The Rockfinder
Michiana Gem & Mineral Society
7091 E East Park Ln
New Carlisle IN 46552

November 1995

THE ROCKFINDER

Highlights of this issue --

MICHIANA GEM and MINERAL SOCIETY
1995 BOARD OF DIRECTORS

President	----	Margaret Heinek	7091 E. East Park Lane, New Carlisle, IN 46552
Vice Pres	----	Ed Miller	3431 East 18th B Rd, Tippacanoe, IN 46570
Secretary	----	Marie Crull	17651 Byran St., South Bend, IN 46635
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COMMITTEE CHAIRPERSONS

Programs	---	Ed Miller	3431 East 18th B Rd, Tippecanoe IN 46570
Hospitality	---	Lorraine Jordan	52087 Central Ave, South Bend IN 46637
Educational	---	Gordon Dobecki	11900 Laughlin St, Mishawaka IN 46544
Librarian	---	Paul Godollei	1910 Ribourde Dr, South Bend IN 46628
Historian	---	Ed Miller	3431 East 18th B Rd, Tippecanoe IN 46570
Sunshine	---	Molly Elwell	105 N Ironwood Dr, South Bend IN 46615
Publicity	---	Tom Noe	305 Napoleon, South Bend, IN 46617
Membership	---	All Members	

The Michiana Gem & Mineral Society, a non-profit organization, and is affiliated with the Midwest Federation of Mineralogical and Geological Societies and with the American Federation of Mineralogical Societies.

PURPOSE-
The purpose of the Michiana Gem & Mineral Society is to promote interest in and study of the earth sciences and the lapidary arts, and sharing the knowledge and techniques.

Time: 2:00 PM EST
General Meeting 4th Sunday of each month
June - Field Trip Meeting
July - No meeting
August - Annual Club Picnic
December - Christmas Party

Place: Our Redeemer Lutheran Church
805 S 29th St (29th & Wall).
South Bend, IN

Board Mtgs: 2nd Wednesday, 7:00pm, South Bend (Main) Library, Basement Level.

ROCKFINDER STAFF: Editor Larry Hess 15358 Kerlin Dr, Granger IN 46530
Co-Editor Margaret Heinek 7091 E East Park Ln, New Carlisle IN
Staff Bob Heinek / Club Members

All contributions for publication should be in the hands of the Editor by the 10th of each month. Call: (219 272-5431) Permission is hereby granted to reprint, at any time, items published in the ROCKFINDER provided due recognition is given.

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Membership Dues are:

____ Individual $ 6.50 per year
____ Family $ 10.00 per year
____ Junior $ 2.00 per year

Please send your dues and this form to
Michiana Gem & Mineral Club
c/o Margaret Heinek
7091 E East Park Lane
New Carlisle IN 46552

Please make address corrections to the mailing label (reverse side) and/or fill in the optional information below.

Check your SPECIAL INTERESTS:

General Geology ___ Beads ___
Gems & Minerals ___ Silversmithing ___

Fossils ___ Artifacts ___
Cabochons ___ Rockhound ___

Faceting ___ Carving ___
Crystals ___ Micromounts ___
Other _____

List Family Members (spouse and children):

Name _____ Birth Mo/Yr ____
will attend meetings, yes ___ no ___

Name _____ Birth Mo/Yr ____
will attend meetings, yes ___ no ___

Name _____ Birth Mo/Yr ____
will attend meetings, yes ___ no ___

Name _____

Address _____

City St Zip _____

Phone _____ Birth Mo/Yr _____

THE ROCKFINDER

Volume 35
Number 11

November 1995

Published by:
Michiana Gem & Mineral Society

Meeting: Meeting: Sunday November 26th
Doors Open 1:30 PM
Meeting at 2:00 PM

Place: Our Redeemer Lutheran Church
805 S 29th St (29th & Wall)
South Bend, IN

Hosts: Kathy & Bob Miller

---------- November's Program ----------
BY A WHIRLWIND
A Study of Thunderstorms and Tornados
TIMOTHY KEEL

Happy Birthday & Anniversary:

Bill Schuster
Dick Rosback
Tom McLaughlin
Tom Noe
Bess Wise
Cindy Hess
Lynn Miller
Dan Zieger
Carl Simpkins
Bob Heinek

COMING EVENTS:

Geodon's Christmas Show
November 24-25-26, 1995
Annex Bldg, DuPage County Fairgrounds
2015 W. Manchester Rd.
Wheaton, Ill

The St. Joseph County Public Library has asked the Michiana Society to take part in the 1996 **Science Alive** event. Gordon Dobecki has agreed to again take his machinery to show the youngsters how to polish Petosky stones.

