

Michiana Gem & Mineral Society
Jason Hefner, Editor
229 East State St
Etna Green, IN 46524



January 2017

Volume 57 Number 1



We're on the Web! See us at: www.MichianaGMS.org

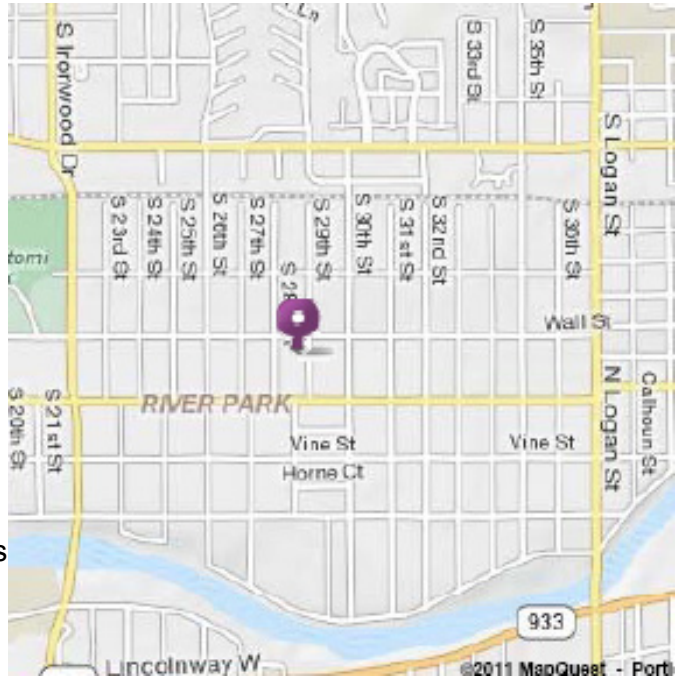
The purpose of the Michiana Gem & Mineral Society is to promote the study and enjoyment of the earth sciences and the lapidary arts, and to share lapidary knowledge and techniques. General meetings are usually held the fourth Sunday of each month at 2:00 p.m. at,

Our Redeemer Lutheran Church
805 S. 29th St.,
South Bend, IN.
Please see the map to the right.

Doors usually open at 1:30 for meet & greet time.

Regular meeting exceptions include May (third Sunday), July (Club Picnic), August (Club Show) and the November/December meeting and Christmas party.

Board meetings are held before the monthly meetings. The annual club show is in late August.



DUES

Yearly Membership Dues are payable by December 15th of each year. Please choose type of membership below.

- Individual \$15.00 Family \$20.00
- Junior \$1.00 Subscriber \$7.50

Please indicate areas of special interest.

- General Geology Gems & Minerals
- Fossils Micro mounts
- Crystals Field Trips
- Cabochons Faceting
- Carving Beads
- Jewelry Making

Name(s) _____
 Street _____
 City, ST, Zip _____
 Phone(s) _____
 Email _____

Please send your dues and the bottom half of this form to:



Please read and sign this section

With my signature I hereby release the Michiana Gem and Mineral Society, Inc., and its individual members and the owners of any premises upon which I enter under permit granted to the society, absolutely free of any liability whatsoever, to my person or property, and further I will respect the equipment and property of the aforesaid owners.

Signed _____ Date _____
 Signed _____ Date _____

Family Information:

Name: _____ Birthday: _____
 Name: _____ Birthday: _____
 Name: _____ Birthday: _____
 Name: _____ Birthday: _____
 Name: _____ Birthday: _____

Michiana Gem & Mineral Society
 c/o Nancy Foreman
 58456 Kimberly Ct.
 South Bend, IN 46619

THE ROCKFINDER

Volume 57 Number 1
January 2017

The purpose of the Michiana Gem & Mineral Society is to promote the study and enjoyment of the earth sciences and the lapidary arts, and to share lapidary knowledge and techniques.

Michiana Gem and Mineral Society www.MichianaGMS.org is a not-for-profit organization affiliated with the Midwest Federation of Mineralogical Societies <http://www.amfed.org/mwfm/> and with the American Federation of Mineralogical Societies www.amfed.org

The *Rockfinder* is published monthly except July and August.

Please note that all items for a given issue of the *Rockfinder* are due to the **Editor** no later than the **5th** day of the previous month. This means that the due date for the March Issue will be February 5th. Advance items are appreciated. Material may be e-mailed to hefner_family@hotmail.com or submitted via the U.S. Mail.

