THE GLACIAL DRIFTER

OCTOBER 1990
Volume 33 Number 2

BULLETIN OF THE GRAND RAPIDS MINERAL SOCIETY
GRAND RAPIDS, MICHIGAN

CLUB CALENDAR

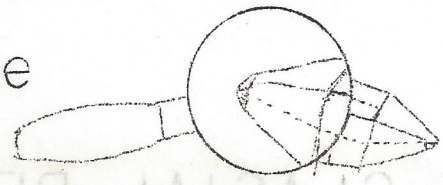
Wednesday, Oct. 5 7 p.m. Our first meeting on our new meeting day - the first Wednesday of each month
Same Place: Grand Rapids Junior College, Room 247
Program: "Photographing Minerals" If you've ever wanted to record the beauty of a mineral specimen with your camera, this program should be a help.

At this time we don't know whether there will be something we can do to help Karl Bruder - come to the meeting and see. Every time we do something to help him with his classes, we learn something ourselves.

PLACES TO GO - THINGS TO DO

Oct. 6-7	Show	Livingston Gem & Mineral Society, Hartland High School, 9526 Highland Rd., Hartland, MI. Sat. 10-7 Sun. 10-5
Oct. 12-14	Show	"Treasures of the Earth" - Michigan Mineralogical Society, Detroit Light Guard Armory, 4400 E. 8 Mile Rd. Detroit
Oct. 19-21	Show	"Rainbow of Gems" - Central Michigan Lapidary & Mineral Society, Michigan State University Military Sciences Bldg. (Demonstration Hall) Fri. 6-9 p.m. Sat. 10-8; Sun. 10-5
Nov. 3	Auction	Midwest Mineralogical & Lapidary Society, Taylor's Sheridan Center, Pardee Rd., Taylor, MI. Sales tables open from 6-7 p.m. & Intermission; Auction at 7 p.m. Refreshments

CRYSTAL GAZING
the president's page



It seems like just a couple of weeks have gone by since I sat down to put some thoughts together for the September DRIFTER, and here I am doing it again for the October issue! Well, it was just a couple of weeks ago, but now that we are meeting the first Wednesday of the month, there was a short turn-around for the editor and publisher for this one issue. Ruth and I have no one to blame for that but ourselves because we decided you should get separate copies for each meeting.

I talked with Rich Van Beek today, and he told me that Karl Bruder was pleased with the work we did for him at our last meeting. He also informed me that the program for October was in his hands. This will be just the thing to see for those who take photographs, and might be thinking of taking pictures of minerals - and I'm sure that the same principles can be applied to photographing fossils. I hope there's something about taking photos through a microscope.

"Rocks and Minerals of the Earth's Crust," which we saw last month, is a program we probably ought to repeat more often. Many of us forget, or do not fully realize, just how much rock outcrops, strata, sills and dykes can tell us about what minerals can be found in and near them. We zero in on a relatively small segment of our hobby (lapidary arts, metal working, fossils or minerals) and have a tendency to ignore the starting point of it all.

Look over the list of shows on our first page and take in as many as you can. Perhaps you can share a ride with others, and make a nice day of it. There are several going on in our own state that can be seen in a one day trip. Ted and Marie Duprey and Ruth and I will be displaying and demonstrating at the Lansing show.

Doug Valentine was under the weather for both the Indian Mounds Club meeting as well as our own, but was sufficiently recovered by the 22nd to lead the Indian Mounds group on a collecting trip to Milan, Michigan, for fossils, and then to Cheney Quarry near Bellevue later in the day for calcite crystals, pyrite and marcasite. I heard through the grapevine that some good specimens were brought home.

Enough for now - see you at the meeting, and maybe at a show or two!

Bob

MINUTES OF THE MEETING - September 19, 1990

The regular meeting of the Grand Rapids Mineral Society was called to order at 7:10 p.m. by President Bob Beauvais. Rich Van Beek introduced the slide program, "Rocks and Minerals of the Earth's Crust." It proved to be a good review for us all.

A brief business meeting followed the program. Minutes of the last meeting were approved as printed in the bulletin. The treasurer's report was presented and accepted for filing. Treasurer noted a former member, Dr. Mary Jane Dockeray, has rejoined the club. She also sent her thanks for our contribution to the scholarship established in her name.

After announcements of coming shows the meeting adjourned and members assisted in arranging specimen boxes for Karl Bruder's classes.

