

JASPILITE

Affiliated with the Midwest Federation of Mineralogical and Geological Societies

Midwest Federations NEWSLETTER

MID WEST FEDERATION

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 Ave., Des Moines, Iowa 50311

September 1977 - Issue No. 177

Dayton show a success story

If you want to know if a rock and mineral show has been a success just ask the show chairman. They will always confirm that it was and T. T. (Ted) Cadeau, chairman of the 1977 Midwest Federation show and convention held in Dayton, Ohio last July 21-24 answered the question as expected... "it was a success." But Ted could back up his statement, it really was a success, in it's presentation and will probably wind up a financial one when all the money is counted.

The Convention Center was a spacious place with plenty of room for all the displays and dealer booths. There were escalators to take you from the main to upper floor meeting rooms. Ted said it would be air conditioned, and Ted was right, the system really kept it cool in the huge display area and the meeting rooms. Executive meeting room was ample for Friday's meeting and the Council meeting on Saturday was held in the auditorium that was really a little theatre with plush theatre seating and a sloping floor to the stage where the officers sat at a table. And for once PA systems that worked, a far cry from some of those that need some fiddleing with after the meeting starts and then never completely does the job. With microphones in both aisles and on the table on the stage everyone could be heard.

"The Hall of States" in the walkway between the Stouffer's Plaza Hotel and the Convention Center was impressive and very interesting and showed much planning as did everything connected with the show and convention.

The Editor's Breakfast, Friday morning, the noon luncheon for the Council members on Saturday, and the Saturday evening banquet were all well executed and well attended. Various awards and certificates were presented at the Editor's Breakfast and the banquet. (Many of these awards are listed in this issue of the Newsletter, others will be printed in future issues.)

The dealer booths contained a wide variety of material and machinery and there were many working demonstrations. A cafeteria adjoined the display floor with other snack bars about the building.

The camping area was the Montgomery County Fairgrounds about a mile from the Convention Center. The Dayton Club furnished free chartered bus service to transport the campers to and from the show. The bus service was very ample and ran about every 15 minutes throughout the entire show.

Those who missed this show missed a really fine one. Ted and his committee can be justly proud of this show and convention and when he told us it was going to be a really good one he was really right!

by llaydon Peterson

Welcome new memberships

Miami Valley Junior Rockhound Society (Junior Club) Diana R. Dearth, President 56 W. Main St., Phillipsburg, Ohio 45354 Sponsor: Keith B. Singerman 8805 S.R. 202, Tipp City, Ohio 45371

INDIVIDUAL MEMBERSHIPS

Mr. Leonard J. Marhut 30 N. Albert Street Mt. Prospect, Illinois 60056

Fausto Mario Sangalli 25 Shasta Drive Thornhill, Ontario, Canada L4J 1Z7

John Arthur Wishart 3 Mark St. Toronto, Ontario, Canada M5A 1Z3

FALL EXECUTIVE MEETING

The fall meeting of the MWF Executive Committee will be on Saturday, October 22 in Joliet, Illinois. Newly elected officers at Dayton, Ohio for 1978 will be installed. Complete details will be sent to all members by the Secretary, Jean Reynolds.

LAST REGIONAL SHOW IN HOUSTON

The last 1977 Regional Show will be in Houston, Texas September 9-11. The South Central Federation will be hosted by the Houston Gem & Mineral Society. Show site will be the Shamrock Hilton. If you have not attended a regional show this year, this will be your opportunity to attend one.

1976 BULLETIN EDITOR'S CONTEST WINNERS ANNOUNCED IN DAYTON

MINI-BULLETIN CONTEST: 1st) "The Conglomerate", Editor-Walter Johnston, Blue Grass Rock Club, Kentucky; 2nd) "Flint Flashes", Editor-Helen Smith, Licking County Rock and Mineral Society, Ohio; 3rd) "The News", Editor-Elsie Popejoy, Corn Belt Lapidary and Geological Society, Illinois.

SMALL BULLETIN CONTEST: Special Award--Best Bulletin (2) years in a row, "The Rockfinder", Editor—Fred Niebauer. Michiana Rock and Gem Club, Inc., Indiana.

1st) "Lakota Pebbles", Editor—Eleanor Milbrandt, Lakota Glacier Rock Club, South Dakota; 2nd) "Pebble Prattle", Editor—Cliff Backstrom. White River Gem Society, Indiana; 3rd) "The Tumbler", Editor—Thelma Pyatt, 500 Earth Science Club, Indiana.

LARGE BULLETIN CONTEST: Judges Award-One Bulletin Selected from all entered for this award, "Crystal Cluster", Editor-Barbara Brandt, Des Plaines Valley Geological Society, Illinois. 1st) "Pebble Pusher", Editor-Mary Boland, Coulee Rock Club, Inc., Wisconsin; 2nd) "The Geode", Editor-Willis D. Smith, McDonnell Douglas Gem and Mineral Society, Missouri; 3rd) "The Sandscript", Editor-Marilyn McFadden, Duneland Rock Club, Inc., Indiana; 4th) "Flint Chips", Editor-Peg Crow, West Central Ohio Rock Club, Inc., Ohio; 5th) "Pick and Shovel", Editor-Evelyn Ulrich, Lincoln Gem and Mineral Club, Nebraska; 6th) "S.I.E.S.", Editor-Diane Dare, Southern Illinois Earth Science Club, Illinois; 7th) "The Pyriter", Editor-Lyle Voas, Dallas County Rock Club, Inc., Iowa; 8th) "The Tribolite", Editor-Bob Hopwood, Wisconsin Geological Society, Wisconsin; 9th) "The Tully" Editor-Betty Myers, Park Forest Earth Science Club, Illinois; 10th) "The Exchangite", Editor-Leona Vojcek, Rock Exchange Club, Michigan.

MIDWEST FEDERATION ALL AMERICAN AND MERIT AWARD WINNERS

June Zeitner, Merit Award Chairman announced at Dayton the Midwest Federation All American Clubs and the Merit Award Clubs. Judges, all from the Detroit area were Mr. & Mrs. Lee Kirby, Mr. & Mrs. Melvin Berry, Mr. & Mrs. Art Meinert, and Mr. & Mrs. Russell Reiman. 96 clubs entered, and 15 clubs won trophies. Michigan and Illinois tied for the most winners with three each. South Dakota had the highest percentage of entries with 10 out of 12 clubs. All entrants received certificates of participation, and the following clubs were awarded trophies. The participation certificates will be listed later.

AFMS ALL AMERICAN: Central Michigan Lapidary and Mineral Society, Lansing; Central Nebraska Rock and Mineral Society, Grand Island; Duneland Rock Club, Griffith, Indiana; Earth Science Club of Northern Illinois, Downers Grove; Michigan Gem and Mineral Society, Jackson; and Boehm Geology Club, Berea, Ohio.

MIDWEST MERIT AWARDS: Central Michigan Lapidary and Mineral Society; Central Nebraska Rock and Mineral Society; Des Plaines Valley Geological Society (Illinois); Duneland Rock Club; Earth Science Club of Northern Illinois; Kalamazoo Geological and Mineral Society, Michigan; Michigan Gem and Mineral Society, Jackson; Minnesota Mineral Club, Minneapolis; Heart of Wisconsin Gem and Mineral Society, Wisconsin Rapids.

SPECIAL MERIT TROPHIES: Boehm Geology Club;

BERNARD PARR STRICKEN

Bernard F. (Barney) Parr, Mansfield, Ohio, died Friday, May 6, 1977, at his home.

Barney was born August 24, 1907, in Illinois and moved to Mansfield in 1933 from Maine. He was a retired small appliance engineer for the Westinghouse Electric Corp.

He was a member of the American Institute of Electrical Engineers, the YMCA board and Indian Guides. Barney was past president of the Midwest Federation of Geological and Mineralogical Society and also past president of the Richland Lithic and Lapidary Society. He was also a member of the Mandera Scholarship fund from 1968 to 1972.

Wisconsin Geological Society, Milwaukee; Badlands Sandhills Earth Science Club, Mission, South Dakota.

HONORABLE MENTION AFMS: Des Plaines Valley Geological Society; Heart of Wisconsin Gem and Mineral Society; Kalamazoo Geological and Mineral Society; Lake Erie Gem and Geological Society, Elyria, Ohio; Minnesota Mineral Club, Minneapolis; Muncie Rock and Gem Club, Indiana; Ozark Earth Science Club, Mountain Home, Arkansas; Park Forest Earth Science Club, Illinois; Wisconsin Geological Society, Milwaukee.

DAYTON TROPHY WINNERS

Excellence shown by the 59 competitive exhibits at the Dayton Show produced 26 First Place ribbons, 21 Second Place ribbons, and 5 Third Place ribbons. In addition the following trophy winners were honored at the Awards Banquet:

MINERALS: Carlton M. Davis, Columbus, Ohio - Columbus Rock and Mineral Society.

MINERALS, JR. GROUP: Karen Sharp, Berea, Ohio - Boehm Geology Club.

LAPIDARY: Thomas and Anna Gibala, Livonia, Michigan - Midwest Mineralogical and Lapidary Society of Dearborn, Michigan.

CABACHONS: Donald M. Bates, Cedar Rapids, Iowa-Cedar Valley Rock and Mineral Society

SPECIALIZED LAPIDARY: Raymond A. Karr, Warren, Ohio - East Ohio Lapidary Club.

FACETED GEM STONES: Donald E. Dunn, Dayton, Ohio - Dayton Gem and Mineral Society.

FOSSILS: Joseph Koniecki, Detroit, Michigan - Michigan Mineralogical Society.

FOSSILS, JR. GROUP: Carol Downey, Berea, Ohio - Fairview Lapidary.

JEWELRY AND METALCRAFT: Michel P. Rubbens, Chicago Heights, Illinois - Park Forest Earth Science Club.

SOCIETY EXHIBITS: Columbus Rock and Mineral Society, Columbus, Ohio.

