



ROCK and MINERAL CLUB

P.O. Box 102

ISHPEMING, MI. 49489

# THE JASPILITE

Affiliated with the Midwest Federation of Mineralogical & Geological Societies

Business Meetings: 1st Fri. of Month. 7 PM--Jacobetti Veterans Facility  
425 Fisher Street, Marquette, Michigan

Program & Activity: 3rd Sun. of Month. 2 PM Marquette Township Hall, West of  
Marquette, Michigan

With summer finely here, everyone is off running to the many activities the U.P. affords those who enjoy the outdoors. While on your summer excursions pass the word on the upcoming activities of the club, and invite those you meet to join us whenever they can.

Those members who live outside the Marquette area, drop us a line and let us know what is happening with you and your family, and the area you live in, and if at all possible join in one of our many activities scheduled for the summer and fall. (Check your March Jaspilite for the field trip schedule and Bruce Spike for the place and hour to begin each field trip.)

To each and everyone of you enjoy and have a great summer and remember to "belt up", as we want you back from your travels.

Your President, Ernie Johnson

## From the Secretary's Minutes

Business meetings begin at 7:30 P.M.; Jacobetti Veteran's Facility using the entrance near the Chapel. If you've missed several meetings, call Ernie Johnson to confirm place and date.

Ramada Inn and Bonanza have offered us their facilities for meetings.

Raffle prizes for the August Swap will be limited to the first 25, and the rest will be auctioned at the Cracker Barrel. Larry Sain is in charge of the prizes. So far he has some jewelry, clocks and bookends plus the IRMC \$50.00.

Swap/Show flyers reflect a nominal fee for each table a dealer sets up.

Larry Sain gave an informative talk on Magnetite and had many fine specimens for viewing at the March program meeting. He also demonstrated the use of a Lodestone he made from a strip of Magnetite suspended from a string.

Sally Ahrndt, club member and owner of Cat's Eye Creations gave a demo on bead stringing. She has a piece of her creative jewelry on display in Lansing following an Art Show honoring Women of the Arts in Negaunee.

Arnold Mulzer sent some iron ore pellets to the Garden Club of Greater Lansing for their Botanical Gardens and received a thank you letter.

The Welcome Center south of Marquette would like some rock and mineral samples to hand out to visitors. Arnold will supply them with Kona Dolomite and Iron ore pellets for now.

\*\* Meeting dates for the coming year at the Marquette Township hall are: 1990--- Oct. 21 and Nov. 11. 1991----Jan. 20, Feb. 17, Mar. 17 and Apr. 21. Christmas party at the Northwoods on Dec. 2; Chairperson--I. Bartelli.

\$100.00 sent to the Midwest Federation Endowment Fund. Received a thank you letter.

Jim Procnier gave an interesting talk and demonstration on Fluorescent minerals at the April program meeting and Silent Auction.

The Silent Auction was successful. We had a good variety of rocks, slabs, minerals, jewelry and plants; very little was left for the summer Swap.

Local mineral displays requested: A case is needed for the Ishpeming Chamber of Commerce for which Jim Procnier is to price building supplies. Specimens to be donated by club members. The case at the Marquette Chamber of Commerce needs to be raised from the floor for better viewing. Bob Markert is to follow up on school displays. The Marquette Welcome Center and Negaunee Irontown also need displays.

Jim Procnier reports that Red Metal of Hancock has plans for June/July trips thru a copper mine and a geologic tour of the Keweenaw at a cost of \$5.00. Call Richard Whiteman for further information.

Lowell Smail has reserved the Ely Township Hall for the evening before the Swap to set up tables and displays, etc.

The Chambers of Commerce and the Welcome Center have asked for information on collecting sites. Arnold Mulzer and Bruce Spike will follow up on the request. Permission to collect will be stressed and guided tours can be arranged.

Midwest Federation Convention: Arnold Mulzer and Jim Bowns will be club delegates. Bob Markert will be a visitor.

Chuck Manto says things look good for the go ahead on the Park Museum at the Cliff Shaft.

It was suggested we carry a list of rocks and minerals that can be used at the Kid's Treasure Trove and in the cartons for the swap. Ask Olive Sain or Al Murray for a list.

New club rosters are available from Arnold. Send a stamped, addressed envelop for list.