Respectfully submitted,

Ruth Beauvais, Secretary Pro-tem

TREASURER'S REPORT

Checking account, Aug. 10, 1990			$ 728.23
No income			
Expenses: State of Michigan Filing Fee		10.00	
Bulletin paper		47.22	
Bank service charge		.30	
			57.52
Checking account, September 17, 1990			670.71
Savings account, Aug. 10, 1990	874.96		
Interest	10.93		
Savings account, Sept. 17, 1990			885.89
Scholarship Savings, Aug. 10, 1990	407.19		
Interest	5.15		
Scholarship savings, Sept. 17, 1990			412.34
Total of all accounts			$ 1,968.94

- T. R. Duprey, Treasurer

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The deepest canyon in the United States is not the Grand Canyon, but a gorge along the Idaho-Oregon border called Hell's Canyon." Cut by the winding Snake River, Hell's Canyon is 7,900 feet deep at its deepest point, or 2,200 feet deeper than the deepest part of the Grand Canyon.

Via Crystal Gazer 9/90

METEORITE FOUND IN INDIANA FIELD

The October 20th (1989) issue of the Journal & Courier had a good article on a meteorite that was found in a farmer's field near Seymour, Indiana. This peculiar rock was stored in a farmer's collection of Indian artifacts for 11 years, before Phillip Bonneau, his son-in-law, a Ball State geologist saw it and thought a few tests should be run on it.

Tests at Ball State University and Indiana University showed the rock to be a 4.5 billion-year-old meteorite that could provide new information on how the solar system developed.

Such a meteorite is called an "unequiliberated ordinary chondrite" or "H3 Chondrite," IU geologist, Abhijit Basu, said. Most meteorites contain significant amounts of iron-nickel alloy and have tiny ball-shaped objects known as chondrules embedded in masses of mineral fragments, Basu said. Chondrules are not found anywhere on Earth because of the way our planet was formed, so chondrules are almost certain proof that an object is a meteorite.

Scientists have concluded that chondrules were once liquid droplets that cooled very quickly in space. The radioactivity of some elements in the Seymour meteorite chondrules indicates they are about 4½ billion years old, almost as old as the sun, and older than the earth.

Basu said that preliminary studies of the Seymour meteorite indicated that it has many chondrules and a high concentration of iron-nickel alloy. Chemical analysis of the meteorite minerals showed that they are not compatible with each other, meaning the meteorite was formed from many small pieces that came together by gravitational attraction very early in the history of the solar system.

Via Rock Pickings, Crystal Gazer

IS THERE SOMETHING INSIDE MY ROCK?

Many times lapidaries, rockhounds and mineral collectors have a nodule, concretion, septarian, geode or just some spherical, or partly spherical, or disc-shaped rock and wonder what it contains, if anything.

If the rock is metamorphic or igneous, it probably contains agate, as Brazilian agate for example, or some other form of silica. If the concretion was formed in sedimentary rock, it may be from an inch or less in diameter to many feet across, and it may be spherical, ellipsoidal, flat, ring-shaped or of some other odd or fantastic form and contain one or a number of many substances.

Concretions formed in sedimentary rock generally are an accumulation of mineral matter that forms after the sedimentary deposit has been laid down. Generally the concretion is composed of one of the minor constituents of the enclosing rock.

In chalk and limestone, these concretions consist of silica most often and form flint nodules, etc. In sandstones, they consist of iron oxide or calcium carbonate, and form calcite, aragonite, etc. In shales, they are calcium carbonate or iron sulphide. Manganese nodules partly encrusting sharks' teeth have been dredged from the ocean bottom. Indeed many concretions contain a fossil at their center, which was the nucleus causing the mineral matter to settle around it, causing the matrix encasing it to harden a little more than the surrounding country rock. Indeed, most often concretions are a little harder than the enclosing matrix rock and thus they may weather out of it.

via The Mineralog & The Glacial Drifter (Kan.) 5/90

"DINOBUSTERS" USING SOUND TO FIND BONES

New technology that should move the tedious search for dinosaur skeletons beyond the age of the pick and shovel is helping scientists recover the remains of the longest dinosaur ever discovered.

By using sonic images of the sandstone beneath a site in New Mexico, scientists were able to detect the dark shadows of bones of "seismosaurus"--so named because it was so big that when it walked the ground must have trembled. Results of the project were presented here Thursday during the fall meeting of the American Geophysical Union. (held in San Francisco)

The early digging consisted of hit-or-miss, time-consuming excavations, but today the 50 or so workers in New Mexico know precisely where to dig because of a technology developed by the U. S. Department of Energy to help locate acceptable burial sites for waste disposal. Much of the skeleton has already been excavated, but it will take about two years to finish the project.

The process is similar to computer tomography, which uses X-rays to produce images of tissues and bones inside humans, except in this case sound waves are used instead.

"We call ourselves the 'Dinobusters,'" said geophysicist Alan Witten of Oak Ridge National Laboratory. Mimicking the theme from the movie "Ghostbusters," he added: "Something big in your neighborhood? Who ya gonna call?"

