extras.

Midwest has always been the leader in this program. It is important to us to keep up with our own history and accomplishments, to learn what others are doing, to share our ideas, and to participate in the activities of our Federations. Please see that your club entry is in the mail soon. No scrap books this year so your entry should not be too much work. We have had many winners and are proud of them all, but we are also proud of all the clubs who have participated. Absolute deadline for postmark is March 1st. Why not do it now since 1975 is now history?

Judges for the current competition are announced on page 2. Mail those entries to me: June Zeitner, Midwest Merit Awards Chairman, Mission, South Dakota 57555.



THIS IS YOUR LAND
KEEP IT CLEAN

Plans continue for convention

St. Louis in '76

MIDWEST FEDERATION
SHOW AND CONVENTION

JULY 22 - 25, 1976

The site of the 1976 Midwest Federation Show and Convention is at the "Show Center" located at 9785 St. Charles Rock Road in West St. Louis County just minutes away from Lambert International Airport.

The Show Committee is also pleased to announce that they have now selected the headquarters motel which is the Ramada Inn, 9636 Natural Bridge, Berkeley, Missouri 63134. This motel is about 1/2 mile from the airport, 1/4 mile from Interstate 70 and is about 3 miles from the show site. The Ramada Inn will provide free transportation to and from the airport and to the show site for their guests. When writing the motel for reservations, ask for "1976 MWF Convention Special Rates". The Show Committee has reserved 200 rooms and expects them to go fast so reservations at the headquarters motel should be sent in early. These special rates are good only through April 1, 1976.

The headquarters campground is "Pinewoods Park", which is located one mile west of Wentzville on Interstate I-70 at AA exit. You may write the owners, Leonard and Ellen Grimm, Route #1, Box 314, Wentzville, Missouri 63385. This campground has fishing, recreation area, pavilion, Olympic size pool, and a large number of camp sites with no or full hookup.

A complete list of recommended motels and camping facilities close to the show site may be obtained by writing the show chairman.

The show itself will have over 300 displays on one open floor which is completely air conditioned. In addition to the competitive displays and other special displays, the show will have a large number of museum exhibits.

Show attendees will be able to purchase supplies from 40 nationally known gem and mineral retail dealers. A large wholesale area encompassing 16 dealers has been provided from the wholesale trade. Free special lectures and programs are being provided all four days of the show.

The show committee has selected "Twenty-one Tours, Inc." of St. Louis, Mo. to provide daily tours from the show to outstanding attractions in the area.

Inquiries about the show should be directed to Gerald Hook, 932 St. Charles Avenue, St. Charles, Missouri 63301, phone 314-724-5427.

WELCOME! NEW CLUB!

Sanilac County Lapidary, Inc.
Mr. Henry Wede, President
5301 Harrington Road
Corswell, Michigan 48422
Joined 1-16-76

JUDGES ANNOUNCED

Mrs. June Zeitner, Merit Award Chairman for the Midwest Federation, has announced the following judges for the Midwest regional division of the AFMS All American program and the Midwest Merit Award Competition. Chairman: Mr. Leo Yanasak, Midwest Past President, Des Moines, Iowa. Committee Members: Clyde Hanson and Doloris Poffenberger, both of Des Moines.

In keeping with the custom of the past several years all committee members are from one area to facilitate conferences and communication. Past judging teams have been from Mountain Home, Arkansas, the Chicago area and the Twin Cities of Minnesota.

Mr. Yanasak is currently show advisory committee Chairman for the Midwest and has served the Federation in various capacities for many years. An active member of Des Moines Lapidary Society, Leo has held all offices in that club and has been in charge of such projects as the clubhouse owned by Des Moines Lapidary.

Clyde Hanson is a past president of the Dallas County Club and the Des Moines Lapidary Society. He is also a member of the Central Iowa Mineral Club. Doloris is Vice President and program chairman of the Dallas County Rock club and served that club last year as secretary. The Dallas County Rock Club has won several All American and Merit Awards in the past. Des Moines Lapidary was a winner last year and has contributed much to the Federation including the hosting of a national show.