Jan. to June---Microscope Hunting Season...I. Bartelli

Tuesday evenings have been fun times for the few of us who own microscopes and have not forsaken the area for warmer climes. From Jan. til June is micro-exploring time.

This year the group has been meeting at the Bartelli's looking over some long neglected collections of Ingrids. We found some lovelies! Bruce Spike broke out an exceptionally fine specimen of Chalcotrichite from some Cliff mine rocks. We also found some lovely copper and silver crystals as well as many of the more common minerals. Several halfbreed micros were broken out.

Those old neglected collections can prove to be most valuable when compared to any you may find on the piles today.

What nicer way could one find to spend the long, cold winter than to snuggle up to the wood stove with your microscope and a bag of rocks to explore. We had fun and will be anxious for another January to roll around.

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Bits and Pieces...A . Mulzer

Dates to remember: The 16th annual rockhound weekend sponsored by MGAGS at Northwestern College at Traverse City, June 23 and 24. The Midwest Federation Convention at Evansville, Indiana July 19 to 22. The IRMC annual Swap/Sell/Show at the Ely Township Hall Aug. 4th, and the field trip to the Kona pit on Aug. 5th.

By this time all members should have their quota of raffle tickets. It is important that we make this drive a success as it is our prime money maker and it subsidizes our club activities. By selling your tickets you are keeping dues down and also taking advantage of winning a raffle prize. In the 19 years I have been in the club the dues have remained the same. In the 1989 annual report, the following is a list of some of our expenses:

Midwest dues	\$90.00	Hall rent	\$110.00	Postage & supplies	\$155.00
Insurance	200.00	Jaspilite expenses	150.00		

You add this up and then figure out how \$3.00 per couple and \$2.00 per single can run a club without raffle funds. Enough of this! Let me finish on the brighter side.

This county has so much beauty for us to enjoy. For years I have been urging you to take advantage of some of our local sites or attractions. I know that some of our newer members have never been up on the world's largest gemstone--Jasper Knob in Ishpeming, the Michigan Iron Ore Museum in Negaunee, Wattson & Wattson Jeweler's indoor mine in downtown Marquette, the Greenwood Reservoir west of Ishpeming. Share these sights with your out of town company.

See you at the next meeting, field trip or swap.

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Asbestos, First Friend Now Foe.....L. Scotti

The term "asbestos" identifies a group of mineral substances that share a common physical characteristic rather than a common chemical composition. Asbestos separates into smaller and smaller fiber bundles. The fibers are almost indestructible by common agents. Asbestos is both heat and chemical resistant, an excellent thermal insulator, a very good noise insulator, and resistant to the effects of friction. It was these characteristics that made asbestos sought after as a "miracle fiber" in insulation, soundproofing, and fireproofing. Asbestos has been used for over 2,000 years and Charlemagne had a tablecloth woven from asbestos.

There are two varieties of asbestos: the serpentine mineral group containing chrysotile, and the amphibole mineral group containing amosite, crocidolite, tremolite, actinolite, and anthophyllite. Chrysotile,  $Mg_3Si_2O_5(OH)_4$ , the white asbestos, has fine silky fibers, is flexible, has high tensile strength and accounts for over 90% of the uses of asbestos. Chrysotile is found in the Metronite quarry near Felch in Dickinson County (Conrad, 1952) and at the Verde Antique quarry in Marquette County (Snelgrove et al, 1944; Broderick, 1945) and on cliffs at the northeast end of Presque Isle (Creveling, 1926) The Mineralogy of Michigan, 1976.

The amphiboles are complex hydrous silicates chiefly of magnesium, iron, calcium, sodium and aluminum in various combinations. Amosite, the brown asbestos, has brittle fibers, bonds well with plastics and is used in heat insulation materials. Crocidolite, the blue asbestos, is the strongest of the asbestos fibers and is usually found in combination with chrysotile in paper and sheeting and occasionally with amosite or chrysotile in pipe or boiler wrap. Tremolite, actinolite and anthophyllite are rarely found in building or commercial products and are more likely to be encountered in mineral specimens.