We will need help on Saturday Feb. 10th from 10:00 am - 4 pm. Science Alive is planning on expanding their 1996, event on Friday morning, Feb. 9th 9:30 - 11:30, for at-risk students. If you are able to help with this, please let us know.

MARGARET'S COLUMN

Last month was a good month in several ways, but a sad month in another way. First of all, the ROCKFINDER took 6th place in the Midwest Federation for a small bulletin, congratulations Larry. For his article on "Fossils" Paul Godollei, took Honorable Mention. For an article on "Petrified Forest Visits", Bob and I took 8th place.

Louis Jordan, Jr's article written for the St. Joseph Co. Library contest, for grades 3 - 4, took 2nd place. Elizabeth Jordan was awarded an Honorable Mention for her article, 5 - 6 grade. Congratulations to both of them!!!!

We have several members that have been under the weather. Paul Godollei is recovering at the Holy Cross Care Center on Dougdale Drive. He enjoys visitors. Both Paul and Catherine McHugh need your prayers. Margaret Schultz was visiting her son in Pittsburgh and fell, breaking 2 bones in her ankle. Margaret was operated on Nov. 4th, and I imagine she will be with her son for a while. Our best to all of our members, those who are ill, and those who are not.

We lost a member, Joseph Fashbaugh on October 27th. Joe was a long time member and an expert on fossils. He has been ill so much the last year he was not able to attend meetings. Our sympathy goes out to his family.

Now, November is our election of officers month, so make sure you attend the meeting on November 26 for this event. It is important you attend, and if you have nominations for ANY office, please come and make your wishes known!!!!! The program for Nov. will be given by Tim Keel, "By a Whirlwind: A Study Of Thunderstorms and Tornados". Tim was the speaker a few months ago on earthquakes, and members enjoyed his expertise. So come and find out about storms.

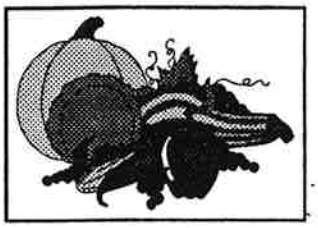
We would have changed our meeting date, but the church ladies are having a chili dinner and a craft show on the 19th. And our Christmas Party will be December 3rd at the church. I know the 2 events are close together, and what with Thanksgiving, many members will be out of town or have guests (who would be welcome at the meeting(s).

Dues are due, the time is now! If you are unable to make the Nov. or Dec. meetings, you can remit by mail to Pam Rubenstein. Pam will be glad to accept dues at the meeting or at the Christmas party. We must send in the MWF dues before Jan. 5. Make your check out to Michiana Gem and Mineral Society, but she will accept cash!!!! It would be nice to get the roster out early also.

If you missed the program last month given by Al Mitterling on Meteors, you missed a very informative program. Al explained the difference between "meteorites and meteors". Meteors float in space and meteorites fall to the ground.

Most meteors are 4.5 billion years old, and the falling meteorites can "come in" at 40 miles a second, but some as slow as 6 mi a second. Most people think that the meteorites are hot, but space is cold, minus 200 degrees F. and they are cold when they hit the earth. Al explained how meteorites can be examined and experts can tell where they came from in space. He said many people ask how much they are worth, and the reply is, where they come from determines the value.

Paul Godollei was such a good librarian, but he has asked that we obtain someone that will take care of the books. We have a new member, Sister Marjorie Jones, who is a librarian, and she has volunteered to act as our librarian. Bob Miller has moved the books to the church, so they are available for members to check out. Before Sister Marjorie takes over we will inventory the books, and see if any have been checked out and not returned. it this month.



See you at the meeting.

MINUTES OF THE OCTOBER 22 MEETING

President Heinek opened the meeting at 2:00 PM which was held at Our Redeemer Lutheran Church and welcomed everyone including our guest, Sister Marjorie Jones, Al Metterling and junior Eric Kring.