Guidelines will be provided the judging team and all entries postmarked prior to March 1st will be judged. All American Trophies will be awarded at Austin at the National Show and Midwest Merit Awards will be presented at St. Louis at the Midwest Federation Banquet.

NEW FOSSIL BOOK

A new fossil book, Common Fossil Plants of Western North America, is the first guide to the fossil plant kingdom written especially for the amateur. This book, written by Dr. William D. Tidwell, may be ordered from Brigham Young University Press, Marketing 205 UPB, Provo, Utah 84602.

COMMITTEE APPOINTMENT

Howard Taylor, MWF President, announces the appointment of Leonard Nicholls, 32141 Meadowbrook Lane, Livonia, Mich. 48154 as chairman of a new committee to be known as "Reopen and Keep Open Collecting Areas".

NATIONAL "GEM CAPERS" OF '76

June 17, 18, 19 & 20, 1976

The annual National Gem and Mineral Show of 1976 will be held at the Austin Municipal Auditorium and Convention Center on Town Lake in Austin, Texas. The show and convention will be hosted by the Austin Gem and Mineral Society for the American Federation of Mineralogical Societies and the South Central Federation of Mineral Societies.

The headquarters hotel is the Sheraton Crest Motor Inn also on Town Lake and only a very short distance from the Auditorium. Hotel reservations should be made through the Austin Chamber of Commerce, Austin, Texas 78704.

Visitors to the show will have the opportunity to hear some very outstanding speakers on earth sciences and the lapidary arts.

There will be special exhibits at the Texas Memorial Museum. A shuttle bus will be available from the Auditorium, Hotel, to the Museum.

There will be no organized hunts directly from the show. There will be hunting information available and after the show hunts are being planned.

Planned for your extra pleasure are two activities which will be held at the Coliseum. Thursday we will have a Bar-B-Que supper with square dancing immediately following. On Friday we will serve Mexican Food with a special program immediately following.

The swappers area will be in the Coliseum, just across from the Auditorium, and will be open from 10-5 Thursday, Friday and Saturday. We are asking all swappers to bring your own card table, box or magic carpet to set up your material. Remember, there will be no selling or buying in the swappers area.

For an advance registration packet, write Roberta Goldenberg, Route #3, Box 196G, Georgetown, Texas 78626. For general information regarding the show, write National "Gem Capers" of '76, P.O. Box 4327, Austin, Texas 78765.

\$6,000 CHECK

The Midwest Federation has received a check in the amount of \$6,000 as a partial payment of the Midwest's share of the 1975 Greater Detroit International Gem and Mineral Show.

MRS. ELLA PARR STRICKEN

Mrs. Ella Parr, wife of Bernard Parr who is a past president of the Midwest Federation, died at Mansfield General Hospital, Mansfield, Ohio in December. She was a past president of the YWCA and a member of Church Women United, the Women's Committee of the Mansfield Symphony Society and Descendants of Mayflower Pilgrims for the State of Maine.

It was the wish of Mrs. Parr that tributes of remembrance be made to the classes for the partially seeing and the blind, department of special education of the Mansfield City Schools. In addition to her husband, she is survived by two sons.

FROM THE PRESIDENT

ENJOY: Enjoy, and I am sure everyone that participated in the Round Robin in February certainly did. I know Preston and I certainly enjoyed it very much. It was an experience for us. Thank you, Sally and Slim Barber, for opening your home and letting everyone enjoy your collections and accomplishments. Wish to thank Sharon Davis for organizing this nice event, and also her and Walt for opening up their home. We certainly were happy to have it all end up at our home and want to express our appreciation for all the help with refreshments and those who brought their displays to our home. Those of you unable to attend just don't know what you missed.

Another enjoyable day was spent at Everett High School as a part of the displays for the Michigan Science Teachers' Association. These events are a lot of work but well worth the time spent. Hope more of you can participate in the future.