Editor:
Jason Hefner
229 East State St
Etna Green, IN 46524

Permission is hereby granted to reprint any original *Rockfinder* articles as long as recognition is given along with the reprint.

REMEMBER – Items in The Rockfinder that are **BLUE & UNDERLINED** are links to the internet or email addresses. Just click on them for more information.



From the Editor - Jason Hefner

Hope everyone had a Happy Holiday Season. A Merry Christmas, Happy Hanukkah, and Happy New Year to you. I hope you had a chance to visit with friends and family.

We only have 2 people signed up for Host & Hostess, so feel free to bring something to share.

After the meeting we will be preparing bags for Science Alive, which is on Feb 4th at St. Joe County Library, South Bend. If you have any smaller gems, minerals or fossils, etc you would like to donate for Science Alive, please bring them to the Jan meeting or drop them off with another club member who will be going the Jan meeting.

Reminder - Dues are due – Nancy Foreman, Membership

Up & Coming

Next Meeting: January 22, 2017 Visitors are always welcome. Doors open at 1:30. Meeting starts at 2:00.

Place:
Our Redeemer Lutheran Church
(29th & Wall)
South Bend, IN. (This is in River Park)

Program: Prep for
Science Alive

Host & Hostesses: Marty Perry and Babe Miller

Board of Directors

President: Bill Foreman
574-233-9178

Vice-President: Randy Hill
269-465-5814

Secretary Jan Pellus
574-264-4772

Treasurer: Diane Gram
574-588-2665

Liaison: Bob Bell
574-233-7352

Committee Chairs

Displays: Mike Skoczylas
574-251-0255

Editor: Jason Hefner
574-858-9837

Educational: Jesse Zeiger
574-259-5944

Facebook: Danielle Wilborn
574-344-3385

Field Trips: John Davis
574-232-8823

Historian: open

Hospitality:
Linda Miller 574-291-5027
Marsha Miller 574-498-6513

Juniors: Trista McIntosh
574-780-1162

Librarian: Mel Glick

Membership: Nancy Foreman
574-233-9178

Programs: Kathy Miller (Interim)
574-291-0332

Publicity: Nick Pellus
574-264-4772

Safety: Julie Wieger 574-291-2597
Jennifer Hefner 574-858-9837

Show Chair:, John Davis 574-232-8823

Sunshine: Annette Freel 574-293-8193,
Sherrie Kobie 574-522-0189

Webmaster: Joe Perry 574-295-9050

December Meeting minutes Jan Pellus Secretary

Members in attendance / Adults_64___ Children_14___
Guests__4___

Call to Order: President Bill Foreman

Pledge of Allegiance

Welcome

Secretary report: Jan Pellus/ Motion made and seconded to accept minutes as printed in the Rockfinder

Treasurer's report: Diane Gram / Motion made and seconded to accept report

Liaison report: Bob Bell / No Report

Parliamentarian: Bob Miller / No Report

Midwest Federation/ There is a copy of the latest Federation available on the display table.

American Federation/ No Report

American Lands Access: Bob Miller / No Report

Committee Reports

Displays: Mike Skoczylas / No Report

Editor: Jason Hefner / No Report.

Educational: Jesse Zeiger / No Report

Face Book: Danielle Wilborn / No Report

Field Trips: John Davis – Kathy Miller (bus) / Sign up sheet available for Keokuk, IW

Historian: / No Report

Hospitality: No Report

Juniors: Trista McIntosh / No Report

Librarian: Mel Glick / Working on organizing for 2017

Membership: Nancy Foreman / No Report

Programs: / Prepare give-away bags for Science Alive

Publicity: Josh / No Report

Safety: Jennifer Hefner and Julie Wieger / No Report

Show Chair: John Davis & Joe Perry / No Report

Sunshine: - Annette Freel & Sherry Kobie / Sympathy card to John Jaworski for his father

Webmaster: Joe Perry / No Report

Continued next page

December Meeting minutes from previous page

Old Business

Next month we will be preparing give-away bags for Science Alive. Anyone who can help with the event is welcome.

New Business

Welcome back Linda Miller!

Mark Turner is asking for volunteers to help staff his dinosaur museum. He will give 20% to the club. He will also train individuals to clean specimens.

Election of Officers for 2017

President	Bill Foreman
Vice President	Randy Hill
Treasurer	Diane Gram
Secretary	Rachel Sutton

Thank you to all.

Merry Christmas and a Happy, Safe New Year!!!

