

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



January 2021

Volume 61 Number 1



**THE
ROCKFINDER**

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

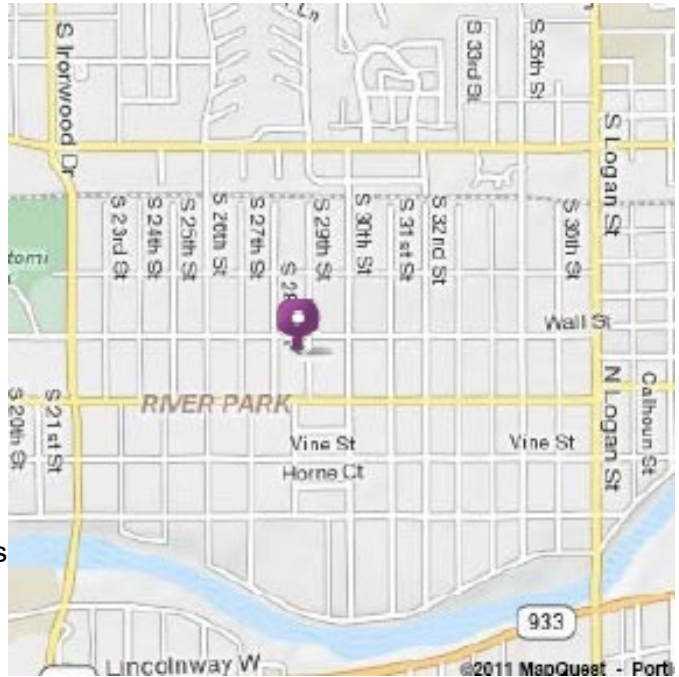
The purpose of the Michiana Gem & Mineral Society is to promote the study and enjoyment of the earth sciences and the lapidary arts, and to share lapidary knowledge and techniques. General meetings are usually held the fourth Sunday of each month at 2:00 p.m. at,

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) _____
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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
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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/mwf/> and with the American Federation of Mineralogical Societies www.amfed.org

The *Rockfinder* is usually 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.



Presidents message by Jason Hefner, President

Wow 2020 is over..... I don't know about you, but I'm exhausted.

I'm happy to report that rock collecting and lapidary has enjoyed a resurgence! I do not know about you, but I have seen a large increase in folks online and out in public spots looking for rocks. Our FaceBook page has been growing and there a lot of other FB pages that are seeing huge increases in activity and membership.

I don't know about you, but I have been working hard to get more into lapidary. I have built a large rock tumbler and am currently rebuilding a 10" trim saw. I have been using my slab saw and have started hand polishing rocks! It is a lot of fun and it keeps me out of my lovely wife's hair.

The best part about our club is that we share our knowledge and resources, so if you ever have a question make sure to reach out to others!

I may ask for you to share any adventures in lapidary during our upcoming call.

Up & Coming

Next Meeting: January 24, 2021

Meeting starts at 2:00 pm

Place:

Online via Zoom – look for a separate email.

No in person meeting

Board of Directors

President: Jason Hefner
574-354-0478

Vice-President: Josh Klosinski
574-274-8714

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Liaison: Bob Bell
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Jason Hefner

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

Webmaster: Joe Perry 574-295-9050

SAFETY FIRST

by Bill Klose EFMLS Safety Chairman

Submitted for the September 2001 EFMLS News

"LAPIDARY SAFETY" is the substance of Chapter Twelve of the AFMS "SAFETY MANUAL" and provides a good review for the indoor activities that follow a good summer of field collecting. I am going to repeat the wisdom laid out in this chapter as written, with a few of my comments in brackets where appropriate.

In "Lapidary" one may be subject to many conditions, some of which are potentially harmful. Some of the agents used, are caustic or poisonous. The following safety rules, if followed, will lessen the risk of possible harm or injury.

1-- Protect your eyes when chipping or grinding rocks. "WEAR PROTECTIVE GLASSES". (Goggles and safety shields provide additional protection from caustic liquids and large flying chips and should be worn over safety glasses when the situation warrants it.

What you are currently grinding may not be caustic, but what was used in the equipment previously and may still be in the water?)

2-- Run your grinding wheels no faster than the speed recommended by the Manufacture. (If you are unsure, run the wheel no faster than 2500 sfpm (surface feet per minute). Polishing and buffing wheels are operated at a speed of 3,000 to 7,000 sfpm with 4,000 sfpm a good speed for most purposes.)

3-- Do not let your wheel become water logged. Keep it running until all water has been thrown out; otherwise, it will cause a heavy spot and make your wheel out of balance. (Do not turn on cooling water until the wheel is up to speed. Out of balance wheels could cause the wheel to disintegrate upon starting. The floor in front of grinder or polishing machine should be of rough cement or a non slip rubber mat to prevent falls on the wet surface.)

4-- Keep your wheel true. It will wear longer and there will be less chance of its parting while in use. (Grinding work should be done near the center plane of the wheel and moved back and forth across the face of the wheel to produce even wear. Do not force the work and take too heavy of a cut. Wear appropriate eye, hand, and body protection when using dressing tools.