Spring is just around the corner, I think, and time for Outdoor Field Trips. Hope to see a large turnout on all of them.

Eva Whipple, President

PROGRAM, MARCH 18 -- Wesley Manley

Topic: Youth Expeditions in geology and other phenomena throughout the Great Lakes region. The presentation should interest club members and young folks they may wish to invite.

Presented by: Mr. Lawrence Lemanski, environmental engineer with the Lansing Board of Water and Light Commissioners. He has spent some summers assisting in Michigan State Parks for the Department of Natural Resources. He also serves as organizer and program director for the Great Lakes Camp and Trail Association, Inc. of Lansing. Mr. Lemanski will show slides and describe youth explorations into all areas of the Great Lakes Region. Places presented will be those of major interest to rockhounds.

Camp and Trail is a non-profit outdoor activities program devoted to helping youth -- ages 10 to 15 -- discover the Great Lakes region, its cultural and natural history, and its environmental diversity. This is done by camping, hiking, backpacking, canoeing, snowshoeing, cross-country skiing, rock climbing, swimming, nature study, conservation, historic preservation, survival and exploring. Among places the groups explore are: State Game Area, Pigeon River country, Harsen's Island, Thunder Bay area, Point Pelee, Lake Superior Provincial Park, Wilderness State Park, South Manitou Island, the Michigan Thumb area, and Nicolet National Forest.

MARCH FIELD TRIPS -- Sharon Davis

The field trip this month is to the Michigan Natural Storage Company, Grand Rapids. Everyone will meet at the Storage parking lot at 9:15 a.m., Saturday, March 20, 1976. There is an entrance fee of \$1.50 per person. Our group is scheduled to collect from 9:30 to 3:00. These are the hours the company is open; so for the maximum collecting time, please be there promptly to sign in. Since they close at 3:00, we will meet back at the elevator at 2:45.

Supplies you will need to carry with you are: a lunch to eat underground (for each member in your party), Coleman lantern for general light, flashlight for closeup light, (extra lantern fuel, extra mantles, extra batteries), first aid kit, punches and hammers, boxes for specimens (egg cartons for small ones), and wrapping paper. The temperature in the mine is 50° so dress accordingly. You can collect "pencil rock" gypsum, selenite crystals and good carving material in the mine.

At the March meeting there will be a display of material found there in the past year, and some tools which do quite well.

Driving Directions: Take I-96 to the West 28th Street exit, drive west to Clyde Park Street. (There is a garden center on the right at the corner.) Turn right (N) to Grandville SW. Turn left (W) on Grandville which becomes Chicago Drive, go to Judd Street. Turn right (N) on Judd to the Storage parking lot on the right.

Please collect pencil gypsum and carving material for the children's table at the Show. There will be a box provided for your contributions.

This is a good time to review the Code of Ethics of rock collecting, and keep it in mind as we begin our spring collecting trips.

The Michigan Field Trip sponsored by the Alpena Earth Science Society will be held

the weekend of May 22 and 23. Trips have been scheduled to Paxton Quarry, Presque Isle, Rockport and the sink holes.

(And Sharon, take a bow for a most interesting Round Robin field trip, which showed a real variety of the things our members are interested in.)

FEBRUARY MEETING

The silent auction February 19 saw a lot of material change hands. Faces of the lucky buyers reflected their delight in picking off choice pieces from under the noses of rival bidders.

Guests at the meeting were Ken Hein, Mr. and Mrs. Carroll Harrod, Frances Kornaelje, Robert Watson, Paul Saxman, Ivan Wilkins, Janet and David McNease, and Gail Gillenkirk.

ROSTER SECRETARY -- Sally Barber

Again this month you will have a red star on your address label if your 1976 dues are not paid. If you have any change in your directory listing, please let me know, as we do our new directories after the March meeting. My phone number is 882-7621. If mailed, checks should be made payable to Central Michigan Lapidary and Mineral Society and sent to

Sally Barber
3215 Karen Street
Lansing, Mi 48910

Remember! To be in the new directory your dues must be paid.