Displays of geodes were brought in by Molly Elwell, Clifford and Katy Maxwell, Bob and Margaret Heinek, Tom Noe and Bob and Kathy Miller.

Kathy Miller motioned to accept the minutes as printed in the ROCKFINDER, seconded by Jessie Zieger, passed.

Pam Rubenstein reported on the September show. A full report from May till October was given. Pam asked if anyone had questions, hearing none the report will be filed for audit.

The board reported their approval for repairs on the copier. Heineks had printed the hand-outs for the Labor Day show, and a piece of paper had become stuck in an area that could not be reached without taking the copier apart. Bob took it to a repair man, which made the cost of cleaning and repair, much less expensive.

Hostess for the meeting were Margaret Schultz and Lorraine Jordan, which was in keeping with Halloween. Very nice ladies.

Gordon Dobecki reported on 5 classes he is holding at his home.

Bob Miller has set up our library now and we will have a new librarian, Sister Marjorie Jones, who serves as a librarian at St Mary's.

Molly, Sunshine Chairman reported on Paul Godollei and said he was coming along better and loves to have company. Catherine McHugh needs a lot of prayers now. It was reported that Wendy Como, our entertainment at the 1991 & 94 MWF banquet, is doing much better, and is now able to talk and walk.

Tom Noe was thanked for sending out the publicity on the October meeting.

Marie Crull gave a delegates report on the MWF convention meeting in Warren, Michigan and thanked the members for sending her as delegate. The MWF may have to raise the dues that is collected from the clubs.

Kathy Miller discussed future rock and gem trips for next year.

President Heinek talked on AALA, the American Lands Access Association. She reported that donating to this organization would not jeopardize the tax-exempt status. A call to the AALA treasurer who informed her that the club members, would not be doing any lobbying. The club could join AALA for $100.00, individuals, $25.00. Applications to join as individuals were handed out to all.

There are 12 dealers signed up for the September 1996 show.

Our speaker for November will be Timothy Keel from Notre Dame.

The Christmas party will be held December 3rd at the Lutheran church. The club will furnish the meat, and a suggestion was that we have turkey and ham.

The junior members were asked if they would like to put on the Jan. program. Some agreed, others were not too sure.

The treasurer's books will be audited by Tom Noe, Dawn Cytacki and Tom Fields.

Bob Miller and Tom McLaughlin, in the absence of Ed Miller, presented the slate for 1996 officers as follows:

President.....Margaret Heinek
V-President.....Michael Slattery
Secretary.....Marie Crull (May-Dec.
Emily Johnson (Jan-Apr
Treasurer.....Pam Rubenstein
Liaison.....Jessie Zieger

President Heinek told about the new MWF committee that suggests that one club member of the year be nominated as outstanding club member. She suggested the club name Paul Godollei, seconded by Marie Crull and passed by the members. Margaret Schultz said Paul would be very grateful for the honor.

Door Prizes: Junior members-Cliff Maxwell, Louis Jordan, Bill Nelson, Alex Rubenstein, Eric Kring, Liz Jordan: adults; Marie Crull, Sister Jeanne, Mike Slattery, Tom McLaughlin and Gordon Dobecki.

The program was presented by Al Mitterling on Meteors, which was very interesting. Thanks Al!

Adults 26, 5 Jrs and 3 guests. Meeting adjourned at 4:00PM. Marie Crull, Sec

INGENIOUS ROCKS

Being a new member, I decided I needed to study up on my geology. One of the first things I read about in geology was ingenious rocks. Now I wondered how they got their name, and while the book told me a lot about them, they didn't tell me where there name came from. However, I think I got it figured out.

The book says that ingenious rocks are formed from melted rock material, way down below the surface of the earth where it gets hot enough to melt rocks. Well, I'd heard of that place before, and according to what I'd heard if you ever got down there you could never get out and to get back up on the earth's surface. My guess is that's why they call them ingenious.

Next month I'm going to study sedentary rocks.

by a Michiana club member....Herb.

* * * * *

SAFETY TIPS: Not enough fire extinguisher? Take your empty coffee cans, fill with three parts sand from the river bottom (or your kid's sand pile) with one part baking soda, mix well, then store in strategic places in the house, garage and vehicles. In case of a small fire, sprinkle at the base of the same. Also....if you get stuck in snow or ice, sprinkle this mix under tires for more traction.

