

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



April 2018

Volume 58 Number 4

**April Showers bring...mud**

**THE  
ROCKFINDER**

**We're on the Web! See us at: [www.MichianaGMS.org](http://www.MichianaGMS.org)**

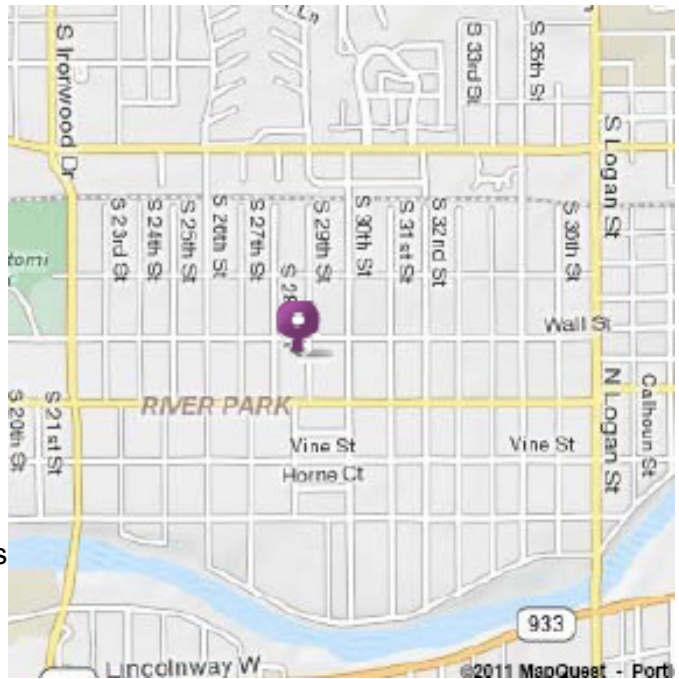
The purpose of the Michiana Gem & Mineral Society is to promote the study and enjoyment of the earth sciences and the lapidary arts, and to share lapidary knowledge and techniques. General meetings are usually held the fourth Sunday of each month at 2:00 p.m. at,

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

# THE ROCKFINDER

Volume 58 Number 4  
Apr 2018

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](http://www.MichianaGMS.org), is a not-for-profit organization affiliated with the Midwest Federation of Mineralogical Societies <http://www.amfed.org/mwff/> and with the American Federation of Mineralogical Societies [www.amfed.org](http://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 **5<sup>th</sup>** 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](mailto: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.



## MSHA Training

by Jason Hefner, Editor

The MSHA class was a success! We had 78 people attend the class. Everyone said it was a good class and it was a chance to learn information that could prevent injuries or even save your life.

Remember to take your training form on all field trips. Make copies and keep a copy in each vehicle. The club has a copy of each form as well and will have the binder on field trips.

When you get to a collecting location you still need the site specific training. Follow all of the rules you are given. Watch out for the other person. If they are doing something dangerous let them know immediately. They may not realize the danger as they are after a specimen. Pick up trash you find regardless if it is your trash. We want to be invited back!!!

In the event of an emergency assign a specific person to go to the entrance and wait for emergency services. Roads in collecting areas can be confusing and every moment counts.

## Up & Coming

**Next Meeting: April 22, 2018.**

Doors open at 1:30. Meeting starts at 2:00.

### Place:

Our Redeemer Lutheran Church  
(29<sup>th</sup> & Wall)  
South Bend, IN. (This is in River Park)

### Program:

How to create displays  
Nick Pellus

### Host & Hostesses:

Sherry Bowen, Alyssa & Jessica Alstott  
Hefners, Randy & Joan Hill



## Board of Directors

President: Bill Foreman  
574-233-9178

Vice-President: Randy Hill  
269-465-5814

Secretary Rachel Sutton  
269-221-8366

Treasurer: Linda Cioch  
219-363-5809

Liaison: Bob Bell  
574-233-7352

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Educational: Jesse Zeiger  
574-259-5944

Facebook: Danielle Wilborn  
574-344-3385

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Historian: Jim Daly

Hospitality:  
Linda Miller 574-291-5027

Juniors:

Librarian:

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574-233-9178

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

Publicity: Josh Klosinski

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

Show Chair: Josh Klosinski

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

Webmaster: Joe Perry 574-295-9050

# WANTED

## Displays for Club Show

Club members this is your opportunity to show off your favorite rocks, fossils, or other collectible finds. Remember this is your show. Your reward is the OOH's and AHH's you get for your display.