SHOW - Walt Davis

Contracts have been received from all but two of our invited dealers. Members are urged to think show and talk show from now on.

CODE OF ETHICS

AMERICAN FEDERATION OF MINERALOGICAL SOCIETIES

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

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

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

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

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

I will leave all gates as found.

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

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

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

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

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

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

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

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

I will appreciate and protect our heritage of natural resources.

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

MEMBERSHIP - Ruth Hillis

Four young people have been accepted as student members. They are Jeff and Cynthia Gardiner, whose parents are Bill and Alice Gardiner, Deanna Schmidt (Debbie's sister), and Dana Whipple of 4015 Thackin Drive, Lansing. Deanna and Dana are granddaughters of Preston and Eva Whipple. All four new members are interested in lapidary.

Congratulations and welcome to the Society!


CORRESPONDING SECRETARY - Eleanor Owens

The club extends sympathy to Mrs. Bailey in the recent death of her husband Orla, and also to Life Member Norman Kunkel in the loss of his wife Dollie. Many members have fond memories of the open houses and travel movies enjoyed at the home of the Kunkels.


MEMORIALS - Sally Barber

The memorial committee would like to tell you that we have acquired the specimens for two of our recently deceased members.

In memory of Henrietta Myers we have a beautiful and unusually formed tricolor fluorite from Marion, Ky., which had a very special meaning for her. And for Elsie Barry we have a beautiful yellow mica specimen from Wyoming.

Fluorite has the formula CaF_2 , which is calcium fluoride. The crystals are isometric and very common prevalently in simple cube structure, with dark purple the most abundant color. It is brittle and has the octahedral cleavage.  Transparent material can be cut into gems, but it has a low refractive index of 1.43, with a hardness of 4.

Our mica specimen is called phlogopite mica and comes from Wyoming, also Ontario. There are three types of mica - scales, plates and books. This one is in plates. The flakes are often found in streams and mistaken for gold because of their color and their association with feldspars and quartz. Mica comes in various colors.

Brownish red, brownish green, yellow and black are the most common. It belongs to the monoclinic system and is of a prismatic shape, which is often mistaken for hexagonal. The formula is $\text{KMg}_3\text{AlSi}_3\text{O}_{10}(\text{OH})_2$  which is potassium magnesium-iron hydroxyl aluminosilicate. This can vary because of many substitutions. It has a pearly luster and a hardness of $2\frac{1}{2}$ on cleavage surfaces and 3 across cleavage. The streak is colorless.

EDUCATION - Bill Gardiner

Classes are well underway. Mac McMahon has three full silversmithing classes. Another was recently started at Slim and Sally Barber's and is full. Read Myers has a crystal class going on Tuesday afternoons and would consider holding an evening class if there is enough interest. Contact Read direct if you're interested. 485-6686.

Dave Swain has announced his teaching schedule for the next term at LCC and MSU. He'll be teaching silversmithing at MSU with beginners classes meeting on Tuesdays and Wednesdays, 7-10 pm, and an advanced class Thursdays, 7-10 pm. Call the MSU Evening College for information.

At LCC he'll have lapidary classes on Mondays and Wednesdays, 4-7 pm. He'll also have a Gemology class from 7-10 pm on Mondays. LCC classes will be 10 weeks long; MSU classes will be 8 weeks.

(This will be the last time we will be able to take a class from Dave, as he will be leaving the area in June. He has been accepted for graduate study in metallurgy, with the promise of an assistanceship, in not one but three prestigious universities! -- MIT, Berkley and Stanford! What an honor to be able to choose among those!)

We are considering taking part in the Fine Arts Display at the Meridian Mall April 23-25. If you have any suggestions, see me (Bill).

LIBRARY - Preston Whipple

New Material which has come in.