Midwest Federations 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 Ave., Des Moines, Iowa 50311

October 1977 - Issue No. 178

Ken Zahn: "It has been an eventful year"

by Ken Zahn, AFMS President

This has been an eventful year for the American Federation. The Show Chairman of the Rocky Mountain Federation, Mrs. R. Anderson, persuaded 19 of the Past Presidents to be present to commemorate the 30th Anniversary of the founding of the AFMS in Salt Lake City in June 1947. It was an event which will be long remembered by all the Past Presidents who were able to attend.

Mr. Obie Goss has been appointed as Show Consultant. His primary duties will be: 1.) Serve as the expert on all questions which arise concerning a Convention, Regional Federation or Club Show. 2.) Be a clearing house for all show manuals, contracts, correspondence concerning shows. 3.) Be prepared to discuss with Show Chairpersons any problems they may encounter in setting up a show. 4.) He will be responsible for adding suggestions and changes to keep a Show Manual up-to-date. 5.) Work with the Show Coordinator to assure there are no conflicts with show dates. 6.) Establishes methods to stimulate exhibiting and prepares lists of good judges in collaboration with the Rules Committee. 7.) Resolves conflicts in choosing show sites. 8.) And any other related duties that may be assigned.

Both Obie and Barbara have had a great deal of experience and Barbara will be an advancing officer for several years. Judging from the number of problems this past year this position should fill a needed vacancy in the AFMS and provide clubs with a real service.

The International Relations Committee has started to collect information on foreign localities, museums and places of interest to collectors which will be made available in a pamphlet as soon as sufficient information is collected. I am sure more information will be made by the Chairman of that Committee.

A good deal of thought has been given to reorganization of the AFMS. Discussions were held with organizations with similar problems such as the Mineralogical Society of America, the Geological Society of America, Directors, Officers and individuals such as Paul Desautels, Dave Jensen and many others. The result has been a number of suggestions to establish an Executive Secretary or career Secretary-Treasurer position to provide continuity in the organization. In addition a suggestion was proposed which has great merits, to select the President and Vice President for one year terms and elect successors from the Federations by a vote of the Directors.

Zahn... please turn to page 2

National show exceptional in every respect

by June Culp Zeitner

The 1977 "EMPIRE OF GEMS" National Gem & Mineral Show, hosted by the Golden Spike Gem & Mineral Society of Ogden, Utah, for the Northwest Federation of Mineralogical Societies in August, was an exceptional show in every respect. With hundreds of superb displays, beautiful facilities against a backdrop of inspiring mountain scenery, and swapping, auctions, programs and special events going on every minute, the show was enjoyed by thousands of hobbyists who traveled to Utah from all over the United States.

All meetings were well attended. Norman Steele, Uniform Rules Chairman, reports that the UR meeting went very well, being streamlined, carefully organized, and accomplishing many goals. The AFMS Cracker Barrel session, presided over by President Ken Zahn was lively and informative and turned out to have more than "crackers" at the delicious snack table laid out by the ever present "red-bandanaed" engineers of the Golden Soike Club.

Thursday opened with a judges and clerks breakfast at the beautiful Skyroom of the Student Union Building. This was followed by an impressive "ribbon cutting" at which Utah Governor Matheson struck a blow at a geode to open the show. The evening was devoted to fun . . . food, refreshments, music, dancing and entertainment . . . a very special event called "Ogden Night."

Following the annual AFMS meeting on Thursday, (reports will appear in the Newsletter) there was a meeting of the AFMS Scholarship Foundation. The AFMS luncheon was at the Ramada Inn.

Friday started with the Past President's breakfast and continuted with the Northwest Federation meetings, presided over by Don Kendall, President.

The Editor's breakfast on Saturday at Hilary House was probably the all time record. Elaine Wilponen, Northwest Federation Newsletter Editor, Loyal Gooch, Golden Spike Editor, and Elza Slatery, AFMS Club Publications Chairman, presided at the program which honored bulletin editors, and friends, from all regions.

Attendance at the annual Awards Banquet at the Elks Lodge banquet room, was over 400. Dr. & Mrs. Leonard Glismann were in charge of arrangements and show hospitality. Robert Wallace was installed as next year's President of Northwest Federation and Don Langston was installed

Show... please turn to page 2

This would provide greater flexibility in elections and a good supply of candidates with competition for offices, rather than an assured position after going through a six year (and possibly more) chain. No candidate would be assured of an office and fresh new ideas would be constantly percolating up the line.

In any event the AFMS has need of a central office with continuity and a clearing house for all administration matters.

We thought we had a new idea for stimulating exhibiting but apparently the California Federation has been experimenting with it for some time. Whether it worked or not California Shows have had a number of outstanding exhibits. It was our idea to encourage exhibiting by establishing awards for unusual or outstanding lapidary items, carvings, one-of-akind mineral specimens or fossils. Accordingly we are offering a special award, to be called the President's Award. If it is successful, it will be suggested for future Federation Shows. In addition to the Show Consultant I am appointing a Special Committee to study the problem and make recommendations for stimulating exhibiting. A report will be made in six months and sent to all officers and Directors, and the Long Range Planning Committee for implementation of any good ideas.

Boundaries problems have been cropping up all over the country. In my opinion the AFMS should not be the arbitrator of boundary disputes. The real problem seems to be at the grass roots level. If so the boundary should be settled by club members in the gray areas where two Federations overlap, in a democratic matter with votes and then negotiations. Apparently the gentlemen's agreement made in 1971 and agin in 1975 in Denver does not seem to be the answer. The AFMS may have to set rigid boundaries and any violations will be settled in an arbitrary manner. In my opinion this is not the best solution and we may have to accept this as the best or only solution. States, governments, government agencies and many corporations establish rigid boundaries for their field offices and nobody steps over these boundaries. I have asked our Boundary Committee to prepare a staff paper and this will be furnished to all Directors.

Our Committees have been working hard to provide the best service to the clubs. The Slide Program Contest is off to a good start, we have new Rules Books, the Newsletter is excellent and Les Darling has been doing a top job trying to protect our collecting areas. I will let them tell their story.

A third of my regime is still available to continue to initiate programs or put into effect any that the Officers and Directors feel are worthwhile. I have had splendid cooperation from all the staff and have received many good suggestions to improve the AFMS. I hope that we can continue to grow and improve our service to the clubs.

DIANE DARE WINS TROPHY

Diane Dare, our Midwest Junior Activitiss chairman, was awarded First Trophy at the AFMS show and convention in Ogden, Utah last August for Individual Articles. This category was one of those included in the Bulletin Editor's Contest. Diane's winning article was titled "Using Maps As A Collecting Tool". Diane lives in Salem, Illinois.

MARGE COLLINS WINS IN SLIDE CONTEST

Marge Collins of the Plymouth Rock and Mineral Society, Plymouth, Mich. won \$100 for her entry in Class 3 of the AFMS slide program contest. It is titled "Making Constructed Silver Jewelry". Mrs. Collins is an instructor at Madonna College in Livonia, Mich. where she has developed a course of instruction which closely follows her winning program.

MRS. CECIL (PHYLLIS) MELCHER

Phyllis Melcher died Sunday, August 7 in the hospital in Platte, South Dakota. Phyllis was one of the founders of the Missouri Valley Gem & Mineral Society and was Protocol and Social Courtesy Chairman for the Midwest for several years. Phyllis was also hospitality chairman for the Federation Banquet in Murdo. She also helped with the All South Dakota Swap during the years it was held in Platte.

Show... from page 1

as the new President of AFMS. Joe Bybee, Past President of Northwest Federation and assistant show chairman, was Master of Ceremonies, introducing Golden Spike president Devoe Mayhue for the Welcome. Dr. Ruth Hopson Keen, Northwest Federation honorary award recipient of the Scholarship Foundation gave a short talk. La Docia Ellis AFMS all American Chairman, presented the All American Club of the year award to Central Michigan Lapidary & Mineral Society of Lansing, Michigan. Georgia Hedin presented certificates and trophies to Northwest All American Clubs and participants. Kay Jensen, AFMS Slide Program Chairman, presented checks for winning programs to Oregon Agate & Mineral Society, Portland, and Marge Collins, Plymouth (Michigan) Rock & Mineral Club.

AFMS and NWFMS presented trophies for winners in competitive display classes. Bulletin trophy winners were named. A new feature was the presentation by Ken Zahn of the "President's Trophy" for the outstanding non-competitive exhibit. Florence Anderson, Potlatch Diggers Club, was the winner with an exhibit of official State Rocks, Minerals, Gem & Fossils, which filled two large cases.

At the show itself there were an unusual number of special displays under the direction of Emil & Clara Rosenau. There were also a wonderful variety of superb displays by Golden Spike members. Demonstrations, mostly by Northwest and Golden Spike members, were both educational and entertaining, with big crowds watching most of the time. Outstanding were chainmaking, R. McOmber, filigree, M. & M. Sutton, scrimshaw, Steve Allured, and silversmithing, Chris Sladek. In addition to bringing a display of Japanese "chrysanthemum stones." Sigeki Hosono of Gifu Prefecture, Japan, brought ten trophies for displays he thought were particularly beautiful by standards of his country.

Ivan Rudd, Show Chairman, and Liz Rudd, Registration Chairman, seemed to be everywhere helping run things smoothly. Other show committee officers not previously named are Erol Benson, legal affairs, Mary Bybee, Secretary, Lucille Maybee, Treasurer, Charles Sladek, Properties, and Mel Reeves, Special Services.

Bonnie Glissman was in charge of the programs and lectures which were continous and ranged from local geology to the Hope Diamond. Weber College, site of the show, was most cooperative in all aspects of the show, and furnished several excellent programs.

One of the most exciting areas of the show as the Scholarship Auction of the Northwest Federation. Another area with plenty of activity was the Breezeway where swappers set up their tempting wares.

The Golden Spike Club worked for several years planning this show, and all the hard work has paid off, because they produced an AFMS show that is unforgettable.