Contact Nick Pellus, display Chairman with table space needed and if you need electricity. Note electricity is limited to a few spots, so first come first served.

REMEMBER...being a club member is NOT a spectator sport.

# REWARD

When was the last time you took some time to explore the United States Geological Survey website? Maybe I can entice you to go look. Jason

USGS Geology efforts address major societal issues that involve geologic hazards and disasters, climate variability and change, energy and mineral resources, ecosystem and human health, and ground-water availability. Our science strategy for geologic activities, [Geology for a changing world 2010–2020—Implementing the U.S. Geological Survey science strategy](#), presents six goals with accompanying strategic actions and products to further the science directions of the USGS science strategy, [“Facing Tomorrow’s Challenges—U.S. Geological Survey Science in the Decade 2007–2017.”](#)

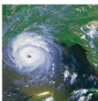
The six goals are:

1. Characterize and interpret the geologic framework of the Earth through time;
2. Understand earth surface and climatic processes and anticipate their effects on ecosystem health and change;
3. Understand and quantify the availability of Earth's natural resources in a global context;
4. Increase the resilience of communities to geologic and environmental hazards;
5. Apply the most advanced technologies and best practices to effectively acquire, analyze, and communicate our data and knowledge; and
6. Develop a flexible and diverse workforce for the future.

The goals emphasize the critical role of the USGS in providing long-term research, monitoring, and assessments for the Nation and the world and describe measures that must be undertaken to ensure geologic expertise and knowledge for the future.

The USGS maintains real time data on earthquakes in the US and around the world. Are you interested in Volcanos, Tsunamis, Landslides, the Earth’s magnetic field....information is right at your fingertips....go check it out

**Coastal and Marine Geology**

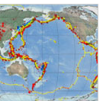


CMGP conducts research on the changes to the coastal and marine environment that impact lands, lives and livelihoods, and vulnerable ecosystems; providing science to inform decisions that ensure safe and resilient coastal communities and sustainable use and protection of marine resources. Supporting the Natural Hazards mission, CMGP conducts research on marine geohazards including earthquakes, tsunami, and submarine landslides and on coastal change hazards from erosion, hurricanes and other extreme storms, and sea-level rise.

- [Tsunamis](#)
- [Coastal Change](#)

Monthly Newsletter - Soundwaves

**Earthquake Hazards**




The Earthquake Hazards Program is part of the National Earthquake Hazards Reduction Program (NEHRP), a four-agency partnership led by the National Institute of Standards and Technology (NIST). Earthquakes pose significant risk to 75 million Americans in 39 States. The USGS provides research and information products for earthquake loss reduction, including hazard and risk assessments, comprehensive real-time earthquake monitoring, and public outreach.

- [Earthquake Map](#)
- [Real-time RSS Feeds](#)
- [Earthquake Notification Service](#)
- [Did You Feel It?](#)

"Earthquake Hazards – A National Threat" Fact Sheet

**Geomagnetism**



The mission of the Geomagnetism Program is to monitor the Earth's magnetic field. Using ground-based observatories, the Program provides continuous records of magnetic field variations covering long timescales; disseminates magnetic data to various governmental, academic, and private institutions; and conducts research into the nature of geomagnetic variations for purposes of scientific understanding and hazard mitigation.

- [Real-time Data](#)

"Monitoring the Earth's Magnetic Field" Fact Sheet

**Global Seismographic Network**




The Global Seismographic Network (GSN) is a permanent digital network of state-of-the-art seismological and geophysical sensors connected by a telecommunications network. The GSN provides near-uniform, worldwide monitoring of the Earth, with over 150 modern seismic stations distributed globally. The GSN was formed in partnership among the USGS, the National Science Foundation (NSF) and the Incorporated Research Institutions for Seismology (IRIS).

- [Station Status](#)

The Global Seismographic Network Fact Sheet

**Landslide Hazards**




The mission of the Landslide Hazards Program is to provide information that leads to the reduction of losses from landslides and increase in public safety through improved understanding of landslide hazards and strategies for hazard mitigation. The USGS conducts landslide hazard assessments, pursues landslide investigations and forecasts, provides technical assistance to respond to landslide emergencies, and engages in outreach activities.

