March 9,1992

THE JASPILITE

ISHPEMING ROCK and MINERAL CLUB
P.O. Box 102
ISHPEMING, MI. 49489

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

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Dear Fellow Rockhounds,

The planning for our summer activities is well under way; field trips and our annual Swap. The field trips under the leadership of Bruce Spike,(see list elsewhere in the Jaspilite) should provide something for everyone. The club members have done a great job of identifying some interesting areas to prospect for minerals. Make your plans now to join us and to enjoy yourselves.

The Swap is moving right along with Dave Olsen and Jim Procunier bird dogging all of the activities that must be addressed. They can't do it all so pick one or more of the activities to sign up for as soon as possible. Give the co-chairmen a call.

This is an open invite to all our out of town members to join us on a field trip before and at our annual Lindberg Quarry trip; also plan to help at the swap. You'll have a great time working together on the swap.

As always, I am fighting the deadline for getting these 'words of wisdom' to our editor, so I can keep on her good side. She does a great job in putting all our bits and pieces together to come out with an interesting Jaspilite each and everytime.

Your President, Ernie Johnson

From the desk of Secretary.....Dawne Smail

January--election and installation of officers for 1992:

Pres.	Ernie Johnson	Recording Secretary....	Dawne Smail
1st V.P.	David Olsen	Treasurer.....	Bruce Spike
2nd V.P.	Lowell Smail	Jaspilite Editor.....	Olive Sain

Swap Chairperson--Dave Olsen and Assistant--Jim Procunier

Business meeting hostesses: April3--Bartelli's and May 1--Ruonavaara's

Door prizes for program meetings: March 15--Sain's and April 26--Procunier's

Mike Jurmu, NMU and Shaun Baker, MYU scholarship recipients sent thanks to the IRMC.

The Republic Mine will be a field trip available to paid up members only by specific request of the CCI Mining Co. An employee will guide the tour.

February--Petoskey stone was featured this month. Suzanne Reihl gave an interesting talk on this fossil and showed many samples. Other members displayed some of their choice polished and unpolished specimens. Al Murray Sr.'s special "lapboard' for hand polishing Petoskey and other soft minerals was displayed and explained.

Arnold Mulzer displayed batches of tumbled rock--from the rough through polished, He also had a tumbler running.

March--The mineral featured will be pyrite by Olive Sain.

Wattson and Wattson is remodeling their second floor to become a rockshop. They request anyone having quality specimens/ materials, demonstrators of Lapidary, Faceting, Identification, etc please contact them. They hope to open the shop this spring.

The March general program will be a slide show of crystals by Dave Olsen.

April 26 is the annual Silent Auction. Everyone will have to start weeding out some of their excess rocks, minerals, jewelry, etc., to fill a few tables. Other goodies would also be appreciated.

The April program will be presented by Stan Dyl, Curator of The Seaman Mineral Museum, and member of our club.

IRMC is a 700% donor to the Midwest Endowment Fund.

Bruce Spike will offer a series of classes on orienteering --beginning indoor instruction with compass and topographic map; then outdoors--for possible Saturday field trips.

Ernie will look into locating the Galena exploratory sites north of Ishpeming for an additional Saturday trip and to practice using a map and compass.

Minerals hi-lited from 1989 to spring of 1992: Hematite/Goethite, Copper, Quartz, Kinoite, Petrified wood, Agate, Pumpellyite, Magnetite, Fluorescent Minerals, Calcite, Soil of Marquette County, Gypsum, MacFallite and Orientite, Petoskey Stone, and Pyrite. Refer to this list for the fall of 1992 and spring of 1993 and select 5 minerals that haven't been featured as yet. Volunteer for one of the fall/winter months.

Bolo cord worn out? When you are putting bolo tips on cords use Elmer's Glue. When the cord wears out, the tips will come off easily by soaking in water and then you can reuse them.

*The human brain is a wonderful thing. It starts working the moment you're born and never stops until you stand up to speak in public...Grit & Sand--MGAGS.

LAKE BOTTOM FOREST UPDATE.....Conglomerate

Though the Olson site off Chicago in Lake Michigan is receiving most of the publicity as having a Lake Bottom Forest, there are other forests on the bottom of the Great Lakes.