Midwest Federations 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 Ave., Des Moines, Iowa 50311

November 1977 - Issue No. 179

Here are your 1978 Midwest Federation Officers

Your new Midwest President is Paul Good

The advancement program that the Midwest Federation promotes will enable the Midwest to again in 1978 to be lead by an experienced set of offic

The advancement program that the Midwest Federation promotes will enable the Midwest to again in 1978 to be lead by an experienced set of officers. This program moves the second vice president into the first vice president position and then to president.

The 1978 president is Paul Good, Griffith, Indiana. Paul is well qualified for the position of Midwest president. He has served on the Bulletin Editors committee and showed outstanding leadership in this field. He served as president of his local club and as show chairman for local shows. Paul is an expeditor for a large manufacturing plant.

First vice president of the Midwest for 1978 is Mrs. Betty Crawford, Mansfield, Ohio. Betty has had experience in Midwest procedures and is very well qualified for the position of first vice president. She was Uniform Rules Committee chairman during 1976.

Second vice president is Mrs. Bernice McCloskey, Elm Grove, Wisconsin. Bernice was Treasurer of the Midwest for four years and has served as State Director for Wisconsin. She is a member and past President of the Kettle Moraine Geological Society.

Miss Jean Reynolds continues as secretary of the Midwest for 1978. She has served the Midwest in this capacity for eleven years. Jean lives with her mother in Clarendon Hills, Illinois and has been with the Federal Reserve Bank in Chicago for 32 years. She is a senior cost accountant, and is a graduate of Northwestern University.



Paul Good

A new treasurer for the Midwest for 1978 is Otto Ensminger, Lombard, Illinois. Otto is a member of ESCONI and is the current president of the club. He has served his club at all levels and is always a willing worker. He is presently treasurer of the Chicagoland Gem and Mineral group. Otto is a retired junior high school teacher and a retired naval officer.

CB CHANNEL 7 FOR ROCKHOUNDS

Rockhounds in the west have been using CB Channel 7 for quite some time to keep in touch with each other. At the National show in Ogden, Utah last August Mrs. Henry Bonar, Odessa, Florida, past president of the Eastern Federation suggested that rockhounds in other parts of the country use Channel 7 much as the truckers now use Channel 19.

The Federal Communication Commission (FCC) does not make offical exclusive designation to groups for use of any of the 40 channels, but any group is free to use a chan-

nel in this manner if desired. Only exception is the emergency Channel 9.

FEDERAL TRADE COMMISSION SEEKS CHANGE

The Federal Trade Commission is seeking to change the customary standards and nomenclature of gold and silver jewelry. One amendment would allow manufacturers to use the term "gold" in describing any gold alloy which has at least 1k or 4% gold. The other proposal would allow anything with silver in it to be called "silver" if the percentage is stamped on each item.

Your 1978 Regional Show Schedule

Here are the dates and locations of the six Regional Shows in 1978. Note that the National Show and Convention will be held in Pleasanton, California in conjunction with the California Federation.

CALIFORNIA National Show	EASTERN	MIDWEST	NORTHWEST	ROCKY MOUNTAIN	SOUTH
Pleasanton, Ca. July 27-30	Newcastle, Pa. July 7-9	Cedar Rapids, Iowa August 10-13	Monroe, Wa. July 14-16	Colorado Springs, Colorado June 9-11	New Orleans, La. March 31, April 1-2

COMPLETE LIST OF ALL AMERICAN AWARD WINNERS FOR 1977

Here is a complete list of the Midwest clubs participating in the AFMS All American Awards for 1977. The Central Michigan Lapidary and Mineral Society, Lansing, Mich. was the First Place winner in the Midwest.

MICHIGAN: Cass River Gem & Mineral Society, Caro; Tulip City Gem & Mineral Club, Holland; Roamin Club, Detroit; Midwest Mineralogical & Lapidary Society, Dearborn; Michigan Gem & Mineral Society, Jackson; Waterford Gem & Mineral Society, Pontiac; Copper Country Rock & Mineral Club, Calumet; Clare Rock & Mineral Club, Mt. Pleasant; Blue Water Lapidary Society, Pt. Huron; Muskegon County Rock & Mineral Association, Muskegon; C.A.I. Family Lapidary Club, Drayton Plains; Flint Rock & Gem Club, Flint; Livingston Gem & Mineral Society, Howell; Kalamazoo Geological & Mineral Society, Kalamazoo; Rock Exchange Club, Garden City; Central Michigan Lapidary & Mineral Society, Lansing; Blossomland Gem & Mineral Society, St. Joseph; Grand Rapids Mineral Society, Grand Rapids.

OHIO: Euclid Lapidary & Mineral Society, Euclid; Boehm Geology Club, Berea; Stonelick Valley Gem & Mineral Society, Loveland; Parma Lapidary Club, Parma; Brunswick High School Geology Club, Brunswick; Cincinnati Mineral Society, Cincinnati; Lake Erie Gem & Geological Society, Oberlin; Fairview Park Lapidary Society, Fairview Park; Ft. Hamilton Gemand Mineral Society, Hamilton; Heights Gem & Mineral Society, Shaker Heights; West Central Ohio Rock Club, Lima.

IOWA: Cedar Valley Rock & Mineral Society, Cedar Rapids; Madison County Rockhounds, Winterset; Blackhawk Gem & Mineral Society, Waterloo; North Iowa Rock & Gem Club, Mason City; Storm Lake Area Rockhounds, Storm Lake; Des Moines Lapidary Society, Des Moines; Mid Iowa Rock Club, Marshalltown; Nishna Valley Rock Club, Atlantic; Dallas County Rock Club, Adel; Old Capitol Geological Society, Iowa City.

SOUTH DAKOTA: Sioux Falls Gem & Mineral Society, Sioux Falls; Badlands Sandhills Earth Science Society, Mission; Corn Palace Rock Club, Mitchell; Missouri Valley Gem & Mineral Club, Platte; Lakota Glacier Rock Club, Aberdeen; Rosebud Geological Society, Winnter; Chamberlain Gem & Mineral Society, Chamberlain; Coteau Des Plaines Gem & Mineral Society, Watertown; Randall Rockhounds, Pickstown; Coyote Rock & Lapidary Society, Vermillion.

NORTH DAKOTA: Lake Agassiz Rock Club, Fargo.

MISSOURI: Pike County Mineral & Gem Society, Bowling Green; Earth Science Club of Missouri, Independence; Blue Ridge Gem & Mineral Society, Raytown; McDonnell Douglas Gem & Mineral Society, St. Louis; Clark Mountain Gem & Mineral Society, Springfield; Central Missouri Rock & Lapidary Club, Columbia; Independence Gem & Mineral Club, Independence.

ARKANSAS: Spring River Gem & Mineral Club, Cherokee Village; Ft. Smith Gem & Mineral Society, Ft. Smith; Ozark Earth Science Club, Mountain Home.

MINNESOTA: Carlton County Gem & Mineral Club, Moose Lake; Austin Gem & Mineral Society, Austin; Chicago County Gem & Mineral Club, Lindstrom; Lake Superior Gem & Mineral Club, Duluth; Minnesota Mineral Club, Minneapolis.

ILLINOIS: Park Forest Earth Science Club, Park Forest; Lake County Gem & Mineral Society, Lake Forest; Chicago Lapidary Club, Evergreen Park; Gem City Rock Club, Quincy; Siloam Springs Earth Science Club, Mt. Sterling; Chicago Rocks & Minerals Society, Chicago; Earth Science Club of Northern Illinois, Downers Grove; Des Plaines Valley Geological Society, Des Plaines; Northern Earth Searchers, Carthage; West Suburban Lapidary Club, Glen Ellyn.

WISCONSIN: Kettle Moraine Geological Society, Hartland; Kenosha Gem & Mineral Society, Kenosha; Heart of Wisconsin Gem & Mineral Society, Wisconsin Rapids; Oshkosh Earth Science Club, Oshkosh; Wisconsin Geological Society, Milwaukee; Neville Public Museum Geology Club, Green Bay.

INDIANA: East Indiana Gem & Geology Society, Richmond; Michiana Rock & Gem Club, South Bend; White River Gem Society, Anderson; Muncie Rock & Gem Club, Muncie; Evansville Lapidary Society, Evansville; Indiana Geology & Gem Society, Indianapolis; Vigo Rock & Gem Club, Terre Haute; Three Rivers Gem & Mineral Society, Ft. Wayne; Lawrence County Rock Club, Bedford; Duneland Rock Club, Gary; Peru Rock & Minerals Club, Peru.

NEBRASKA: Grand Island Earth Science Society, Grand Island; Loup Valley Gem & Mineral Society, Monroe; Lincoln Gem & Mineral Society, Lincoln; Central Nebraska Rock & Mineral Society, Lincoln.

Welcome new clubs

JACK PINE ROCK & GEM CLUB Victor W. Frandsen — President R. #3 — Box 3140 Hale, Michigan 48739

THE CHIPPEWAGEM & MINERAL SOCIETY Terry Copeland — President 749 College St. Wadsworth, Ohio 44281

MINNOWA ROCK & GEM CLUB Robert Siems – President

Box 654 Fairmont, Minnesota 56031

ITASCA ROCK & MINERAL CLUB Ben Toven -- President

Ben Toven -- President Box 18

Hill City, Minnesota 55748

please...

HELP KEEP AMERICA CLEAN. DON'T LITTER.