Minerals and Gems, by Russell P. MacFall -- a memorial for Isa Russell Features more than 250 photographs and 90 maps. This large format volume illustrated in full color, is an unusual reference work and an important addition to any library, club or private. It is divided into three parts. The first section explains how to hunt specimens in the field--the equipment that is necessary, the safety precautions to take, likely places to look--and how to polish, classify, arrange and preserve the specimens found. The second section describes tests for recognizing minerals that even an amateur collector with limited equipment can conduct. The last section is an up-to-date list of over fifteen hundred localities in North America where gems and minerals can be found in abundance. Look this book over and if you wish to order one for your own library it may be ordered at a discount from your Librarian.

The Universe, another Life Nature Book for Time-Life Books by David Bergamini. An Earth Science Book relative to the Planet, Meteorites and Comets. What better way to get a better understanding of our earth and its wealth than a study of the Universe.

About Magazine Subscriptions:

You will find on the library table a sample of all magazines that can be ordered through your Librarian. Attached to each is a sheet on which you may sign up for subscriptions. Don't forget your Society gets a small amount for the treasury for each magazine ordered.

SAFETY - Errol Alvey

Smoking and Driving

We all know that smoking is bad for your lungs and circulatory system, but did you know that it can also impair your driving? According to the Automobile Dealers' Traffic Safety Council, carbon monoxide from heavy smoking in a tightly closed car can bring on a deadly dullness.

The Consumers Insurance Information Bureau adds that:

"Tobacco users should give the inside of car windows an extra good cleaning. Smoke clings to cold glass and leaves an oily residue which causes faster steaming of windows. Paper towels absorb both moisture and residue best. Don't use bare hands or gloves."

MSTA WALKTHROUGH

The display for the Michigan Science Teachers at their conference at Everett High School, February 28, drew much favorable comment. Eight cases of displays, selected library books, the club educational exhibits, a carving demonstration, and a micro-mounting section presented a good sample of club activities and possible aid to teachers. The display was organized by I.J. Brett, in response to the request made last year following the club's first appearance at the MSTA Conference.

SAVE your old phone books, says Walt Davis. They are ideal to carry in the field for wrapping fragile specimens.

MIDWEST FEDERATION FIELD TRIP

LAKE SUPERIOR - KEWEENAW

Sponsored by MWF Geology Committee

TRIP A - August 1 - August 7

North shore of Lake Superior from Thunder Bay to Sault Ste Marie,
conducted by MWF Geology Chairman Wayne Henderson.

TRIP B - July 26 - July 31

Keweenaw tours from Copper Harbor led by Don Clarke.

Each group will be limited to 50 adults, with their children of a suitable age. Registration will close either June 1, or when the limit is reached, whichever comes first.

People may sign up for either or both trips. Fees are \$15.00 per adult for both trips, or \$7.50 for one week only. This does not include camping fees but is for expenses of arranging the trips.

Applications for reservations should be sent to: Don H. Clarke
1107 Maple
Essexville, Mich., 48732
phone (517) 892-5898

Reservations should include (1) week or weeks desired; (2) names and ages of people in the party; (3) proper fees. An acknowledgement and more complete information about the trip will be sent on receipt of application.

The Eastern Federation is being offered a similar trip, and is planning a trip for Midwest people in the future.

FINANCE - Ken Kurtz

Dr. Aureal Cross of MSU and Rod Cranston of LCC will be the Society's judges at the Greater Lansing Youth Talent Show April 3. We are again offering awards in the Earth Science section.

DISPLAY - Nancy Smith

Lola Pearson and Nancy Smith took a club exhibit and an exhibit of petrified wood to the Grand Rapids Mineral Society Show at the Grand Rapids Public Museum. This show runs through April 4, and is well worth seeing.

Confusion say: Man who keep pebble collection in bathroom have rocks in head.

--The Lamit

MERCURY DEPOSITS IN MICHIGAN -- from the Ann Arbor News
courtesy of Hazel Morgan

"When we found metallic native mercury in the concentrate from a local gravel deposit in the bottom of a rubber lined tumbling barrel located in the driveway of Mr. Burnell Tindall, 1328 Arella Blvd., Ann Arbor, Mich., little did we realize that this was the first discovery of native mercury in the glacial drift of Michigan."