- [Advisories](#)
- [Real-time Monitoring](#)

"Landslide Hazards – A National Threat" Fact Sheet  
"Wildfire Hazards – A National Threat" Fact Sheet

**Volcano Hazards**



The Volcano Hazards Program advances the scientific understanding of volcanic processes in order to lessen the harmful impacts of volcanic activity. The USGS monitors active and potentially active volcanoes, assesses their hazards, responds to volcanic crises, and conducts research on how volcanoes work. The USGS also issues warnings of potential volcanic hazards to responsible emergency-management authorities and to the populace affected.

- [Current Alerts for U.S. Volcanoes](#)

"U.S. Geological Survey Volcano Hazards Program: Assess, Forecast, Prepare, Engage" Fact Sheet

**Science Applications for Risk Reductions (SAFRR) Project**



The SAFRR project focuses on building partnerships to improve the use of natural hazards information from the USGS, to identify needs and gaps, and to develop new products that increase the use of USGS science by emergency managers and community decisionmakers in order to promote greater resilience to natural hazards. SAFRR evolved from the Multi-Hazards Demonstration Project in Southern California, which has developed interdisciplinary, science-based products that deliver information that starts with the hazard and carries through to impacts on the community.

- [USGS Natural Hazards Risk Reduction Project Goes National](#)

**USGS Emergency Management**



The USGS Natural Hazards Mission Area has been given responsibility for overseeing the bureau's emergency management activities. This function includes the USGS Hazard Response Executive Committee, which provides executive direction, oversight, and support to USGS managers in responding to major hazard events. During incidents of national significance, the USGS provides support to certain National Response Framework emergency support functions.

- [USGS Emergency Management](#)

## American Federation of Mineralogical Societies News

### Things to do In Raleigh

by Cindy Hummel, Convention Chair

excerpted from [AFMS Newsletter Volume 71, Number 3 - March 2018](#)

There are numerous attractions for you to see in the Raleigh, NC area while you're visiting the annual EFMLS/AFMS convention.

In the Oakwood section you can see many historic buildings and Victorian homes. The Capitol Square building was built in 1804 with local granite quarried under where Central Prison is presently located. A railroad spur was created just for this purpose to bring the stone from the "country". Prisoners will not be digging out of this jail!

Raleigh has two museums across from the Square side by side. The Museum of History and the Museum of Natural Sciences are both free of charge. Downtown is also full of fancy restaurants of all kinds of food.

[Read the rest here](#)

### Presidents Message

David Root, President □ [MWF News February 2018 -](#)

[Issue No. 569](#)

I'm an old-fashioned sort of guy, set in my ways. Every week I sit down and do the financial thing. Look at the bank account, see what bills snuck in that week, and figure out what needs to be paid and what can wait. And believe it or not, I still actually write a few old-fashioned checks. There is one thing that makes me really crazy, and that's when someone I've sent a check to doesn't cash it. So week after week I need to keep deducting that outstanding amount. I can't understand why they can't just cash the dang check.

I brought this up because for the first couple months of every year I witness something that reminds me of my uncashed check situation. The area around the computer fills up with piles of MWF forms sent by Sandy Fuller. It seems like Cindy is updating that website every couple of days. And this isn't just going on for a couple of days after the January 15 due date, this is going on weeks after the due date. And it's no like we keep changing the due date, it's the same every year. I can't understand why they just can't do it on time. If it sounds like I'm nagging that's because I am, it's in my job description. And now for something completely different: SPRING! Baseball opening day, fishing season and rock show season.