Adjournment – Motion made and seconded

Program: Christmas Dinner

Next Meeting: January 22, 2017

Anyone get crafty over the Holidays?

By Jason Hefner, Editor

Bring in your item(s) to display at the January meeting. I made a rock tree. This is a copper tree with copper leaves on copper ore. PS – this is something I learned at a club meeting.



American Federation of Mineralogical Societies News

Introducing Myself by Ron Carman, President excerpted from [AFMS Newsletter Volume 70, Number 2 – December, 2016](#)

Some of you may have seen me at various shows and conventions around the country. For those who haven't, let me write a bit about myself and how I got involved with Federation activities.

When I was in elementary school, one of my first hobbies was collecting rocks, minerals and fossils, but since I lived with my parents in the middle of Tulsa, Oklahoma I didn't have much opportunity to go on field trips. My father really loved fishing and I would sometimes go with him, but if the fish weren't biting I would get bored and go poking around in the rocks around the lake or stream.

At school during recess some of the other kids showed me where to find crinoid fossils in the limestone gravel on the playground, and before long I had a box full of them. When I was in high school and college I had other interests, so didn't do much collecting. I did take a course in mineralogy in undergraduate college, since I had to have an earth science, and that is where I learned about crystallography and mineral identification. After I graduated I spent two years in the U. S. Navy – it's difficult to hunt minerals on a ship at sea!

Read the rest with the link above or [HERE](#)

Midwest Federation of Mineralogical Societies News President's Message by Tom

Whitlatch, MWF President, excerpted from [MWF News January 2017 - Issue No. 558](#)

Hope you had a great Christmas. Happy New Year to everyone.

With the new year comes some tasks that can affect your club's operations and status with the state and federal governments. So it is time to take a look at a few things such as articles of incorporation, tax status and who is named as the club representative for update notifications from these government departments that you have to deal with to keep your club in good standing with them. Do your officers know what the responsibilities are in relating to these departments? Remember, you are the one to know or find out what changes have been made over the last year, and compliance to these changes person may have ended his or her relationship with the club. If the renewal is a few years out it would be time to start the process so that can be ready in time. I know of one club that took two years to get reincorporated. This is due to the club's status having been expired for months before they found out about it, because the person who got the notification had passed away 15 years prior.

It is also time that you get the dues paid and insurance paid to the MWF. Be sure to fill out all of the form completely so nothing gets left out. If you have a club show that is before April include it for 2018 so it will be in the directory in time for people to plan on it. Also schedule your insurance certificate for club activities that require one.

Wishing you a happy and safe holiday season.



Purpose of the AFMS

To promote popular interest and education in the various Earth Sciences, and in particular the subjects of Geology, Mineralogy, Paleontology, Lapidary and other related subjects, and to sponsor and provide means of coordinating the work and efforts of all persons and groups interested therein; to sponsor and encourage the formation and international development of Societies and Regional Federations and by and through such means to strive toward greater international good will and fellowship.

www.amfed.org



Purpose of the MWF

To promote interest and education in geology, mineralogy, paleontology, archaeology and lapidary, and to sponsor and provide means of coordinating the work and efforts of groups interested in these fields.

www.amfed.org/mwf

Upcoming Events

17-19 February

GeoFest - Indianapolis, Indiana
15th Annual Indiana State Museum
Fossil, Gem & Mineral Show
Organized by: [Indiana State Museum](#)
Indiana State Museum (650 West
Washington Street, Indianapolis)

17-19 February

Kirkwood, Missouri (St. Louis area)
Annual Gem, Jewelry, Rock, Mineral and
Fossil Show
Organized by: Cabin Fever Productions
Kirkwood Community Center (111 South
Geyer Road, Kirkwood)

3-5 March

Fri & Sat 10-6, Sun 11-4. Eastern Indiana
Gem & Geological Society Wayne County
Fairgrounds, 861 N. Salisbury, Richmond,
IN

11 March

68th Annual Silent Auction of
Rocks, Minerals, Fossils, and Lapidary
Treasures Saturday, March 11, 2017
6 to 9 PM St. Peter's United Church of
Christ gymnasium 8013 Laramie Ave.,
Skokie IL

11-12 March

Sat 10-6, Sun 10-5 Geodeland Earth
Science Clubs Ballroom, Student Union,
Western Illinois University, Macomb, IL