OFFICIAL PUBLICATION

of the

By the time this i ISHPEMING ROCK AND MINERAL CLUB, INC. Published Quarterly Sand Itly saves out

OFFICERS	& COMMITTEE CHAIRMEN - 1977	Less Han
President	Carlton Gutman, 201 W. Magnetic	Marquette
First Vice President	Robert Phillips, 405 S. Rose	Ishpeming
Secretary	Sandra Phillips, 405 S. Rose	Ishpeming
Treasurer	Arnold Mulzer, 322 Rock	Marguette
Publicity The Publicity	Dorothy Bowns	Negaunee
Finance	R. R. Anderson	Marquette
Field Trip	Robert Phillips	Ishpeming
Safety	Leonard Bartelli	Marquette
Curator OF ATT TE ANDRO	C. R. Markert	Ishpeming
Scholarship	Marian Markert	Ishpeming
Hostesses Ingrid Bartelli and Olive Sain		Marquette
Education ·	Vernon Miljour	Gwinn
Jr. Member Co-ordinators	Pat Elie & Chris Miljour	Gwinn
Librarian	Ernie Johnson	Marquette
Bulletin Librarian	Edith Anderson	Marquette
JASPILITE Editor	Sandra Phillips	Ishpeming
Assistant Editor	Dorothy Tubbs	Negaunee
Fublishers Dem Market	Laurence & Olive Sain	Marquette
Liaison Officer	Frazier Tubbs	Negaunee
WEST AIDA MUN 310J URI	tal race maked some but	SARDIJIO AN

Deadlines: January 1, April 1, July 1, and October 1

Meetings: Business meeting: 1st Friday of the month, 7:30 p.m. at Bothwell Middle School

Program & activity meeting: 3rd Sunday of the month at 2:00 p.m., Bothwell Middle School, October-April. Field trips during the summer months.

micromounting class rdo Antique Minde. Membership: The Ishpeming Rock and Mineral Club, Inc. is open to anyone interested in the Earth Sciences.

Initiation fee \$1.50

Husband and wife annual dues. . 3.00 Adult annual dues 2.00 Junior annual dues 1.00

Material in this bulletin may be copied provided full credit is given to the author and the bulletin.

in, Bob Phillips, and

OUR PURPOSE - be ILS B' tal . Isog-- Idenisedo To enjoy, to learn, to teach and to conserve The rocks, the gems, the fossils and ores.

To collect, to admire, to brag and to show. The material we've found, we'll trade for yours.

and success and Alexander Bob and Marian Markert tolle year, France

CONTENT	S AVELLE AND ESS
One Thursday in June 3	What Are Rocks? 14
Midwest Convention 5	Popular Rockhounds 15
Rock Swap 1977 9	The Jewelry Metals 16
Inclusions and Phantoms 11	Ring Making 17
Polymorphs 13	Cleaning Minerals 18

PRESIDENT'S COMMENTARY

By the time this is read the colors will have faded and indeed most of the leaves will have found a resting place on your lawn. This is a less than gentle reminder that 'nasty time' is swiftly approaching and it's "to the basement" to go through last summer's detritus. Sift and winnow, extract the keepers and establish trading stock plus give-aways.

BLICATION

For me, a hectic summer as a shopkeeper has made winter a welcome season. Fun we had, but not without hassles. A disappointment was not seeing more club members throughout the summer. We now await next spring with keen anticipation.

Fall is a good time to 'take stock.' It is a time to put things in order. Accordingly, new officers are now being solicited and ultimately groomed. To be relieved of some duties means the acceptance of others. This is an oblique way for me to say that when the new president takes charge in January, 1978, I then will be able to swing into our micromounting class with the fervor and vigor it requires.

I now look forward to new directions in the Club and stimulating programs. An effort must be made to attract new members and deepen interests. A permanent meeting place and a full complement of equipment is still a prime--and obtainable--goal. Let's all address ourselves to these items plus gaining new knowledge of our hobby. Share with others those things that make you happy.

Cordially,
Carlton Gutman

The Joyolry Metals 16

Sing Making 17

Closning Minorals 18

NOTES FROM THE SECRETARY'S MINUTES

By Sandra Phillips

As rockhounds our outdoor activities are coming to an end. Our field trips are over for the year, and we look forward to our program meetings again.

The Ishpeming Rock and Mineral Club's Annual Rock Swap was a big success. The silent auctions brought in \$207.15 and the raffle tickets brought in \$76.50. After all expenses, the Club realized a profit of \$159.43. The Saturday evening Cracker Barrel Session was very enjoyable. Fred Rydholm was guest speaker and did a delightful job. This year the Club purchased two platters of assorted cheeses and meats for the group to enjoy. Nagelkirks made up the plates at a total price of \$27, which the Club felt was very reasonable and well worth the cost.

There were three field trips Sunday; one to the Ogden Pit, Greenwood Mine, and the Tilden Mine overlook; one to the Michigamme and Champion Mines; and one to the Ropes and Verde Antique Mines.

In connection with the Rock Swap, but not considered an expense of it, the Club voted to purchase its own bull horn at a cost of \$104.

A nominating committee for 1978 officers was composed including Laurence Sain, Bob Phillips, and Bob Larson.

Plans for our Christmas party are underway. The Club voted to have it at St. Johns Church in Ishpeming again this year. Frazier Tubbs will call them about the date.

We have several new members, including Kenneth and Anne Croner and

Ef a a a a a a a a a a morrowyloll

their son, Christopher. The Croners are from Flint, Michigan. Chester and Elizabeth Williamson, avid rockhounds from Wheaton, Club. I am sorry that Mr. Arne Nelson's name was mistakenly left off the 1977 membership list. o top we found a very large

CALENDAR OF IRMC MEETINGS

2:00 p.m. man ham in the last and

ness and program meeting, 2:00 p.m. find out.

dostite, Carrusi Dec. 2 (Friday) -- Business meeting

Dec. 18 (Sunday) -- TENTATIVE DATE Christmas Party * COLUMN TOWN

Jan. 6 (Friday) -- Business meeting

ONE THURSDAY IN JUNE By Bob Phillips

"Where are the snakes?" "Sold um 'bout two weeks ago. Had near forty. Now there's Post Office-store and Sam Jone's three left, but they're in that hole during the day. It's cooler in there."

"You Sam Jones? I was told to stop in here. They said you had a lot of Blanchard Mine specimens I should look at."

"Yep. Look around all you

"Thanks. I brought my father-in-law and brothers-inlaw down here to look for specimens at the Mine. I'm Bob, and this is John, Mike, and Steve."

Sam: Well, they've put a cable across the road up at the mountains. Some outfit in Colorado bought the claim and they've got some equipment up there.

Bob: Can we get in anyway? Sam: If you want to walk you can. Of course, the watchman might be there and let you in. It'll Illinois, have also joined our cost you \$10 each, though. That's what he charges.

John: I knew it. Can't get

in anyway.

Mike: We might as well drive in as far as we can to take a look.

Sam: I can't tell you to go in or not to. I don't have any-Oct. 16 (Sunday) -- Program meeting thing to do with that place anymore.

Steve: I don't care. Nov. 6 (Sunday) -- Combined busi- Bob: Is the watchman there now Sam: I wouldn't know.

Bob: There's only one way to

So we hopped back into the car, 7:30 p.m. drove up the road about 200 feet, turned right over a cattle guard, and started along a dirt road through the desert of central New Mexico. Three miles straight ahead lay the Oscura Mountains and the well-known Blanchard Mine which has yielded many fine specimens to many people. The Mine lays south of Bingham, a two-building town about 30 miles each of Socorro, one subgrouping of floor New Mexico.

> The town of Bingham boasts a U.S. Rock Shop complete with rattle snakes. The post office is run by a very nice elderly woman and her husband. Inside was a bank of old brass post office boxes. Miscellaneous canned goods were nested on another wall. Mike needed a pair of boot laces and sure enough she had some. But they had been there so long the cellophane wrapper literally fell apart, and she asked us what the price should be.

> The road to the Mine proved interesting in itself. Several openrange cattle herds eyed us in passing. A foursome of antelope grazed in the distance. Rabbits were sighted occasionally. Several times we tried to determine the presence

of rattlers in the brush.

Soon we arrived at the cable across the road. After parking the car we loaded up with sacks, food, water, hammers, cameras, safety glasses, and hats. The day was quite clear and the sun must have brought the termperature to 95 degrees.

The access road up the mountain had been built up with mine rock and already fluorite and barite crystals were to be found in abundance. We were told this first area would not be so good, but we found plenty to argue that point.

It was no time at all before everyone got into the swing of finding crystal specimens. After a short course on what to look for and what to disregard, we got to work. Steve and Mike hammered, John took pictures, and I supervised. It was a good arrangement. The area we were working was yielding light-blue and white fluorites and some galena in matrix. Some of the fluorites, I found later, show impressive phantoms of color bands. One outcropping of fluorite yielded several crystals about 2½" on an edge.

The Mine consists of open portals at various elevations on the mountain side. On the level we were working, we were finding good material without entering any of the old workings, a practice that is recommended if possible.

We had worked for about an hour and were eating lunch when a vehicle was spotted approaching us on the desert below. We couldn't tell if it was the watchman or not. but knew we'd soon find out. was. He explained to us that they charged \$10 per person, but when I explained I was the only collector and that the others were only along chili, fries, and coffee. The

tried to determine the prosunce

sowed throse

for the ride, he settled for \$10 and a cigar. He indicated that there were better places to collect and asked us to follow him in our car. We went back to the car and off we went to the highest portal of the Mine complex. sembership list.

At the top we found a very large cavernous opening. Inside we found pillars and walls, ceilings and foot covered with large fluorites, barite blades, quartz, linarite, galena, and several other mineral species. Bessie Simpson, in her book, New Mexico Gem Trails, indicates rarer minerals such as Atacamite, Azurite, Brochantite, Celestite, Cerrusite, Cyanatrichite, Limonite, Linariate, Malachite, etc. can be found at this location. At any rate, everyone got to work obtaining fine specimens under my supervision.

Finally, when we felt the car's load limit had been reached, we quit. A welcome rain shower cooled the air. We started back down. We stopped to pick up previously assembled piles of material and proceeded to the desert floor after some final pictures.

By the time we reached San Antonio. near Interstate 25, hunger had set in. Earlier that morning we had taken note of the Owl Bar and Cafe at one of the dusty intersections. Mike recalled that the establishment had been written up in some publication as having the best hamburgers in New Mexico. With near unanimous decision, we pulled The interior was an interesting combination of typical western saloon furnishings and modern electric beer signs. In one back corner was a wash basin with no soap. The kitchen seemed to consist of a stainless steel grill and miscellaneous appliances tucked in back of the bar. We ordered hamburgers. equipment up there.

food came. The hamburgers were steaming hot and hung out of the five-inch buns by 3/4 inch all around. The chile was green. Mike, Steve, and I took a spoonful. In a few seconds sweat began to glean on my forehead. My tongue screamed for something cold. Mike and Steve looked at each other with faint self-conscious smiles as tears began to well up in their eyes. Mexican chile: Beats any sinus medicine on the market. Eat it slowly.