Via- *PEGMATITE, THE CALUMET GEM*

* * * * *

IDENTIFIED FLYING OBJECTS

By Mel Albright, chair, Safety,
(via AFMS NEWSLETTER)

You pick up a rock that looks promising. You can't quite tell if it's any good. You want to see what's inside. So, you take your rock hammer or another rock and hit it to chip a piece. ZING--a chip hits your eye. You are now one-eyed.

That great specimen you want is partially buried in the matrix right there. All you have to do is get it loose without breaking it. So, you grab a chisel and a hammer and start chipping. ZING- a chip hits your eye. You are now one-eyed. (I know what can happen...Bob was asked to remove a fossil from the matrix for me. I got too close...and ZING---I had a piece of the chisel in the tip of my nose!!! Thank goodness it was not my eye! Margaret H.)

You need to get that rock out of the ground. All it needs is a little prying. You grab a crowbar, point the end at the crack and bang it down to force it into the ground. ZING- a chip hits your eye. You are now one-eyed.

You want some rocks for tumbling. All you have are too big. So, you grab a big one, set it down on the ground, take a hammer and bang away. ZING--a chip hits your eye. You are now one-eyed.

Your piece of slab is too big. It's real time consuming to trim it with your saw. So, you grab a pair of pliers, grab a corner, and pry to break it off. ZING-- a chip hits your eye. You are now one-eyed.

Or, you score the slab with a glass cutter, line the score over a bench edge, and start tapping to break it. ZING--a chip hits your eye. You are now one-eyed.

You are cleaning a fossil. As you chip away to get matrix off, you lean closer and closer to see that you get it exactly right. Suddenly your hammer slips and bounces. ZING--the hammer hits your eye. You are now one-eyed.

You're gluing with epoxy. You get a little hardener on your hand. You wipe the sweat off your forehead. You get a little hardener in your eye. ZING--you are now one-eyed.

Wild? Exaggerated? Not really. It happens all too often. Plastic safety glasses at WalMart--about $1.00. Plastic face shield at WalMart--about $5.00. WORTH IT?

* * * * *

CHRISTMAS PARTY- Dec. 3rd

The committee that is preparing the meat for the party, would like to know if you will attend. Please let Margaret Heinek, Marie Crull, Lorraine Jordon or Pam Rubenstein know how many of your family plan on attending. Very important so we will not "over-buy" on the meat, rolls etc. Remember to bring your own plates, silverware and a dish to share along with a GOOD APPETITE.

RECENT ERUPTIVE HISTORY OF MOUNT HOOD

GSOC program by Ken Cameron, Oregon geologist, April 7, 1995 (via *Northwest Newsletter,* October 1995)

By any standards - past eruptions, present status, possible future activity - Mt Hood is an active volcano. Its igneous core is around 1/2 million years old. The youngest dated lava flows, roughly 120,000 years old, are exposed in a ridge on the north side called The Pinnacle. Crater Rock resulted from volcanic activity on the south side of the mountain during the last 12,000 years. In the 1800's ash clouds and "fire" were seen from the valleys below. The March 1907 National Geographic magazine reported "incandescent rocks and ash" on Mt. Hood. Hot areas on and earthquakes in the mountain increased during 1987-90, but for now, at least, the mountain it is quite.

When the Palmer lift was being built above Timberline Lodge, an additional tower was planned beyond the ones that are there now. But drilling down revealed glacial ice. Evidently an older glacier had been buried under volcanic debris during fairly recent eruptive activity. Enough of the ice is still there so that construction of the tower had to be abandoned.

Volcanoes have differing styles and frequencies of eruptions. Stromboli in Sicily explodes violently. Hawaiian mountains are built up with relatively quite lava flows. Mt. Hood's eruptive mode is in between these types. It enlarges its dome, which then collapses and produces pyroclastic flows and mudflows. [*Worldwide, mudflows are the kind of volcanic activity which has produced the greatest loss of human life. EP]* Mudflows have rushed down the Sandy River many times. During the last eruptive episode one of them stretched from Crater Rock to Troutdale, and helped make the Sandy River delta. Because of it, the Columbia River north of the delta is only 1/2 mile wide. Other mudflows came down the White River to the Deschutes at Tygh Valley.