Diving Times reports a similar underwater forest in the Straits of Mackinac and one near the Pictured Rocks National Lakeshore in Lake Superior. Who really knows how many there are? All of them point to the fact that the Great Lakes were not always as we know them today and these lake bottoms were higher and once flourishing forest.

TAYLOR PYROLUSITE is really MANGANITE

Donovan D. Wharff asked that we (the Conglomerate) publish his letter to set the record straight:

I just received a note from Bill Tislar. Bill and I are the ones who opened up the Taylor Mine in Alberta, Michigan around 1975.

All the Pyrolusite that came from the Taylor Mine by D. Wharff, Bill Tislar and Rich Whiteman is NOT Pyrolusite. It is MANGANITE! Readers/collectors should be advised. Bill recently had it tested in the St. Paul, Minnesota area where he lives.(The Conglomerate)

INCA INDIANS USED SOLAR POWER TO CUT STONE (Conglomerate)

An earth science professor who has visited and done research at several sites in Peru where the Inca Indians lived, 1,000 years ago, believes he has the answer to a mystery that has puzzled archaeologists for years.

"The Incas used solar power, not manpower, to cut the huge stones they used to build their massive cities," said Dr. Ivan Watkins of St. Cloud State University in Minnesota.

Watkins said his theory supersedes all previous theories because they do not account for all the evidence. He believes there is enough circumstantial evidence of the preserved Inca traditions to support his idea. The sun was important to the Incas and was venerated in an annual festival, he noted. Some cultural records indicate the Indians renewed an external flame by lighting a torch with sun rays reflected from a priest's bracelet. "There is no doubt in my mind that they knew how to do it; everything points to it," Watkins said.

Watkins believes the Incas used gold dish-shaped or parabolic reflectors to concentrate the sun's energy to carve the rocks with a beam of light. "They had technology 1,000 years ago" he said. Watkins believes the dishes probably were cut up and destroyed when the Spanish conquistadors conquered the Incas in the 15th century. Additional evidence to support the theory can be found in the Gold Museum at Bogota, Columbia. He said four small dishes appear to have the shape needed to focus the sun's rays. A parabolic dish looks like a TV satellite dish. "When sunlight is reflected on a parabola, the focused energy can be directed by moving the dish," Watkins said. The dishes used by the Incas were "Two men across," he said. "That's a pretty big dish and it could burn a lot--it would be large enough to cut rock easily," he said.

The huge dishes allowed the Incas to cut the rocks in a precise fashion. The stone blocks are so closely matched that a knife blade cannot be inserted between them, he noted. Previously scientists have theorized that the massive stones of Incan cities were hammered with other stone, broken with wooden or metal wedges, etched with organic acids, or sanded with grains of sand and water. But Watkins said some of the rocks are carved with sharp inside corners, and there are clean edges of cut rock near stress fractures in the rocks. Crude stone hammers could not be used to achieve those kinds of results. Watkins said his theory evolved after he noticed a glaze on the wall of a cave that had Inca stonework in it. "In order to get a glaze, what you have to do is heat the rock, fire it up," he said. What happened in this cave is they had heated the rock quite severely.

The Inca villages were rediscovered in 1911. The capital of the Inca empire was near the Peruvian town of Cuzco, but the most famous sites is Machu Picchu in the mountains of south-central Peru.

Watkins conducted experiments on his theory at the Federal Bureau of Mines in the Twin Cities and found that rock could be cut with a 100 watt laser. A huge dish, like those Watkins believes were used, would generate 6,000 watts of energy, he said. Watkins has been awarded a patent for a solar dish similar to those he believes the Incas used. He plans to test the dish on red granite in the St. Cloud area because it is the same as that found in the mountains of Peru. He plans to take a sabbatical next year to detail his dish theory and three other theories. He also hopes to learn how the Incas transported the rocks from the quarries, miles away to the village sites...(Mountain Gem via Rock Rustler's News)

(Ed.--The February issue of the National Geographic,1992, has an article on "Pizarro, Conqueror of the Inca" telling about the tremendous stores of gold artifacts melted down by the Spaniards which were then sent to Spain; the worship of the sungod,and the fine buildings 'built of solid stones, beautifully joined....very large and well cut'. Very interesting to read!)

SEPTARIAN COUSINS

Septaria means only one thing to West Michigan rockhounds--that is the "Ironstone" concretions which are collected in the area just south of Holland, Michigan.