17-19 March

Jackson, Michigan
Michigan Gem & Mineral Society 55th
Annual Show
Organized by: [Michigan Gem & Mineral
Society](#)
Theme: *We Will Rock You*
Jackson County Fairgrounds - American
One Event Center (200 West Ganson
Street)

2-4 June Wauseon, Ohio (Toledo area)

56th Annual Gem, Jewelry, Bead, Rock &
Mineral Show
Organized by: [State Line Gem & Mineral
Society](#)
Fulton County Fairgrounds - Junior Fair
Building (8514 State Highway 108,
Wauseon)

Rock & Gem Seeks Articles

 by Jim Brace-Thompson, R&G Contributing Author excerpted from [MWF News January 2017 - Issue No. 558](#)

Lynn Varon, Managing Editor of Rock & Gem, needs your assistance! Rock & Gem is the officially endorsed hobby magazine of the American Federation of Mineralogical Societies. In order to better serve their lapidary readers, Rock & Gem intends to increase the number of articles devoted to the lapidary arts and jewelry making.

Members of AFMS-affiliated clubs may wish to share their expertise in cabochon cutting and polishing, gemstone carving, soapstone carving, rock sculpture in general, intarsia, inlay and mosaics, sphere making, bead making and drilling, flat-lapping, scrimshaw, wire -wrapping, chainmaille, fused glass, polymer clay and PMC, silver- and goldsmithing, lost wax casting, faceting, and other techniques. Lynn would value article submissions and/or recommendations of experts whom she could approach to contribute articles.

To read Rock & Gem's writers' guidelines, visit www.rockngem.com, click on "Contribute" at the top of the page, then click on "Writers' Guidelines." For further info about contributing, contact Lynn directly at editor@rockngem.com.

Large, rare diamonds offer window into inner workings of Earth's mantle

Gemological Institute of America, December 15, 2016

"Some of the world's largest and most valuable diamonds, like the Cullinan or Lesotho Promise, exhibit a distinct set of physical characteristics that have led many to regard them as separate from other, more common diamonds. However, exactly how these diamonds form and what they tell us about the Earth has remained a mystery until now," explains Dr. Wuyi Wang, GIA's director of research and development, and an author of the study.

Large gem diamonds like the Cullinan have a set of physical characteristics that distinguish them from other kinds of diamonds. The new research shows these Cullinan-like gems sometimes have small metallic inclusions -- or internal characteristics -- trapped within them. The metallic inclusions coexist with traces of fluid methane and hydrogen.

In addition to the metallic inclusions, some of these exceptional diamonds contain mineral inclusions that show the diamonds formed at extreme depths, likely within 360-750 km (approximately 224-466 miles) in the convecting mantle. This is much deeper than most other gem diamonds, which form in the lower part of continental tectonic plates at depths of 150-200 km (approximately 93-124 miles).

"This new understanding of these large, type IIa diamonds resolves one of the major enigmas in the study of diamond formation -- how the world's largest and most valuable diamonds formed," says Smith. "The composition of the inclusions, however, provides the story."

The metallic inclusions are a solidified mixture of iron, nickel, carbon and sulfur, also containing traces of fluid methane and hydrogen in the thin tiny space between the metallic phases and the encasing diamond. Pure carbon crystallized in this mix of molten metallic liquid in Earth's deep mantle to form diamonds. Small droplets of this metallic liquid were occasionally trapped within the diamonds as they grew. During cutting and polishing, parts of the diamond that contain inclusions are often cut off or polished away to craft exquisite polished gems with minimal flaws. These cut diamond pieces are not normally available for research, but because of GIA's unique position as an independent, nonprofit research organization, Dr. Smith and his coauthors were able to study the inclusions for this investigation.

"Previous experiments and theory predicted for many years that parts of the deep mantle below about 250 km depth contain small amounts of metallic iron and have limited available oxygen. Now, the metallic inclusions and their surrounding methane and hydrogen jackets in these diamonds provide consistent, systematic physical evidence to support this prediction," explains Smith.

Though the extent of metal distribution is uncertain, this key observation has broad implications for understanding the behavior of the deep Earth, including the recycling of surface rocks into the convecting mantle, and the deep storage and cycling of carbon and hydrogen in the mantle through geologic time.



The Cullinan Diamond
3106 carat diamond

Image courtesy of cutratediamonds.com

[Visit their page and read the story](#)



The Lesotho Promise Diamond
603 carat diamond

Image courtesy of <http://www.safdico.com>

[Visit their page and read the story here](#)