The center of a mudflow travels fast while the sides go more slowly. Unlike flowing water which spreads out as it slows down, a mudflow stays where it is. Trees along its sides get partly or completely buried and die. Their wood can be used to carbonate the event. The Timberline mudflow happened 1200-1500 years ago; Zigzag, 350-500 years ago; and Old Maid, 1790-1810 AD. Lewis and Clark explored the "Quicksand River (Sandy) in 1805 and 1806, very soon after the Old Maid mudflow, and reported that it was "6 inches deep and 300 feet wide." Portland's water supply is carried from Bull Run Reservoir by six-foot-diameter pipes that cross the Sandy River at Dodge Park. The pipes are sitting on mudflow deposits. Volcanic activity on Mt. Hood would definitely endanger our water supply.

When will Mt. Hood erupt again? Are we asking for a forecast or a prediction? Forecasts give general trends - Mt. Hood generally has "events" every 200-300 years. A prediction - "It will erupt next Thursday" - is a lot harder to make. The mountain must first be in a mode. The easiest way to predict is by looking at a seismogram. Three seismographs located on Badger Butte, Tom Dick and Harry Mt., and near Lawrence Lake triangulate the location of earthquakes in Mt. Hood. If they indicate that magma is rising under the mountain, we may have a problem!

Magma uses a lot of energy to rise. This translates into earthquakes. Mt. Hood averages 2030 earthquakes a year, although sometimes there'll be a swarm of 20-30 in a few days. The mountain's seismic zone passes right under the Mt. Hood Meadows ski area. There seems to be a 2-3 km sphere, 4-5 km below the peak, which is

continued next page

MT. HOOD - continued....

seismic. An area that earthquake waves will NOT travel through indicates magma that is completely liquid. The bottom of the sphere cools, hardens into solid, and cracks. This can produce earthquakes. The whole chamber is probably left over from Mt. Hood's last eruption.

Before Mt. St. Helens' eruption in 1980, not much volcanic monitoring was done in the Cascades. Now, of course, the monitoring is quite extensive. Seismic data from Mt. Hood goes to the U. of Washington's Seismology Lab. In 1984 Mt. Hood was measured by laser to see of it was swelling. It hasn't been measured since, and probably should be. Mt. Rainier, considered more dangerous, gets measured once a year. Anyway, there should be some warning before an eruption. One monitoring system is called the "P-Picker Program." If a computer picks up P-waves (Primary or compressional waves, the first to arrive from an earthquake), it immediately alerts a human.

Today, field work in the natural sciences is decreasing because so many people receive information via computer modeling. Some things, though, can only be learned by going out and getting your feet muddy.

Crater Rock is a dacite dome. Coleman Glacier butts up against Crater Rock on the northeast side, and steam from the vent keeps a hole open there.* The Hot Rocks are just west of the dome, and Devil's Kitchen, to the east. I map heat in the Devil's Kitchen fumarole field. There are many mounds a couple of meters across by one meter high, almost solid sulfur, with gas vents in the middle. The whole field is about 400 feet across. As the magma below cools, volatile are given off. Water vapor, sulfuric acid and hydrogen fluoride have turned volcanic ash around the vent to sticky gray clay. In one place it's 150 degrees F. In the 1930's Dr. Allen cooked a can of beans on this spot. When I camp by the fumarole field I can roll by sleeping bag out on a warm place, bury food in a plastic bag in a hotter spot, and have a meal cooked and ready to eat in a couple of hours. But there are disadvantages. The warm hydrogen fluoride from the vent is such a strong acid that I can't wear glass glasses, because after a few months they'd be so frosted that I couldn't see through them. Ultraviolet filters are needed to protect ,y camera lenses.

Historically, the March 1907 National Geographic talks about "incandescent rocks and ash " on Mt. Hood. Hot areas on, and earthquakes in the mountain increased in 1987-90. Then in 1991 everything shut down.