There are many types of septaria. The stone is not a geode, although it may contain many of the same minerals as the well-known geodes of Indiana and Missouri.

The one characteristic of SEPTARIA that enables identification is the presence of "avenues of entry", showing the path that the mineral took into the nodule. They enter the nodule like the spokes of a wheel, going from the rim to the hub. The common filling in the West Michigan septaria is calcite. Many contain a rich mixture of fossils. (The author found a pyritized ammonite about eight inches across, wrapped in and around a septarian nodule, and another was

found which contained a pyritized snail.)

Septaria from some areas have distinctive markings, that have led rockhounds to call them turtle stones. In southern Illinois, some septaria have been found containing fluorite, sphalerite, witherite, and sometimes galena. The Utah type has a different shape, and may be filled with agate. (The Utah types we are familiar with are almost always filled with calcite in dark brown and amber colors. Editor.) The Thunder Egg of Oregon is a septaria. This interesting cousin is a silicified rhyolite rock, with an inner core of chalcedony, with a banded or irregular varigated appearance...(Joe Moran in the Rock Box)

MINERALS IN COSMETICS

From almost the beginning of covilization, organic materials and minerals have been used by humans for beautification; sometimes with disastrous results. Malachite for green eye shadow, Lapis Lazuli for blue. Galena and sometimes Antimony were used to darken eye brows. Vermillion (cinnabar) was the source for pink cheeks (but as the danger of mercury poisoning is now known, it probably didn't lengthen life any. The Romans used red ochre and Cerussite as a powder mixed with vinegar to give the skin a pale delicate look--but very corrosive to the skin.

In the Middle ages, Cerussite (called Venetian Ceruse) was the most wanted skin product, to hide freckles or skin blemishes, and the best rouge was 'Spanish wool'--red Ochre wrapped in steel wool and rubbed on the skin! Mercury was used asa wash for skin blemishes (it took the skin off, too!) and Arsenic was eaten to give an 'ethereal quality' to the complexion!

Today there are nine plus minerals used in cosmetics and lotions. TALC, of course; also the iron oxides--MAGNETITE, HEMATITE, LIMONITE, and GOETHITE. ZINC OXIDE, used in sun screen creams; MICA, in eye shadow, or if coated with RUTILE or ANATASE, it makes pearlescent shades of lipstick, eye shadow, hair gel, body lotion, rouge, and blush.

TITANIUM OXIDE (Rutile and Anatase) whitens various products. CALCITE is a binder in eye shadow and pressed makeup; KAOLINITE thickens creams and lotions, absorbs oil from the skin and forms gels and pastes for toothpaste and shaving gels.

QUARTZ is used in soaps and toothpaste, coatings for pills, and in ointments and lotions. BAUXITE also polishes teeth, adds smoothness to lotions and creams, and is a carrier for perfumes in sachets and creams.

On a lipstick package, Betty Rasmussen, exchange bulletin editor for The Oshkosh Quarrier, found these minerals in various forms 'may be' included (along with a whole slough of unpronounceable chemicals)--BARIUM, MICA, TITANIUM DIOXIDE, IRON OXIDES, CALCIUM (lake)*, several shades of ALUMINUM LAKE, MANGANESE , and TIN OXIDE. And this is just to make reds! How mnay more would be listed for the many colors of eye shadow. ....(The Oshkosh Quarrier)

OFFICIAL PUBLICATION OF THE ISHPEMING ROCK & MINERAL CLUB — Published Quarterly

IRMC OFFICERS FOR 1992

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2nd V. Pres.	Lowell Smail	100 Marble	Ishpeming, Mi. 49849	486-6588
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Treasurer	Bruce Spike	197 Midway Drive	Negaunee, Mi. 49866	226-3933
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Mailing address: Ishpeming Rock & Mineral Club, Inc., P.O. Box 102, Ishpeming, Mi. 49849. Membership Chairman--2nd V. P. The club is open to anyone interested in the Earth Sciences. Initiation fee- $1.50.Annual Membership dues: 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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1992 Field Trips----------Bruce Spike

The field trip agenda through August 2 has been finalized--weather permitting. The following list will be your schedule. Post it in a handy spot.

May 3, Early trip. Mica outcrops near M-95 between Koski's Korner and Republic. Then on to the Champion Mine and the Ohio Mine to complete the day.