The food eaten, we continued back to Albuquerque, arriving home about 7 p.m. It was a good trip and we all had a tremendous time. The recollections of the day will stay with me forever. Sam Jones and his snakes, the post office, minerals, the heat, the dirt, the watchman, and the Mexican chile. You couldn't ask for a better day.

MIDWEST CONVENTION . DISCOVER DAYTON -- GEM CITY '77 By Marion Short

Editor's note: Arnold Mulzer and Marion and Nelson Short attended the Dayton Show this July 21-24, Marion as our Club's official representative: She was kind enough to submit the following report so we can all know what went on. And the English of the Manual Will

We arrived in Dayton shortly after lunch. After leaving our passenfor the four days. The campground was about a mile from the Convention Center, but we had an air-conditioned bus to take us to and from the Center. Once we were inside we could stay in the cool temperature. The meetings were either in the Convention Center or at Stouffer's Hotel which were connected by an elevated, air-conditioned walkway.

The displays were very pleasing to the eye. One display was Ohio Flint. It had a picture of a butterfly when it was split. The July issue of the Lapidary Journal had a picture of it on the front. It was found at the Nethers' Farm near Newark where we hunted. Wonder if there are anymore prize pieces left? I imagine there are. many that haven't been found.

Another display was a large picture of the American Eagle made from approximately 400 stones. A prize anyone would be pleased to have hanging in their livingroom.

There was a case of agate butterflies. They looked so real one might think they would fly away. In addition, there was beautiful jewelry, fit for any queen, all shapes, designs, and sizes.

We attended the Editor's Breakfast Friday morning after which they gave a demonstration on silk screen for bulletin covers. Then there was a demonstration on three different methods of printing bulletins

Saturday was the Delegates Meeting called to order by President Hazel Kuntz. The Invocation was by Mark Harris, past president, followed by a welcome from Ted Cadeau, 1977 Show Chairman from Dayton. Terry Huizing, another past president, introduced persons present from gers off at the hotel we proceeded the American Federation, the Eastto the Fairgrounds where we camped ern Federation, Canadian Federation as well as past presidents of the Midwest Federation.

> All clubs had received by mail a copy of the Secretary's report which was approved as printed. The Treasurer's report was read and approved. The Midwest consists of 14 states and Canada -- 258 clubs --

16,647 adult members plus 1,543 junior members. Committee chairmen gave their reports.

The displays were very pleasing to June Zeitner handed out the Merit Awards. I'm happy to say the Livingston Gem and Mineral Society received an Honorable Mention, plus June made the comment "I like the title of their bulletin, it's The Living Stones."

der if there are anymore prize This year's show had 59 competitive entries, with 10 trophies given. There were many noncompetitive entries. There was a Hall of States; most midwest states showed something.

od bonnald ed bluov enoven

The 1978 convention will be held at Cedar Rapids, Iowa, on August 10-13. They plan to have a comeand-go display table, so if you cannot stay for four days you can show a display anytime. This is to be an old-fashioned rockhound show on the Fairgrounds. The 1979 convention will be June 14-17 in Columbus, Ohio, in air-Indiana, will be host to the 1980 more, they can be ordered from convention on June 12-15. Be the Director of Supplies. sure to see the streets where all the older homes of river captains The meeting then adjourned. have been restored. A city ordinance permits owners to repair Saturday night was a delightful but not to tear down. We have banquet. The Banquet Room was set hope to see them again. I sat with the Emerson's from the

wrap. or am I telling my age.

Hugh Smith of the Miami Valley keeping hunting locations open subject was Gold. Many slides of discussed and the conclusion reached that rockhounds should be Sunday morning we attended a fine very careful of their actions Worship Service at the Convention

and the actions of other people. ALWAYS get permission before entering areas. It would not be feasible for the Midwest to carry an insurance policy for all clubs as laws differ in many states. Each club should seek their own.

The meeting was dismissed for lunch, och other with faint self-con-

conque screamed for something

The meeting resumed with the election of officers. The following were elected: President Paul Good, Griffith, Indiana; First Vice President Betty Crawford, Mansfield, Ohio; Second Vice President Bernice McCloskey, Elm Grove, Wisconsin: Secretary Jean Reynolds, Clarendon Hills, Illinois; and Treasurer Otto Ensinger, Lombard, Illinois. severol em dilw

and his snakes, the post office, Mel Sharp, treasurer, asked what he should do when a club writes for many more membership cards than they have members. The conclusion was that at the time each club pays its dues to the Midwest they should be sent 10% extra to take conditioned buildings. Evansville, care of new members. If they need

seen some of these at night but up in tables for eight. Nelson and Livingston Club and two other The Midwest is in need of some couples. Their name was Long--no new slide programs, as some are relation to each other -- so we had wearing out and others need to be four Long's and two Short's at our updated. Ralph Goniea presented table. How many remember when our the Midwest with a set on wire telephones used to ring that way, rom the

Dr. Mandarino from the Royal Ontario Club of Ohio raised the subject of Museum was the guest speaker. His and insurance for same. This was beautiful gold specimens were shown.

Club. The speakers were a Cathoter. My only regret was that more Where are you from and what are spend a few minutes to pause and though the people who live on top hear the message.

Once again I would like to thank visit and have located another the Ishpeming Rock and Mineral them at the Convention. It also I didn't try hard enough. gave Nelson and myself an opportunity to meet some friends who With my shortness of breath, I can't stress enough--GO--to a when I woke up to see all those convention where you are a guest beautiful stones disappear. Oh

SEMINAR

will be held at Mid-Michigan College near Harrison, Michigan, Walled about 325 miles from Marquette, manage with on June 24 and 25.

Howell so we were fortunate to der residue from cabochons after attend this year's sessions. This polishing--use as directed for is a two-day session with many dentures. Also use denture cleanclasses every hour. If you are ser to clean the insides of geodes. not quite sure what facet of the hobby you wish to pursue, this is From The Template via The a fine place to find out. The Earth Science News demonstrations not only show you how, but tell you what you need Put a few drops of rubbing alcohol to get started. Some even let in the bottle of water in which the audience make their own article. you keep opals. It will keep them We met new friends, and with our from turning black and the water self-contained camping unit were from turning stagnant. able to sit in a group and exchange ideas with other rockhounds until they turned out the lights. Try The Earth Science News it! You'll like it!

I EVEN DREAM ROCKS By Faustin Anderson

Rocks are everywhere but here! Science News

Center arranged by the Dayton Oh yes, I've seen them here too. I've met so many people here and lic priest and a Methodist minis- each new face raised some questions. people did not take the time to your rocks and minerals? Seems as of the pile are the last informed. I have learned of a few spots to mine. I did not get the above load Club for letting me represent of rocks home, but you cannot say

we met at our first convention pulled the sheet and blanket under here in Ishpeming in 1972, and I my chin. It really was a strain and see first hand a wonderful yes, the gems were here for a group of rockhounds. moment in Room 308, Marquette Genand desputation and despital North.

I wish to thank the members of our The 1977 Seminar is now a thing Club for visiting me and those who of the past, but this is the time sent cards. It makes me feel imto make plans for next year. It portant. Marion and Nelson, your wish is my wish, too.

HELPFUL HINTS

Nelson and I were at our home in Use denture cleanser to clean pow-

From Crystal Cluster via

When using chrome oxide for polishing jade, mix it with half water and half vinegar.

From the Opal via The Earth

TALLE CALLED AND AND ADDRESS OF THE PARTY OF		Contract of Contra
hem here ten.	ye seen t	CALENDAR OF EVENTS
October 21-23	SHOW	1977 Gem and Mineral Show, "The Magic of Minerals," Central Michigan Lapidary and Mineral Society, National Guard Armory, Lansing, Michigan
October 22-23	SHOW	Joliet Gem Club, Joliet Junior College, 1216 Houbolt Road, Joliet, Illinois
October 22-23	SHOW	Northeast Iowa Rock Club, American Legion Hall, 113 East First Street, Sumner, Iowa
October 22-23	SHOW	East Ohio Lapidary Club, Johnson Community Center, Gilmer Road, Leavittsburg, Ohio
October 29-30	SHOW	Akron Mineral Society, Ohio National Guard Armory, Allen Road, Stow, Ohio
November 5-6	SHOW	Evansville Lapidary Society, Washington Square Mall, 5011 Washington Avenue, Evans- ville, Indiana
November 5-6		Park Forest Earth Science Club, Westwood Junior High School, Lake Wood and Wilson Streets, Park Forest, Illinois
November 5-6	SHOW	Tri-County Rocks and Mineral Club, Bay County Community Center, Bay City, Michigan
November 5-6	SHOW	Oshkosh Earth Science Club 6th Annual Gem and Mineral Show, Park Plaza Shopping Center, Oshkosh, Wisconsin
November 5-6	SHOW	Chanute Gem and Mineral Society, Central Park Pavilion, Chanute, Kansas
November 6	SWAP	Mount Clemens Gem and Lapidary Society, Mount Clemens, Michigan
Alle Sept and the		Nishna Valley Rock Club, 4H Building, Cass
November 12-14	SHOW	Madison Community Center Lapidary and Mineral Club, Madison Community Center, 112 North Fairchild Street, Madison, Wisconsin
November 18-20	SHOW	"Gem Capers 1977," Austin Gem and Mineral Society, Municipal Auditorium, Austin, Texas
November 19-20	SHOW	Homestead Gem and Mineral Club, Indian Creek Mall, Beatrice, Nebraska
November 25-27	SHOW	St. Louis Mineral and Gem Society, Elect- ricians Hall, St. Louis, Missouri

ROCK SWAP 1977 By Ernie Johnson

Our 3rd Annual Rock Swap was held on August 6 and 7, 1977. The swap was held on August 6, and the field trips were on August 7.