Pictures taken in 1894 and in 1912 show that ice on the south side has retreated. Devil's Kitchen is now snow free year round. In 1874 White River Glacier extended from the 11,000-foot-plus summit down to the 5500 foot level. Since then the glacier has lost 200 feet thickness of ice, which has split it in two. Now there's Colman's, Devil's Kitchen and White River Glacier. Devil's Kitchen cuts off the White River Glacier's zone of accumulation. There are more glacial outbursts than there used to be, and the bridge at Mt. Hood Meadows has been taken out six times. This glacier is receding much faster than any other in the Cascades.

What about the future? Will Mt. Hood erupt in five years (probably not) or in fifty (quite likely)? The only thing we can be sure of is that, like other glaciated volcanoes in the Pacific Northwest, it will change from what we see today into - who knows?

* In 1934 a man decided to crawl down into the vent to see what was inside. He suffocated from lack of oxygen.

From *The Geological Newsletter*, The Geological Society of the Oregon County, Sept. 1995

(WHAT TO LOOK FOR IN POSSIBLE METEORITES)
By Al Mitterling

*Meteorites fall in all localities all over the world. One area has just as many meteorites as an other.

*Only 1 percent of the meteorites that fall are ever found!!!

*Most meteorites found are from 2 in. to 2 feet in diameter. and look different from the local rocks.

*The three classes of meteorites are: STONY, IRON, and STONY - IRON.

*Meteorites are most often stony (at first glance they many look like common rocks). 92% of all falls are of the stony type.

*The interiors are usually grey to dark brown in color. The outside is rusty brown or black in color (black if fresh fusion crust). Check for small rusty spots on sample, also for shiny metallic spots in a broken part of the interior. Please don't break to find these!!

*Most meteorites attract a magnet (watch out for magnetic rocks we have in this area).

*Meteorites have irregular shapes with smooth edges from flight.

*Meteorites are very heavy. The stony meteorites are one and a half times heavier than earth rocks, while Irons are much heavier.

*Meteorites are never porous (do not have bubble like cavities).They are not perfectly spherical and smooth. Meteorites rust easily and there may be no bright metal showing.

*Meteorites sometimes have little round sphereoids called chondrules in the interior. Look for these 1mm average size chondrules.

*Don't be afraid to go out and ask farmers and ranchers if they have seen any of the above. You might bring a new meteorite to life!!!

***** NOTE *****

Please read and re-read this to help Identify a meteorite. Most people that find something that may fit one catagory should check the other discriptions to positively I.D. a suspected specimen. Often other areas are overlooked when one area is a good discription of a specimen. All meteorites found should be turned over to a meteorite lab for proper study so that the science can be derived from them. If you think you have found a meteorite I would be glad to look at it and test it to positively identify it.

*****REWARD*****

A reward is offered to new meteorite finds. The amount depends on the size, condition, and right to buy a portion or all of the new find. A ordinary chondrite one pound meteorite which is fresh might be worth a $100 plus the value of the meteorite. All new finds will be catalog and researched. Meteorites from other known falls do not apply!

Mitterling Meteorites
5245 S. Country Club Rd.
Warsaw, IN. 46580
(219) 269 - 4145

HO! HO! HO!
Merry Christmas

NOTICE.....

There will not be a ROCKFINDER sent out in December, so this is the information for the Christmas party.....

The doors will open at 12:30. The dinner will be served at 1 P.M. at the church. You are to bring, for every 3 people in your family, a dish to share. We are planning on having turkey and ham, rolls, coffee, and your contribution of food. Please bring your own plates and silverware. If you bring food that should be served hot, there is an oven in the kitchen.

We will have a gift exchange for those who care to participate. A suggested price is about $3.00. Mark it for " man , woman or either", or if it is for a junior, mark it for a younger child or older child. Suggest you bring something you would like to receive.

* * * * *

A little boy was asked if God had a first name. He answered "Yes". They asked him what it was, his reply "Andy". When asked where he got that name, his reply was it was in a song, "And he (Andy) walks with me: And he (Andy) talks with me".

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THE MICHIANA GEM & MINERAL SOCIETY'S OFFICERS WOULD LIKE TO WISH ALL ----------

SEASON GREETINGS

How about bringing can goods to the Nov. meeting and Christmas party, to give to the Center for the Homeless and/or the Hope Rescue Mission?

It would be nice if the Society could help either or both of these organizations. We could also help with a donation for the Women's Shelter.