May 17, Copper Country. Hancock City Park will be the headquarters camp. This is a weekend trip. Some may want to arrive at camp the evening of the 14th. Stay 15th,16th, 17th, and 18th. Join the group for one or all of the days.

June 7, This is a special trip into the Republic Mine arranged by CCI for paid up IRMC members only. No guests.

June 21, Channing-----Kimberlite, Sagola------Dolomite nodules, Felch----Groveland Mine.

July 19, Verde Antique Quarry behind the Ropes Gold Mine.

Aug. 2, Lindberg's Quarry--The annual Swap field trip.

(Ed.-- Generally these trips begin at the Marquette Courthouse at 9 am. To be sure--call Bruce at 226-3933 for exact information on each trip.)

Our micromount group has been studying the minerals of various mines. When making a collection, exact locations, names of places, and dates are important data. We are planning a seminar to acquaint you with map reading and use of a compass. This will assist you in pinpointing your finds as well as locating a spot shown on the map. We will have an orienteering tryout to give you practice.

"An update on Mary West, club member, whogave the club such great help in planning how to get Hematite and Copper named as Michigan's state minerals, and introduced us to the study of soils and its economic effects on man in the short time she was in the county. Her letter follows:"

Lots has been happening these past few months. Starting February 24th I'll be in a new job with the Soil Conservation Service. I've been promoted to a GS-11 Data Gathering Specialist,and I'll be stationed at the State Office in St. Paul, which is the headquarters for SCS in Minnesota. I'll still be working with soils information a little bit, but also with land use changes; changes in agriculture, water quality, and lots of other stuff I've yet to learn. All this data collection goes into the National Resources Inventory (NRI), and every state is doing this.

I've also joined a second concert band, so I'm getting lots of practice at playing drums and percussion again. Other hobbies of late have included making some rock jewelry (earrings, pins, necklaces) and I went ice fishing for the first time and enjoyed it.

The Mineralogical Record--March/April Issue '92

If you are not a subscriber to the Mineralogical Record you will want to check the local magazine racks in the market place for the March/April 1992 Issue titled The Michigan Copper Country issue. A few years ago Rocks and Minerals had a special issue on the Copper Country which was and is still a treasure to own with its wealth of information.

Stan Dyl Curator of the Seaman Mineral Museum has two articles in the issue, one summarizing the history of the Lake Superior Copper District, and one co-authored with Wendell Wilson describing the Seaman Museum. Marc Wilson contributed articles on Copper Country geology and mineralogy with special emphasis on copper crystallography.

Collecting on Federal Lands

John Boland, conservation and legislation chairman for AFMS has been reporting in the AFMS newsletter and which has been picked up by many exchange bulletins. on Federal Lands current collecting rules. Do read his report in an exchange bulletin, bring it back to a club meeting and urge a fellow member to take it home and read it. He keeps updating any changes made. These rules affect all of us as rockhounds who enjoy collecting.

We only put out 4 newsletters a year and so any lengthy material must be left to those clubs who publish 9-10 bulletins a year.

CLUB MEMBERSHIP

Please note the number 91 or 92 next to your name on the address label of your Jaspilite. If it is a 91 you haven't paid your 92 dues and this will be your last Jaspilite. Send your 92 dues to Bruce Spike 197 Midway Drive, Negaunee, Mi. 49866.

If you want a copy of the '92 club membership list, send a self addressed, stamped envelope to Dave Olsen 909 W. Magnetic St., Marquette, Mi. 49855.

If you would like a club badge let Dave Olsen know, and if 6 or more would like a badge he'll order them.

Calendar of Area, State & Midwest Events

June 27-28:	MGAGS Seminar at Mott Community College, Flint Michigan
July 23-26:	Combined AFMS and MWF Show at the Brunswick Hi School, Brunswick, Ohio
Aug. 1-2:	IRMC Rock Swap on Sat. and Field Trip on Sun. Ely Twsp. Hall 4 miles west of Ishpeming.
Aug.9:	from 10 to 4 the Copper Country Rock and Mineral Club will hold a Swap in Calumet. Write to Steve Whelan R.1, Box 406, Calumet, Mi. 49913.

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*Recycling tip: Use the **center plastic ring from Scotch** tape or other tape dispeners to hold spheres or geodes. Snip off the 4 little edges holding the tape with pliers.....MGAGS