The activity for the swap started in the winter months of 1977 when the plans were laid out, and production started toward the first weekend of August, 1977.

The swap officially started at 9 a.m.; but, as usual, there were a few early birds. This year was no exception.

The day started off as cool and clear and proceeded into a very sunny, hot day, then turned very, very cool during the evening Cracker Barrel Session.

The swap brought rockhounds from different rock clubs. Overall, and many treats. It was our way registered at the registration who came. After sampling the desk with 44 IRMC members parti- goodies, the program began. cipating in some capacity.

The silent auction ran from and story-teller, entertained us 10:30 a.m. to about 3:15 p.m. for about two hours with the hiswith 30 to 50 specimens available tory of Marquette County and the for each auction. Considering the admission was a specimen for memories to some and, I hope, gave the auction, everyone was more a little insight to others. Fred than generous with their donations. could have talked another two This is the only way the Club has hours, but it got so cold it was to generate any income toward the just hard to sit at the end. So swap expenses. I am happy to we called it quits and will save report we were able to meet all the rest for the future. expenses.

Throughout the day, as swaps that is another day and another were being made and bids were story. made on the silent auction tables, door prizes were given out to At this point, I would like to those who registered at the gate. thank all IRMC members who worked It is my feeling that everyone at the swap. There are just too had a good time, met some old many to list; so I can only say friends, and made some new ones.

The lunch stand was manned by Scout Troop 302 with the parents' assistance. All the food was homemade except for the donuts. The sloppy joes were especially delicious. The scout troop left their extra food for our evening session, gratis to the Club.

At noon the swap took on a picnic type of atmosphere with people eating on picnic tables, out of the back of their cars, and on blankets spread on the ground.

The afternoon patterned itself after the morning with rockhounds trading and swapping, bidding on the silent auction, and in general enjoying themselves.

At approximately 4 p.m., everything closed down in order for people to prepare for the evening Cracker Barrel Session to begin. The Cracker Barrel started about four different states and fourteen .7:30 p.m. with hot coffee, lemonade there were 138 individuals who to say thank you to all the people

> Fred Rydholm, a local historian U.P. as a whole. It brought back

Sunday brought the field trips, but

"thank you," because without them the swap could not have become a reality.

ROCK SWAP RAFFLE WINNERS Troop 302 with the parents! ussis-

- 1st: Peter Hansen, Marquette, 30 1b. piece of copper from the Ojibaway Mine donated by Frazier Tubbs. rood for our evening session,
- 2nd: Ernest Johnson, Marquette, fluorite from the Blanchard Mine, Bingham, New Mexico, donated by Bob Phillips.
- cating on pionic tables, out of 3rd: Mrs. Jack Wodelc, Petoskey, Michigan, copper spike donated by Laurence Sain.
- The afternoon patterned itself 4th: Joe La Chance, Marquette, piece of float copper the milent suction, and in demoral
- blades coated with micro-

- 1. Kathryn Wolcott, State Line the bridegroom is an electrical Club, Adrian, pyrolusite dendrites technician. on dolomite, donated by V. Miljour.
- Rydholm, a local himtorian
- 3. Vera E. Strange, Bruce Crossing, copper, donated by Ray Anderson. Michigan Tech University has now

of Marquette County and

- hematite, donated by Bob Phillips.
- 5. Elmer Meyer, Milwaukee, kona year will be Ingrid Bartelli and dolomite, donated by George Bell. Olive Sain.
- 6. Jerry Niles, fluorite crystals, Benjamin T. Desonia, 81, of 756 donated by Bob Phillips. West Washington Street, Marquette,
- 7. Ruth Simons, tourmaline cry-
- Illinois, moss agate. and the rest of the family. "thank you," boosuse without thom

- 9. William Campbell, specular hematite with quartz crystals.
- 10. Kathryn Sebrauke, copper, donated by Jim Bowns. eyen was held on August 6, an
- 11. Duane Suckow, granite, donated by Arnold Mulzer.

The activity for the swap started

- 12. Peter Hansen, Kingston Lode, donated by Jim Bowns. duction started toward the first
- 13. Annette Johnson, Kingston Lode, donated by Jim Bowns. The even officially started at

Remai but, as maust, there were

ROCKIN AROUND By Edith Anderson

5th: William Zoback, siderite Wedding, Kuopio, Finland: Evelyn Jarvi, daughter of Mr. and Mrs. hematite from the Republic Elmer Jarvi, Ishpeming, and Pentli Mine donated by Bob Phillips Einari Nykanen were married June 25 partition and an entire of all and an the Kuopio Tuomio Church. Par-6th: Eileen Dunham Land ents of the groom are Sylvia Nykanen of Kuopio, Finland, and the late Sulo Nykanen. The couple spent DOOR PRIZE WINNERS a month here in August. At present they will be living in Kuopio where

I talked to Lilly and she told me 2. Allan Korby, Negaunee, quartz Faustin is getting along pretty well. crystals, donated by Bob Phillips. Hurry up, Faustin, and be with the gang again a sumiloge 32 of G

cipating in some especity

replaced its mineral display, and Jerry Christiansen, specular it should be ready for viewing soon.

Our new hostesses for the coming

died recently following a fourmonth illness. Mr. Desonia was a stals, donated by George Ruuska. Very fine member of our Club and he herrow of another DMAI Its Mand will be missed. Our sincere sym-Betty Williamson, Wheaton, pathy is extended to his wife, Sue, RODO MEN ONDE

the ewap could not have become a .volieva

INCLUSIONS AND PHANTOMS

One of the most fascinating aspects of the study of minerals and crystals is that of "inclusions." The term refers to one or more minerals "included" or occurring within another, usually a translucent or transparent host material. Inclusions do occur, in one sense, in minerals that are opaque, such as tetrahedrite in pyrite, sphalerite in galena, and dozens of others. These, however, are simply mineral mixtures or combinations extremely common in ore bodies and referred to as massive intergrowths.

To the mineral collector, the term "inclusion" means a translucent or transparent mineral crystal in which other minerals occur as if suspended in space or frozen within the former. Inclusions (the included mineral) may occur as microscopic dustlike crystal particles, small or large single crystals, or more commonly as groups or aggregates of small well-formed crystals.

Quartz

The most common mineral carrying inclusions is quartz. This is not surprising, since quartz is the most common transparent crystallized mineral found worldwide in ore bodies or mineral deposits. Inclusions may occur within almost all gem stones, as well as in minerals such as calcite, fluorite, barite, gypsum, halite and celestite. Any transparent or translucent mineral may occur with inclusions of another mineral within it. Inclusions are actually impurities, and they descrease the value of many gemstone minerals such as diamond, emerald, sapphire and zircon. However, inclusions may turn the commonplace quartz or calcite vis Drystal Claster

crystal into a collector's item of spectacular beauty.

Which Came First?

Inclusions are not one of the best understood phenomena of mineralogy. Which came first, the inclusion or the host crystal? This is a perplexing question in some cases. For example, the gem mines of San Diego County have furnished some breathtaking specimens of clear quartz crystals completely penetrated by large raspberry-colored crystals of rubellite tourmaline. Some of the penetrations are of such size as to cause wonder regarding which came first, the quartz or the tourmaline. Crystals grow by slow processes, and it appears that both the host and inclusion minerals grew simultaneously. During growth. crystals are primarily affected by (1) varying chemical composition of the depositing solutions or gases, (2) temperature, and (3) pressure. There are many variables involved, so that the entrance of another mineral into the major mineral crystallization is common and is probably a question of solubility of the minerals in the host solution. Examine a good collection of crystallized minerals and you will note that the majority of specimens comprise two or more associated minerals

Wherever crystals are found there is a chance of finding inclusions, and in some particular localities crystals are almost always found with them. As mentioned, quartz leads the field in the number of included minerals. Quartz crystals have been found with striking inclusions of well-crystallized pyrite, rutile, hematite, garnet, tourmaline, cervantite, cookeite, chlorite, kaolinite, dolomite, stibnite, gold, azurite and malachite, to mention a few.

continued. . . .

that stays of davelopment.

Bubbles and the Andrews

Quartz, calcite, fluorite, and halite are all minerals in which movable bubbles of air or carbon dioxide have been found within a liquid inclusion inside a crystal. The most common liquid included is water, and if the cavity within the specimen is not completely filled, the remaining area creates a bubble. Bubbles may be minute or large, and crystals have been found containing as much as a cup of water in a single cavity. In a few quartz crystal specimens from the State of Mines, Gerais, Brazil, water-bubble in-clusions occur in which there are free suspended crystals of loose chlorite in the water itself. As the specimens are turned, these crystals tumble about in their liquid prison.

In Brazil and Uruguay, large agate nodules have been found that are in reality geodes filled with water, and give an audible splash when shaken. These nodular forms are called "enhydros." The geode localities around Keokuk, Iowa, have produced many enhydros, including a number filled with petroleum!

ore elajevio tevetani

Fhantoms

Inclusions and "phantoms" are discussed together since a phantom is a frequent type of inclusion. A phantom is a ghost-like inclusion which shows a former growth stage or period of development of the crystal. For example, during the growth of a quartz crystal, a period may occur when kaolinite is introduced as an impurity in the solutions of crystallization. This mixes with the quartz, leaving a pinkish coating on the outer faces of the crystal at that stage of development. For

unexplained reasons, such a coating will usually favor either the termination of the crystal or a few of the major faces. Sometimes the entire crystal is coated, but this is not common. As the crystal continues to grow, the kaolinite impurities may disappear from the solutions and the crystal resumes normal clear growth, thereby encasing the kaolinite coating with clear quartz. This ghostly outline of the former crystal is a "phantom." During growth, the impurities may be introduced a number of times and will produce a number of phantoms, one atop the other. Brazil is notable for specimens of this type, and specimens have been found clearly showing two dozen distinct phantoms. Phantoms may appear only as a soul faint outline, or may be thick and strongly colored.