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Follow the manufacturers instructions for the dressing tool being used. Only the periphery or circumference of standard grinding wheels are designed for grinding-never grind on the sides of a grinding wheel. We have all done it! Insure the work rest and peripheral guard are properly installed and only adjust them when the equipment is not running.)

5-- Keep all belt pulleys and belts covered. It may save a finger.

6-- Use dop sticks whenever possible. It may save a badly cut finger. (Small pieces may also be placed in a simple jig or fixture.)

7-- A word of "warning" to those individuals who use "dry sanding" of their cabachons. Silicosis is a serious disease which is caused by the inhalation of fine silica dust. Use a dust mask or suction blower, or change to wet sanding. "Silicosis cannot be cured". (It may be prudent to wear a chemical mask if wet sanding and the cooling water is being reused and could have dangerous compounds dissolved in it from the materials that are being or have been sanded.)

8-- Be careful with your alcohol lamp. It could cause a fire.

9-- Keep all containers properly labeled. Putting polishing powders in baking powder cans, for instance, without a proper label, can be dangerous. "(Had the Linde A Powder my hired lady used, been Tin Oxide, it could have been serious. As it was, she couldn't figure out why the cake didn't raise!)".

10-- The use of Oxalic Acid, when properly used, greatly facilitates the polishing of agates. Oxalic Acid is caustic to the skin, as well as a frank poison, if accidentally ingested or inhaled. Also getting some in the eyes from the spray from the polishing wheels, may cause a burn of the cornea, resulting in impaired eyesight. When using this acid, proper precautions must be taken.

A--It is advisable to apply the polish to the wheel, with a brush. (This is good practice for all polishing compounds, not just acid.)

B--Wear protective glasses. (Drip proof or mist proof Goggles over the glasses provide additional protection.)

C--It may be advisable, under certain circumstances, to wear protective gloves. (A rubber apron will protect clothing and underlying skin.)

D--Immediately wash any contact areas of the shin, with soap and water. Medical attention may be advisable.

Continued on next page.

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11-- Sulfuric Acid and Nitric Acid are sometimes mixed with polishing compounds when faceting sapphire. They are also used in the polishing of sapphire cabachons on lead laps. These acids are severe caustics and will cause severe burns if they come in contact with the skin or eyes. In using the techniques above, one must use the utmost precautions. Any contaminated areas must immediately be washed with soap and water. If any gets in the eyes, thoroughly irrigate with water, and seek medical attention. The application of a baking-soda pack is often advisable, or the sponging with a solution of baking soda in water, to the burned area.

12-- The polishing compounds we use today are, as a rule, relatively non-toxic, except to some individual(s). The use of detergents added to the polishing powders, can cause a dermatitis of the hands. This can be eliminated if the offending substance is eliminated. (The uses of masks, goggles, face shields, gloves, and rubber aprons, can also reduce the risk of dermatitis.)

13-- The use of epoxy Resins are very irritating to the skin, and severe cases of dermatitis have resulted. This can easily be prevented by not getting the hands in actual contact with the resins. Acetone will remove this, if you should get some resin on the skin.

14-- The various cutting oils used in the diamond saws, are primary irritants to the skin, and will, in many individuals, produce a dermatitis. Also, the fire hazard, in the use of certain cutting oils, must be realized and proper precautions taken.

15-- (This paragraph deals with silver-soldering and should be the subject of it's own safety article).

16-- Do not overload outlets. If in doubt, have the circuits checked by an electrician.

17-- Keep switches and motors in a dry place, where the water from grinding will not splash on them. (The shut off switch or plug should be within reach of the operator. Stand to the side of a grinding machine when starting up and allow at least one minute of warm up time before starting to grind.)

18-- Be sure to have all motors and outlets grounded. In case of faulty wiring or short circuit, the ground will absorb the shock-"not you". Standing on a rubber mat will give some protection. Electric shocks can cause death! (Circuit Breakers or Ground Fault (GFI) Circuit Breakers are highly recommended over plug fuses. A wet rubber mat will only give you a false sense of security. Water is an electrical conductor!)

19-- Suspicious wires lying on the floor or ground, should be avoided--at home or on field trips. They may be harmless, but if they are not, "beware".

20-- When a person suffers electric shock, it is important to use a stick or other object to separate him from the source before beginning resuscitation. (Shutting off the power source, if known, will also decrease the hazard to all concerned.)

Lapidary Safety continued from page 5

21-- AN ELECTRICIAN'S FEE IS A SMALL PRICE FOR ONE'S OWN SAFETY!

Too all this I would also add, use proper lifting techniques when hauling all that "good stuff" into the lapidary. It has been suggested at EFMLS annual meetings, that hazardous minerals would be a good topic. After investigating the potential topic I have come to the conclusion we should treat all minerals with respect and protect ourselves accordingly. It is better to always practice safety around all minerals than let down our guard when a hazard is present that we may not be aware of. Do you really always know what you are licking or grinding?



Polished Michigan septarian I collected in 2020 – Jason Hefner