So Donald F. Malott, Michigan State University geologist begins his paper titled "The Occurrence of Mercury in the Glacial Drift of the Lower Peninsula of Michigan." Tindall's discovery of mercury, as well as gold, in area gravel pits was reported in the Ann Arbor News of Nov. 1, 1970. But now it is "official."

After describing his and U of M graduate geologist Robert Curry's work with Tindall, a retired Ann Arbor electrical contractor and president of the Au-Min-Co Inc. gold mining firm, in a leased barn on the outskirts of Ann Arbor, Malott writes: "We were not prepared for some of the results."

Concentrate samples from three gravel pits representing 500 pounds of sand each, yielded respectively 125 grams, 147 grams, and 150 grams of free native mercury." On the basis of the sand and gravel produced by the three pits in one year, he estimated the total mercury production possible from the three pits at 170 tons per year. Even when the estimate was reduced on the basis of mercury not being evenly disseminated in the gravel pits he said, "... the possible quantity of mercury in these deposits is mind boggling."

That estimate was based on analysis last year through a new procedure set up in the local barn. In a report on previous analysis earlier in the paper, Malott writes: "Of 98 gravel pits investigated, 93 samples contained some gold and 64 contained some mercury."

In a concluding section on "Gravel Pit Assay Locations," he lists 90 gravel pits in 38 lower Michigan counties, samples from 62 of which contained mercury. Four of five pits in Washtenaw County produced the heavy metal in relatively high quantity.

The MSU geologist writes that when mercury was first found in a tumbling barrel in the Ann Arbor driveway in April, 1968, it was in the form of an amalgum of mercury mixed with gold, and silver in color. "At first we thought it was silver, but treatment with nitric acid dissolved the mercury leaving gold. Little was thought about the mercury at first in that it was believed to be from broken thermometers or mercury switches." But then, he points out, "as sand was processed from gravel pits located in different areas, it became not uncommon to find amalgum often accompanied by free metallic mercury."

Tindall first outlined plans for his gold quest in Michigan pits in 1967, and later obtained 11-year exclusive contracts with 19 pit operators to search for gold which was known to be present in Michigan's glacial deposits.

"The path to the successful recovery of certain heavy minerals from the sand and gravel deposits of Michigan has been long and hard and filled with many disappointments and setbacks," Malott writes. "Tindall was the spark which started it and his

(continued page 8)

MERCURY IN MICHIGAN (continued)

iron will and perseverance in the face of adversity serves as a catalyst which has kept it going these past eight years. However, the potential reward could be substantial.

"The Bureau of Mines and the Michigan Geological Survey figures indicate that approximately 22 million tons of sand are produced annually in Michigan, most of which are produced in the Lower Peninsula. Based on the assays of the 98 gravel pits and partially substantiated by our new assay process, the Michigan gold potential would be in the neighborhood of 34,000 ounces (at \$165 per ounce, that would be \$5.6 billion).

"By installing 30 to 40 mercury sluice units, in the more active gravel pits, approximately 70 per cent of the gold should be recovered, not considering the mercury recovery which would be an addition. The last chapters of the quest have yet to be written," the geologist writes.

THE COPPER CONNECTION

A straggle and wonderful metal is copper, known to early man for its uses for tools and projectiles, developed by modern man as the base of vast industries, and beloved by rock hobbyists for beautiful crystals and treasured gems.

The United States gets 10% of its copper through bacteria living in the mine tailings. The bacteria multiply rapidly in dumps with pyrite content. They attack the pyrite and turn it into sulfuric acid which in turn leaches out copper, which the bacteria can convert to water soluble salts.

Scientists have now isolated bacteria from Icelandic hot springs which can process copper dumps more efficiently. An article in Christian Science News points out that some companies add acid to speed up the work of the bacteria, but that the waste from Kennecott mines has a plentiful supply of pyrite, so no additional acid is needed.