The excavation has been accelerated considerably by the technique developed by Oak Ridge's Witten and Jozef Sypniewski of Wayne State University.

The heart of the process is a shotgun on wheels, which Witten called a "cannon." "It fires a slug of soft metal into the ground," Witten said. "It hits the ground and flattens," sending sound waves out. By plotting the time at which the sound waves are received, Witten is able to show precisely where the bones are hidden beneath the 8-foot-deep layer of sandstone that has built up over the last 150 million years.

- Los Angeles Times via The Omaha World-Herald
12/8/89
via REAR TRUNK 6/90

ARCH FACTS - from the Midwest Federation Newsletter of Sept. 1990

by John Washburn, Chairperson
Archaeology Committee

The Midwest Archaeological Connection was at Evansville - were you? Our display is now packed away, but will reappear in South Bend next year. The connection was strengthened by more participation. A special thanks to friends of the Archaeology Committee: Helen Smith, of Ohio; Diane Dare, of Indiana; and committee member Mary Hanning, of Illinois. These friends supplied handouts on archaeological sites open to the public in their respective states. We had information on Flint Ridge, Serpent Mound, Angel Mounds, Cahokia Mounds, and Dickson Mounds. Our tasks are easier and the results are better when many hands are offered. Next year's goal will be to have more information from more states. We could just write for the materials, but the "connection" requires that someone who shares the interest bring it and be there!

The "American Indian Bone Burial Issue" we wrote about in February did not stir the troops until I suggested that all were in favor of closing prehistoric burial chambers from public display in the April issue. Upon that note, the committee's able assistant, Mary Hanning of Illinois, supplied us with a hoard of contrary opinion. Her information was specifically about the closing of Illinois' Dickson Mounds burial chamber. This matter was quite a controversy in central Illinois. The locals insisted that the chamber was not disrespectful to the Indians. They also believe that closing the burials would be tantamount to closing the entire site upon which much of the local economy depends. On the other hand, the American Indians claimed an ancestral connection to the burials and iterated that public viewing of the remains was disrespectful. They demanded the closing and reinterment of the remains. The final decision of whether to close the chamber or not was left up to the Governor of Illinois.

After all these months, he has decided to allow the burial chamber to remain open. However, his term ends in January!

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AFMS VISA CARDS

At its annual meeting, the AFMS delegates (with the exception of California and Michigan) approved the issuing of a Visa credit card bearing the logo of the AFMS. AFMS President, Eugene Powell, writes in the September AFMS Newsletter: "It is hoped that everyone will take the card for the first year which is free of fees. The AFMS will get one dollar ($1.00) for each application accepted, and then will get twenty-five cents ($.25) each time the card is used. This will hopefully raise some much needed money to help the AFMS. The full particulars of what types of coverage you get with the two types of cards (Silver and Gold) will be sent to all Federations for inclusion in their Newsletter from Dan McLennan as soon as details are finalized."

One reason the Michigan delegates voted against the above proposal is that the federations would be asked for a complete membership list, and the Midwest does not have such a list, only the individual clubs do. So the matter is left to each individual club. We'll keep you posted on this issue.

THE FAIRBURN AGATE by Bruno Petsch

Fairburn agate is another of the members of the silica family. The family includes the igneous mineral quartz family and the water deposited sedimentary family agate, chalcedony, carnelian, chrysophrase, bloodstone, chert and jasper.

Fairburn agate is a vari-colored chalcedony. The colors are usually in delicate fine parallel bands, curved, sometimes concentric. The bands reflect the shape of the cavity in which it was formed. Each band is a separate compound that precipated out of the solution onto the walls of the cavity.

The material containing the agate is generally softer than the agate, so it eroded away, leaving the agate intact. That is how it is found. The Minelusa limestone of the Pennsylvanian period is probably the host rock of Fairburn agate. This strata is abundant with silica in Hell's Canyon and Teepee Canyon. In Pleasant Valley southwest of Custer lies a ledge of vari-colored chert in the limestone. Much float lies on the hillsides below and in the road riprap.

The Rocky Mountains and the Black Hills rose about 70 million years ago and erosion, and perhaps glaciation, attacked these new high mountains. The material was spread as gravel over the western plains. Since the silica family has a hardness of 7 or more, they form a large part of the gravel. Continued erosion and glaciation formed the Badlands. The contact where the Badlands lie on the Pierre shale is a district gravel horizon and a source of Fairburn agate. Most hills and ridges are capped with a veneer of gravel and crests of most terraces projecting into the flood plains are capped with gravel. Agate areas of note are found in Western South Dakota. They have names such as Ardmore agate field and Interior Beds. of Senic.