The health effects of asbestos are due to its fiber bundles which continue to split into smaller and smaller fiber bundles. The average fiber diameter ranges from 0.11 to 0.24 micrometers and five times that in length. However, asbestos can split into even smaller bundles which cannot be seen with an optical microscope. These fine fibers settle from the air very slowly. In completely still air, fibers of the size usually found in overhead spray insulation in an occupied 8 foot or 10 foot office can take approximately 80 hours to settle. Inhalation of these fine, long fibers has resulted in asbestosis, (fibrotic scarring of the lungs), lung cancer, and mesothelioma, (cancer of the lining of the lung or abdominal cavities). Smoking greatly multiplies the health risk of asbestos. It is presently not possible to identify an absolute safe level of asbestos exposure. Asbestos related diseases are usually not diagnosed until many years (15 to 40) after initial exposure. Because of these adverse effects club members should exercise extreme care in the handling of asbestos samples and NOT include them in the Kids Table sample.

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A government expert is one who can complicate simplicity.



## Club News

Bill Mager and Wayne Wilson, former club members died earlier this year. Bill used to have a rock shop on the old highway between Negaunee and Ishpeming. Wayne was an accomplished lapidarist and also worked with pewter.

Pat Procunier had successful knee surgery in May.

The Sains are proud great grandparents; Olivia Marie was born May 21. Lise and daughter are doing well.

Dawne Smail had finger surgery. She says she can blame any typos on that one finger!

Laura Willhite, member for the past few years died June 1. A donation was made to the Humane Society in her memory.

Art Wiig's mother is in the hospital to clear up an infection following recent surgery.

Ernie Johnson has offered to have a work session where members can bring their rock and mineral items for the swap to be labeled and priced. This will relieve the few people the day of the swap so they can enjoy the day doing other things rather than trying to identify your donations, label & price and get them ready for the auction table. Do call Ernie!

Laurence is asking that you notify him of your raffle prizes even though you don't have them ready right now. He should have them at least a week ahead of the swap so labels and a list can be typed up.

\*\* It was suggested that artifacts of mining be a special display at this swap. Dig them out, write down any information you have on them and bring the information to the July business meeting. If you have any questions call Laurence Sain.

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### Rock or Mineral of the Month.....Al Murray

This is the season to collect rocks and minerals and is also a good time to choose one of your favorites for our rock or mineral of the month part of our program meetings. At each program meeting (Nov. to April) one member presents a short "show and tell" about some mineral, gem, rock, or fossil. During the last year or so we have heard about Hematite, Goethite, Quartz, Magnetite, Petrified wood, Agates, Chlorastrolite, and Fluorescent minerals.

Some good choices of common minerals would be Galena, Pyrite, Chalcocite, Marcasite, Pyrolusite, Fluorite, Calcite, Rhodochrosite, Dolomite, Gypsum, Barite, Apatite, Microcline, Stilbite, Prehnite, and Staurolite. Rare minerals are fun too--you might like Brazilianite, Benitoite, Chalcotrichite, MacFallite, or Calumetite.

Some minerals are found together and would be good for a combined 'show and tell' such as Malachite and Azurite; Franklinite, Willemite, and Zincite; Pyrrhotite and Pentlandite; or Sulfur and Celestite. Some mineral groups would be well described as a group, such as the Spinel group, the Mica group, the Garnet group, the Tourmaline group, or the Zeolite group.

Gems and lapidary materials "rocks" are always interesting. Good topics would be Jade, Opal, Lapis Lazuli, Corundum (Ruby and Sapphire), Moonstone, Turquoise, and star gems.

Most of us are not interested in rocks like Granite, Shale, or Gneiss, but Pegmatite is interesting to any mineral collection. If you collect fossils you could tell us about Mucrospirifer or Phacops or Mecopteris.

These talks are short, only three to five minutes, easy for anyone. You can tell something about the mineral or stone, where it comes from, and what to do with it. We all bring in our specimens to add to the display.

Do any of these fascinate you? The best one to describe is the one you like best. Please choose one of your favorites and let Al Murray or Ernie Johnson know which month you would like to show and tell it. If you would like to see and find out about some particular mineral, gem, or rock, ask us about it and we'll find someone to do it. We all enjoyed the talks by our friends and you will enjoy your favorite gem or mineral even more when you tell us about it.