A news release by the Associated Press from Ohio recently said that there may actually be a real basis for the folk medicine cure for arthritis -- the copper bracelet. Dr. Helmer Dollwet, a biochemist from Akron, says that he is researching the copper bracelet treatment which is usually laughed at or dismissed as a useless myth. He tested 54 volunteers with ethylene and found that 88% of them felt less pain in their arm which was exposed to ethylene when the arm was pricked with a pin. He stated that the chemical reaction of copper worn on the skin is to produce an anesthetic ethylene which can be absorbed through the skin. His research is continuing.

So, we may look forward to a TV commercial about a copper bracelet produced by bacteria, to compete with all the pain relievers made from the salts of ancient seas.

AFMS NEWSLETTER, February 1976

Put a few drops of rubbing alcohol in the bottle of water in which you keep opals. It will keep them from turning black and the water from turning stagnant.

-from the Rock Hammer via Sooner Rockologist

THE MGAGS ANNUAL EDUCATIONAL SEMINAR IS COMING !! April 3 and 4!

Those of you who attended the first MGAGS Seminar last April don't have to be told how good it was. And those of you who didn't go have surely heard someone describe it in glowing terms already. Well, this year's Seminar promises to be even bigger and better.

Just listen to this! Forty four individuals or teams will be demonstrating or lecturing during the course of the affair. Six members of CML&MS are among the additions to the staff this year, and we know their quality. A wide variety of subjects dear to the rockhound's heart will be covered -- all phases of lapidary, silversmithing, carving, fossils, archaeology, mineralogy, geology, exhibiting, editing, micromounting, sand art, scrimshaw, mining history, museums, mineral photography, field trips. Your worst problem will be making choices; You just can't see everything you will wish to see.

MGAGS members will have complete schedules and more information at our March meeting. The cost is \$1.00 per section, \$5.00 per day, \$7.50 for both days. 11 to 9 Saturday; 10 to 6 Sunday. Washtenaw Community College, just off US 23 at Ann Arbor. Food will be available on the premises.

And don't forget that those same MGAGS will have tickets for the raffle drawing that supports the MGAGS educational projects. Prizes are valuable, and you don't have to be present to win.

Flyers are coming in for many of the nearby shows. If there are not enough for all the newsletters that go out to members, they will be at the meeting, where you can examine them and see the attractions each has to offer. Information has also come about the MWF Convention and Show at St. Louis, Missouri, on July 22-25. It is a Tribute to Our Mineral Heritage. Be sure to look that literature over.

Working on the newsletter this time besides myself were Lola Pearson, Nancy Smith, I. J. Brett, Slim and Sally Barber, and several others whose names I'm not sure of now. Thank you all.

Florence Hill

MARK YOUR CALENDAR

Mar. 18... Regular Meeting, 7:30 p.m., Everett H. S. Cafeteria, Lansing.
Mar. 20... Field Trip, Michigan Natural Storage Company, Grand Rapids, 9:15 a.m.
Apr. 1.... Board Meeting, 7:30 p.m., K. Kurtz, 800 Frost Rd. Williamston

SHOWS AND WORKSHOP

Feb. 29-Apr. 4, Grand Rapids Mineral Society Show, Grand Rapids Public Museum.
"A Rockhound's View of the Bicentennial".
March 13-14, Blossomland Gem and Mineral Society Show, Lakeshore High School Gym,
Stevensville, Michigan. Displays wanted.
April 3-4, MGAGS Educational Seminar, Washtenaw Community College, Ann Arbor.
March 21-28 Beacon Rock and Fossil Club Show, Grand Haven, Michigan
April 3-4 MGAGS Educational Seminar, Washtenaw Community College, Ann Arbor.
April 9-11 Flint Rock and Gem Club Show, Williams Education Center, Flint, Michigan
April 16-18 Michigan Gem and Mineral Society Show, National Guard Armory, Jackson.
April 24-25 Clare Rock and Mineral Club Show, Shepherd, Michigan.

ROCKHOUND NEWS

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