Without a doubt some of the world's most spectacular and showy mineral specimens are of the inclusion and phantom type, especially those which show two or three different included minerals. Brazil, Switzerland and California have produced quartz crystal inclusion specimens of great beauty. Recent finds near Placerville, California, comprised quartz crystals about the size of a pint cream bottle with brilliant bursts of acicular rubyred rutile emerging through a plumose base of green chlorite, and extending well into the termination.

Or frozen within the former

To Sum Up

Inclusions and phantoms are interesting, not particularly rare in many cases, and are something the collector should be aware of when either collecting personally or purchasing items.

From the Handbook of Crystal and Mineral Collecting

allone at herals such as

From Gems via Crystal Cluster

Minerals that can exist in more than one crystal form are known as polymorphs, meaning "several forms." Each form has the same chemical composition but different physical properties, and a distinct crystal structure.

Undoubtedly the most strikingly different pair of polymorphs are the <u>diamond</u> and <u>graphite</u>. Both have exactly the same chemical composition—elemental carbon.

Another familiar pair of polymorphs are <u>calcite</u> and <u>aragonite</u>, both crystalline forms of calcium carbonate. In this type of polymorph, one form, aragonite, is inherently unstable and tends to change to the more stable form, calcite. Calcite never changes to aragonite.

With other polymorphs, the change from one form to another is reversible and takes place at a definite temperature and pressure. The change may be instantaneous or take place very slowly.

Marcasite and pyrite are polymorphs, different forms of iron disulphide. Marcasite is much less stable and may invert to form pyrite pseudomorphs after marcasite. In general, marcasite is formed under surface conditions from acid solutions at temperatures below 4500°C. It is usually found in sedimentary deposits, clays, shales, etc., commonly as concretions and encrustations, and as replacement deposits in limestone. It disintegrates easily to form ferrous sulphate and sulphuric acid.

Pyrite is formed in natural or alkaline solutions at high temperatures. It is the most common supplies, occurring in rocks of all types and ages. In places it is found in large amounts and may be

mined for its sulphur content. Although more stable than marcasite, pyrite is easily altered to oxides of iron, commonly to limonite, called "iron gossas" by miners, and eventually to hematite.

Marcasite specimens are commonly unstable, tending to fall apart on exposure to air, releasing sulphuric acid which discolors paper, trays, and labels.

Bill Stanley via Rockytier, via The Gemrock

and a cough accommanied by diref-

A WARNING ON SILVER SOLDER CONTAINING CADMIUM

"The hobbyist who uses silver solder containing cadmium metal may be flirting with a serious health hazard and not know it," said Dr. Paul Joliet of the U. S. Public Service Division of Accident Frevention.

Another poisonous metal has taken its toll. The U. S. Public Health Service recently reported two deaths traced to improper use of silver solder containing cadmium. This metal gives a strong adhesive quality for joining dissimilar metals. Cadmium is found in solder used in the aerospace and jewelry industries.

In one of the fatal cases, the worker told his doctor that he had been working with ammonia. He neglected to mention silver solder. The doctor diagnosed the illness as ammonia poisoning. Tissue tests after death revealed cadmium poisoning.

The Division of Occupational Health emphasizes that all silver solders do not contain cadmium. It is used only in certain types. The commonly used tin-based solders do not present this hazard. Whenever cadmium-based

solder is used, precautions should be taken to avoid breathing the solder fumes, and to assure the work area is well ventilated. Solders containing the poisonous ingredient are supposed to be clearly labeled with a warning. However, the Health Service says many are not labeled.

The symptoms of cadmium poisoning are similar to those of a cold or a virus. At first, a burning sensation and tightening is noticed in the throat and in the chest. The body temperature rises, and a cough accompanied by difficulty in breathing occurs. The time from exposure to the first symptoms usually ranges from four to six hours. In non-fatal cases a permanent form of bronchitis could result.

With the popularity of home-made projects and small home torches replacing soldering irons, more cadmium-bearing solder is finding its way into homes. The torches are much hotter than soldering irons, and, therefore, emit more fumes in a shorter time. Factories may be well ventilated but homes are not. ALL WORKERS SHOULD INFORM THEIR DOCTORS ABOUT THEIR JOBS AND WHAT TYPES OF MATERIALS THEY HANDLE. Occupational diseases can be diagnosed incorrectly because of lack of information.

From Science News and the Machinist Paper via the Tulip City Conglomerate via Arrowhead News

. brivestog sincome es

offer death revealed ra

WHAT ARE ROCKS by Jane Girard

What are rocks and minerals, anyway? And why are they important?

There are basically two components of this world, minerals and energy.

Even water is a mineral. Minerals are made up of elements and from them everything else proceeds. Plants, animals, man. A plant needs minerals to grow so there is nothing more basic to our existence than minerals.

There are about 2200 of them, with more being scientifically identified every year. They have their own chemical and atomic compositions, each crystallizing in forms determined by internal arrangements of their atoms. Salt and fluorite grow as cubes. Beryl, apatite, and tourmaline take the shape of hexagonal pencils. There are six basic geometric crystal types and dozens of variations and combinations.

All rocks are composed of minerals. Occasionally a rock may be one single mineral. Sandstone may be pure quartz; soapstone, pure talc; marble, pure calcite. However, most rocks are made up of two or more minerals.

What are called gemstones include not only single minerals like malachite, and mineral crystals like emerald and diamond, but rocks of great beauty as well. Lapidary artists fashion these gemstones into an infinite variety of decorative objects.

To many a rockhound a specimen is important because he found it or because he plans to make something artistic from it with his own hands.

Collectors who specialize in mineral crystals know that much crystallization takes place in cooling bodies of magma, or in fissures or caves in the rock where seeping water or gas brings minerals into solution. The atom by atom growth of crystals, from magma or mineral water or gas, may require a few days, a few years, or thousands of years. The rate of growth depends

THE JASPILITE

on the mineral content of the water or gas, the temperature, the pressures, the surrounding rocks.

Cavities where crystals grow may be as small as a doll's thimble or as large as a major-league baseball stadium. Most crystals are microscopic and millions of them may grow in a single pocket in a rock. There are collectors who have microscopes and a passion to mount and photograph these minicrystal treasures. Micromounters they call themselves. They inhabit a wonderful world of .magnified color and form, and many pursue the complex study of microminerals with scientific dedication.

But crystals can be huge; one giant weighed 2000 tons. The largest specimens normally seen, however, are those used as focal points in rock gardens, center-pieces, pieces in salons, or exhibits in museums.

Between the big crystals and the micromounts come the "thumbnails," the "miniatures" and the "cabinets. "poor food and water in the field. These are the sizes gathered and exhibited by most collectors. Some restrict themselves to collecting specimens of a single mineral, or minerals of a single locality, or a single color.

A cavity of any size in a rock may be a grotto nurturing some of natures most dazzling creations. By the hundreds of billions somewhere beneath the ground, they wait only to be released to light and sight.

Collecting may lead deeply into amateur science or into professional careers. But rocks and minerals remain always an art form.

To a mineral collector, a specimen the owner's permission. How would

pedestal, its most attractive aspect forward. It is to be exhibited, treasured, photographed and examined. Its colors, its crystal structure, its symmetry are all to be celebrated as art in nature. A mineral crystal speaks of beauty and order and perfection in creation.

beints (which Rocks and minerals give me something tangible to hold and touch, a relationship with the earth. They provide a thrill! When I open this hollow-sounding rock with my hammer, I'll be the first person in the world to see what is inside since God made it a hundred million years ago. The property of the second brise stay! The true rockhoemd

From The Kyana Gemscoop

HOW TO BE A POPULAR ROCKHOUND

Rockhounds are funny people; they toil unceasingly under a baking sun or in icy weather. They walk miles on hurting feet, grind away fingers and strain their eyes, suffer acid burns, exposure, a rocky bed and WHY?

So they can own, display and talk about the beautiful specimens; so they can enter a new world of creative art and share the pleasures with others; so every piece on display has its own history of hard work, privation and loving treatment; every piece has its history and neither piece nor history can possibly be replaced. For these reasons, a code has developed among the fraternity, a code based on kindliness, consideration, a genuine appreciation of what the specimen means to the owner, and the code says this:

1. Never touch a specimen without is something to be placed on a you feel if you damaged it? Do

you know that oils and acids of the human skin may dull or damage a finish? Replacement is impossible. The state of the st crystal structure, its symmetr

- 2. When viewing specimens in a glass case, one yard away is the accepted rule. This allows others an unobstructed view and keeps finger prints (which do not help vision or display) from appearing on the glass. tionship with the earth. They pro-
- 3. On a field trip, no sign should remain behind to tell others that you have been there. All holes are filled up, no bottles or cans, paper or trash to stand as an ugly monument to your brief stay: The true rockhound lives and loves nature.
- 4. Don't be a rock-hog or a packrat. Take only what you need and can use, leaving something behind for those who will come along after you. Many a fruitful area minerals and closed for all time some silver or gold. One of the because the "long-ton operator" you should never collect more containing both native copper and back to the car.

Four simple rules to be sure, yet or gold which is obtained. When violations of these honorable pre- the great copper deposits were cepts expel many rockhounds from found in the western states, the the wonderful hospitality of owners Lake Superior area had to close

From the bulletin of the

JEWELRY METALS

similar in construction and all continued. . . .

are good conductors of electricity. Their hardness is close to 2.5. The specific gravity of copper is about 9.0, silver 10.5, and gold 19.3, making gold heavier even than lead. They are all ductile, but gold is more so than the others. They all belong to the isometric or cubic system although they rarely form crystals. Copper is the only one plentiful enough to be used in industry to any extent. Copper ornaments have been found on the remains of the Mound Builders. Evidently they knew about the copper deposits around Lake Superior. The Lake Superior area is one of the few places in the world where native copper is found. When Edison invented the electric light bulb the demand for copper increased tremendously so a large number of miners from Wales came to the area to work in the mines. For many years it was the most important copper mining area in the world.

has been stripped of its beautiful Where copper is found, there is also most desirable mineral specimens tried to get it all. A good rule: from the Lake Superior area is one rocks than your wife can carry silver. As a matter of fact, most copper mines now can only operate profitably because of the silver each year. the mines because they could not compete economically.