-Osage Hills Gems 6/89
Itasca Rock Nut News 8/90

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SAFETY TIP

DANGER - MEKP

An eye specialist has given strong warnings about the grave danger of using the catalyst hardener which is mixed with some resins. Details are as follows: The specific toxic agent involved is methyl-ethyl-ketone-peroxide. A drop of this catalyst in the eye very progressively destroys the tissue and results in blindness! Once started, there is no known way of stopping the destruction or repairing the damage. No known neutralizer has been discovered. Washing the eye with water will only be effective if done within four seconds after contamination.

Although MEKP is not present in all epoxy glues, it is present in extremely high concentration in most modern fillers, glues and the catalyst used as fiberglass hardeners and liquid casting plastic.

-Emerald Gems
via SCRIBE 9/85

There is nobody so irritating as somebody with less intelligence and more sense than we have.

-Terry Thomas
via SCRIBE

IRIS AGATE

When bright light is transmitted through certain agates, the light is broken up into the colors of the rainbow. This is the "iris" effect and can be found in Brazilian agate, Montana agate, limb casts from Wiggins Fork, Wyoming, and other agate types. However, not every slice of these agates will "iris." Certain conditions must be met: the slice taken from the agate nodule must be cut very thin and polished on both sides; there must be several thousand bands per inch, and the agate must be transparent and usually colorless...I have wondered why this light-phenomenon is called iris. Now I think I know. In a flower book I learned that the iris family is named for the Greek goddess identified with the rainbow, presumably because of the many colors of those blossoms. Thus, the association of the rainbow colors of the agates with the mythical goddess. But there is nothing mythical about the spectacular play of color if you are fortunate to see an iris agate.

- Ila Kunc
Editor "Rear Trunk"

JUST A BIT FROM THE EDITOR

Wasn't Crystal Boogaart's story of their trip in the last issue great? I have suggested to her that she should take one trip a month so we can have stories like that.

And if Crystal can do it, so can others. There must be a lot of untold stories out there that have never been put on paper. Think how you can add to the pleasure of our club readers, and increase their knowledge if you will just take the time to share your experiences.

I'd like to tell you about our trip to the U.P. this past summer, but we did so little rockhounding that there really isn't any story. We did spend several hours at the old Ohio Mine (iron) looking for micromounts - the very elusive sammetblende which is a favorite of Bob's. Several hours were also spent looking for kinoite (minute blue specks) at the Laurium mine dump. Bob found the sammetblende but no kinoite. However, the weather was fine and we enjoyed ourselves....and that's not much of a story!

-Ruth

THE GRAND RAPIDS MINERAL SOCIETY

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Vice-President	Val Katelnicks	874-6466
Secretary	Arlene King	532-6239
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Editor	Ruth Beauvais	534-3871
Publicity	Peter Boogaart	451-3274

The Grand Rapids Mineral Society, founded in 1958, is a non-profit corporation and is a member of the Midwest Federation and the American Federation of Mineral Societies.

Meetings are held on the third Wednesday of each month at 7 p.m. unless otherwise noted. We meet in the Geology Department (usually in Room 247) of the Grand Rapids Junior College, 143 Bostwick NE, Grand Rapids. Summer meetings are held at various parks or at members' homes and are usually picnics.

Membership dues are $8 per year for a family; $6 per year for an individual member and $4 per year for a student under 18. Dues are payable to the treasurer in September of each year. Those joining from March 1 thru July 31 shall pay one-half the annual dues. Unpaid memberships will be dropped from the roll in December.

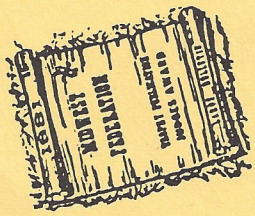
All material for publication shall be in the hands of the editor no later than the first Monday of the month. Permission to reprint articles appearing in THE GLACIAL DRIFTER is hereby given provided proper credit is given. Advertising in THE GLACIAL DRIFTER is limited to a uniform size of one-third page at the rate of $3 per issue, September thru June. Each member is entitled to one free ad per year.

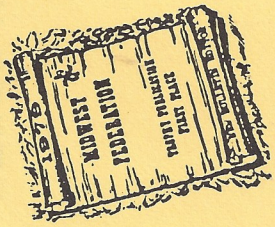
Exchange bulletins should be mailed to the editor.

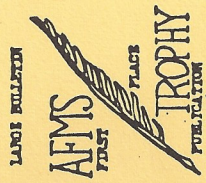
We welcome visitors to all our meetings and encourage them to return whenever possible.

OCTOBER 1990

THE GLACIAL DRIFTER







Grand Rapids Mineral Society
Ruth Beauvais, Editor
Robert E. Beauvais, Publisher
3308 Wilson SW
Grandville, MI 49418

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M/M Robert E. Beauvais
3308 Wilson SW
Grandville, MI. 49418