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### Poor Rock Piles.....I. Bartelli

Poor rock piles are just that--poor rock piles. That is if you expect to find any gem stones, micro-minerals or slabbing material.

With the cessation of mining the piles are not growing. Any activity on the piles, other than that of rockhounds, is usually a crusher or a front end loader filling trucks with rock for roads, fill, etc. Many piles have shrunk to the point of non-existence. Any undisturbed remote piles are too weathered by wind, rain, frost, snow, and vegetation to yield any valuable collections. We find the same rocks in the same place as they were when we worked on them ten or twenty years ago.

But rock hounds aren't easily discouraged. We still try to find rocks to bring home. And if we should find a bit of copper, a speck of silver or a micro mineral worth keeping, we are that much more pleased.

Also we're more apt to see the larger, total picture; the geology of the region that made our rock hounding possible, the total landscape, the vegetation, the sounds, smells and feeling that make the rock piles such special places.

And if we were to look at ourselves we're not as 'gemmie' or sparkly as we once were. We too show signs of weathering--not much different than our rock piles.

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VALUABLE FOX? Perhaps the most valuable fox that ever lived was one in Canada that howled until the blacksmith got so angry he threw his hammer at him. The hammer knocked a corner off a rock and exposed a fine metallic ore. The great Cobalt mines of Cobalt, Ontario, were the results. The fox escaped unharmed. Via-Rocky Trails.



DEAD RIVER PLUTON....O. Sain

Many of our club members and those from other states have journeyed with Bob Markert or Arnold Mulzer north of Negaunee to extract large chunks of "Phenocryst" to take home for specimens or to become bookends, clocks, etc. The size of the crystals frozen in a fine matrix was an amazing sight; a huge hill of these crystals!

When man first brought home rocks from the moon and some were described as Phenocryst, we said "something as we gather north of Negaunee".

I am also a collector of books in addition to all my other hobbies, and one in particular was looked at more closely recently as I was gathering information for the Wally Byum Rockhound fieldtrip in this area in 1991. Titled "Geology of the Negaunee Quadrangle, Marquette County, Michigan" Geological Survey Profession Paper 788. Pages 20-23 describe the Dead River Pluton as a nonfoliated generally porphyritic composite body of syenite, diorite, and gnodiorite. Three facies of the pluton are described as Granodiorite Porphyry, Hornblende Diorite, and Porphyritic Syenite. The later is the one we have collected and the picture on page 22 brings you face to face with the real thing.

"The porphyry contains grayish-pink perthite crystals in a dark groundmass of hornblende, biotite, fine-grained feldspar, light brown sphene, and magnetite. The groundmass constitutes one-tenth to more than one-third of the rock. Weathering of the groundmass in places leaves a rough, warty surface of perthite crystals.

Perthite phenocrysts range from about 2 inches to less than one-fourth inch in size. Perthite crystals "float" in the groundmass, rarely touching one another. There is no obvious alignment of crystals in the porphyry. None appear to be brecciated. Cleavage is pronounced, and some cleavage planes contain calcite veinlets.

The groundmass is similar to the hornblende diorite of the pluton, except that the hornblende appears to be primary rather than altered pyroxene.

The chemical composition of the porphyritic syenite is between that of the hornblende diorite and gnodiorite porphyry. As Na<sub>2</sub>O exceeds K<sub>2</sub>O, the perthite is probably albitic. The relatively large amount of CO<sub>2</sub> is attributed to secondary carbonate in some of the phenocrysts."

This is the season for bugs so if you are going to be in the woods be prepared with repellants or special 'bug jackets'. This is tick season also and with the threat of Lyme disease be sure to wear light clothes (smooth surface) and do tuck pant legs in the boots. Check yourself thoroughly before going to bed. Add a first aid kit with a treatment for insect bites, too. If you are prepared, none of these flying, crawling pests can spoil your fun!

OFFICIAL PUBLICATION OF THE ISHPERING ROCK & MINERAL CLUB  
IRMC OFFICERS FOR 1990

Published Quarterly

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Membership: Chairman--2nd V.P. The club is open to anyone interested in Earth Sciences.  
Initiation: \$1.50. Membership annual fees: Husband & Wife-\$3.00, Adult-\$2.00, Jr.-\$1.00

OUR PURPOSE

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.  
.....Bob and Marian Markert



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