Double "I" Gem & Mineral In ancient times, silver was rare City and the Grand Valley and it was called white gold. As a Lithogram via the Agate matter of fact, some of their gold Picker had so much silver in it that its - color was almost white because copper, silver and gold amalgamate COPPER, SILVER AND GOLD-THE easily. When the great silver deposits were found in the western world, it became much more plentiful Copper, silver and gold belong to and also cheaper so that it could the same family. Their atoms are be used for coinage and ornaments.

Page 17 THE JASPILITE

history. The ancient man believed later to provide a passageway for that the particles of gold he found were dust from the sun. Since they worshipped the sun, they thought that the more gold they accumulated, the more godlike they would become. Gold is a very stable metal and will not it is agua regia which is a mix- plaster fills all the intricate greatest gold mining area and will up to 1,350 degrees. This is

From Chip and Lick leaving a hollow mold. Submitted by Jesse Arbogast

the pyramids of Egypt, one used been, is attached to the small

makers begin by hand-forming a pattern, or wax model, which is The ring then gets its finishing doomed to a short life. The wax touches. The sprue is cut away, mold. After the mold hardens, times acid, and buffed to a high the war. Nothing remains but a the ring is ready for its owner. hollow for molten metal. Thus the process' name.

nations is First, a wax model or pattern is carved. Then it is placed on wax stiles on a wax base and astached If you must say what you think, to a subber mounting. The stilts be careful what you think. and base are called the space. From Rock Talk via the They support the pattern in the Agage Picker

Gold has been known since recorded casting position and then evaporate molten metal. The wax ring, sprue and rubber base are then encased in a canister called the investment flask. 10 Ed

particularly on specimens col-

Next, a plaster is mixed. This is called the investment. The investtarnish under everyday conditions. ment is then poured into the can-The only acid that will dissolve ister and vibrated to make sure the ture of nitric and hydrocloric nooks and crannies around the model acids. It will amalgamate with and to rid the plaster of air bubmercury which is one method of bles. When the plaster dries, it recovering gold in mining opera- is placed into an oven and heated tions. South Africa is now the for about four hours at temperatures probably continue as such. called a burn out. It melts and evaporates the wax ring and sprue,

Meanwhile, solid pieces of metal RING MAKING are placed in a small oven on an arm of a casting machine. This oven melts the metal. After the Lost wax casting survives centur- burn out process, the hot investies. It's a process as old as ment, now hollow where the wax has by cultures from ancient China oven on the casting machine. The to the Aztecs. casting arm then spins and in about Pharoahs and medieval kings be
one minute centrifugal force spins the molten metal into the hollow decked themselves with jewels mold. The canister of plaster is made by the lost wax casting then removed from the machine and process. doused in cold water. The plaster In the lost wax casting, jewel ring sinks to the newly-formed makers begin by hard as

model is used to form a plastic the ring cleaned with soap and someintense heat melts and evaporates sheen. With a stone set in place,

> By Louis Mulinix, Rock Express via the G.I. Nugget

The most common stains found on erals. Also some minerals will mineral specimens are from one of the two iron oxides, brown goethite (limonite) or a red hematite, particularly on specimens collected at the surface where they have been exposed to iron-bearing

The most effective solvent for iron stains is oxalic acid, sold as a powder in most drug stores for removal of iron stains around the household. It is rather expensive when bought in this manner but larger quantities are obtainable at a reasonable price from chemical supply houses. Oxalic acid is poison if taken internally and should be used with caution. The recommended procedure is to make a saturated solution by dissolving all the crystals that will go into solution in a glass dilute the solution a little with water. Personally, I have not found the exact concentration to be too critical, especially if you chloric acid will often expose are not in a hurry. Generally a stain can be removed in two or three days of soaking or softened so that brushing will remove it. wash the specimen thoroughly in running water. Sometimes it is necessary to soak for a few hours men is porous and the acid is readily removed. The best containers for acid soaking are stone-ever, acetic acid is not very ware crocks which can be obtained in a variety of sizes. NEVER use a metal container. The minerals that are commonly cleaned with oxalic acid are quartz, barite, celestite, tourmaline, feldspar, mica, zircon, corundum, rutile, and others. Most of the silicates and oxides are relatively insoluble and can be cleaned. Minerals that cannot be cleaned in this way badly stained, are improved by

CLEANING MINERALS are gypsum, fluorite, dioptase, carbonates and the water-soluble mintolerate acid treatment for a limited time without being harmed.

> Hydrochloric acid (muriatic acid) is another useful solvent. It must always be used with caution because the fumes are highly irritating and the acid is injurious to skin or cloth unless in very diluted form. It can often be obtained at drug stores but is much cheaper when purchased in one to five liter jugs from a chemical company. As purchased it is highly concentrated and is best diluted with four to six parts of water for use. When diluting, always pour acid in water, otherwise the heat generated may cause it to spatter.

Hydrochloric acid is especially useful in dissolving calcite from around other crystals. Frequently or ceramic container of water, then calcite is the last mineral to form in a cavity and, as such, protects earlier-formed crystals. of the calcite by diluted hydrobeautiful and exceedingly fragile crystals. It will also remove iron stains and can be used with fluorite, pyrite, marcasite and many other After the acid soaking is completed sulfides that are attacked by oxalic the last wax casting,

Dilute acetic acid is preferable to in clean water if any of the speci-hydrochloric acid for removing calcite from some minerals that are attacked by stronger acids. Howeffective in removing iron stains. Vinegar is a very dilute form of acetic acid. The water-soluble minerals can often be cleaned with organic solvents used for dry cleaning. Most of these solvents are either inflammable or toxic to breathe and suitable precautions should be taken in using them. Most mineral specimens, even though not

washing in plain water to remove dust and dirt. A small amount of a detergent is helpful in such an operation. Whether to use a spray of water or more gentle treatment depends upon the fragility of the specimen. My favorite tool for cleaning the average specimen is a discarded toothbrush. A small paint brush is also useful for getting into cavities. The clay that often coats crystals in vugs may be too stiff for removal by brushing and is best loosened by gently poking with a pin or needle. A few minerals, such as the Arkansas cacoxenite, are too fragile to be cleaned with water. Dirt surrounding the areas of crystals can be loosened by dry brushing and removed by gentle blowing. First identify the minerals to be cleaned on any stone. and the stain to be removed.

From the Tulip City Conglomerate

RECIPE FOR A GOOD ROCK CLUB

Assemble a group of rockhounds in assorted sizes and personalities. Measure accurately: 1 cup friendly words, 1 cup understanding, 1 cup courtesy and patience. Sift carefully and remove all malice and ego. where tourists can screen for Add a dash of wit and humor, warm welcome for all, and a heart full of cooperation. Fraise where it is Kim, 17, thought it was a "real needed. Mix well until blended into a smooth-running organization. Sprinkle with good times and much fun. Garnish with new members, serve with warm greetings. Plenty for all

From The Triangle Tumbler Via the Agate Picker

JASPA:

A word on two about working jusper. You will find that jasper is much

more troublesome to polish than agate because many varieties are "earthy" and porous, and many others contain hematite which is very difficult to polish. If you are on a field trip, a good way to test for good jasper is to wet it. If it absorbs the water and dries rapidly, throw it away. It will not polish. If it stays wet and does not dry right away, it contains a high amount of chalcedony (quartz) and will take a good polish.

Most jaspers polish well on leather with Linde A., but good results can be obtained with tin oxide on either leather or felt.

Always remember that a fine sanding job is the secret of good polishing Roturn Fostage Sue

From Breccia via The Gemrock

GIRL, 17, FINDS VALUABLE GEM

Franklin, N. C. -- Kim Jones unknowingly plucked a 456-carat ruby from a 25-cent bucket of gravel at a mine near here. The ruby is the second largest native stone ever found in the Cowee Valley near Franklin, which has several mines precious stones.

pretty stone" so she tossed it to her mother, Theresa, for a look. Mrs. Jones picked it up, admired it and set it down next to her in the dirt. A mine worker later told them the value of their find. Kim and her parents were traveling from Scotland, Pa. to Florida in a camper Tuesday afternoon when they decided to stop and dig for native rocks.

The stone, three inches in diameter and one inch thick, is 85% ruby and its value could exceed \$100,000. Jewelers in Franklin told Kim it

will form a star when it is cut, which will greatly enhance its value. dam bus special time "gridges

trait for good pager is to wet it.

If it absorbs the water and dries regidly, three it easy. It will not polish, If it stays wet and

and will take a good polish.

Leading or Turings

on to dumper will at dot

dops not dry cight sway, it contains a birth amount of chalcodony (quarter)

Most jespers policy well on leather

meo affuner boog for annit dilw

de parained with the exide on either

From K. C. Star via The Gemrock

WANTED: A color slide or a chunk of precambrian algae from the U.P. for a Michigan Fossil Localities Display for spring use. It is also used as a lapidary material and is found on the Lake Superior shore between Copper Harbor and Eagle Harbor. If you have any, please contact Ceil Duluk or Jan Root, P.O. Box 368, Dearborn, Michigan 48121 and the order of the

From the Rockpile via The Oshkosh Quarrier

noemark out an coun ,alaminia wol

Connect with uncorn Dirk spreaders of

od of allegat our one watte to be

memorad by contil blowles. First

Return Postage Guaranteed

October, 1977 THE JASPILITE Ishpeming Rock and Mineral Club. Inc.

ponts intover and taker officer

min .ho. a wheat to most onlinesses of the security from

to alde not did for active rocks.

and one inch orles, is 85% ruby and

The abone, three lackse in dismeter

. noo look been the sales and stone of the part of the feet of the

rind that the grant of warder of war and a grant the tell the it

Sandra Phillips, Editor 405 South Rose Street Ishpeming, Michigan 49849 found in the Cowes Valley near

Algorian to

(1) 798 pt

Mr. & Mrs. C. Robt. Markert P.O. Box 69 Ishpeming, Mich. 49849

Locansa sucion



of cooperation. Fraise when it

neo a straining-adjourn a con-

this riene they will about

or por order deletely trained