[Read the rest here](#)



#### 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](http://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](http://www.amfed.org/mwf)



## Upcoming Club shows and events Items from mailings and various websites.

**April 5-7** Thurs & Fri 9:30-9 Sat 9:30-7 Indian Mounds Rock and Mineral Club, Rogers Plaza Town Center, 28th Street at Kreigh Tomaszewski, Clyde Park, **Wyoming, MI** [kreigh@gmail.com](mailto:kreigh@gmail.com)

**April 7** Sat 10-3 Rock River Valley Gem & Mineral Society, open house with displays and demonstrations North Suburban Library, 6340 N. 2nd St. **Loves Park, IL**, Duane Cushing, [tcdc78@comcast.net](mailto:tcdc78@comcast.net)

**April 7-8** Sat 9:30-5, Sun 10-4 Des Plaines Valley Geological Society, Park District Leisure Center, 2222 Birch, **Des Plaines, IL** Lois Zima, 847-298-4653

**April 7-8** Sat 9-6, Sun 10-5 Lincoln Gem & Mineral Club, Lancaster Event Center, 84th & Havelock, **Lincoln, NE**, Jayne Beer, [jbeer60070@aol.com](mailto:jbeer60070@aol.com)

**April 14-15** Sat 10-6, Sun 10-5 Southern Illinois Earth Science Club, Marion City Pavilion, 1602 Sioux Drive, **Marion, IL** Mike Chontofalsky, [hontofalsky@att.net](mailto:hontofalsky@att.net)

**April 21-22** Sat 9-5, Sun 10-4 **Chippewa** Valley Gem & Mineral Society, Eau Claire Expo Center, 5530 Fairview, **Eau Claire, WI**, Paul Tubbs, [bizpam1@gmail.com](mailto:bizpam1@gmail.com)

**April 21-22** Sat 10-5, Sun 10-4 Fulton County Rockhounds, Donaldson Center, Wallace Park, 250 S. Avenue D **Canton, IL** George Coursey, [70georgecoursey@gmail.com](mailto:70georgecoursey@gmail.com)

**April 28-29** Sat 10-6, Sun 10-5 Akron Mineral Society, Emidio & Sons Expo Center, 48 E. Bath, **Cuyahoga Falls, OH** Sandy Shorter, [Gemboree@outlook.com](mailto:Gemboree@outlook.com)

**April 28-29** Sat 10-6, Sun 10-4 Miami County Gem and Mineral Club, Duke Lundgard Bldg., County Fairgrounds, 650 N. County Road 25-A, **Troy, OH** Dewey Buck, [Dewey.Buck@pcmg.com](mailto:Dewey.Buck@pcmg.com)

**April 28-29** Sat 9-5, Sun 11-4 River Valley Rockhounds, Webster County Fairgrounds, 22770 Old Highway 169, **Fort Dodge, IA** Robert Wolf, [midnightwriter@frontier.net](mailto:midnightwriter@frontier.net)

As we start show and field trip season please keep your safety in mind. Keep a hard hat and hi-vis vest in the car. Park as far off the road as possible. If you cannot park at least 3 feet off the roadway...move on. Do not disrupt traffic or create a safety hazard. –

El Paso TX roadcut. Pic by J Hefner - editor



## Field trip opportunity by Jason Hefner, editor

On Saturday April 28<sup>th</sup> The Delaware Valley Earth Science Society (DVESS), in cooperation with the Franklin Mineral Museum, invite you to share an internationally famous collecting experience. This field trip has attracted dedicated collectors from across the globe. Be one of them this year! It WILL be an historic and memorable event. This is in conjunction with the annual NJESA Gem and Mineral Show & Outdoor Swap & Sell.

This will be an official trip of the Michiana Gem & Mineral Society to allow our members the opportunity to be covered by the liability insurance the club has through the Midwest Federation of Mineralogical and Geological Societies & American Federation of Mineralogical Societies.

You are responsible for your own travel, lodging, food, etc. We will be carpooling from Meijer's at 331 and 20 at 8:00am if you would like to join the caravan (not a bus trip). The trip will be about 12 hours, with scheduled short stops. You are free to arrive on your own. There are several hotels in the area. The closest hotels are full. Quality Inn at 1691 46 West, Lendgewood, NJ, 07852 still had rooms at reasonable rates. Their number is 973-347-5100. You should make hotel reservations as soon as possible. Contact Jason Hefner at [Hefner\\_family@hotmail.com](mailto:Hefner_family@hotmail.com) if you plan to go on the trip!

You should make reservation online for the field trip. You can sign up upon arrival, but spaces are not guaranteed. You will have to pay for your goodies. Please make sure you take cash as they do not accept credit cards. Sign up at

<http://superdiggg.com>



Photo of the "glowing wall". Copyright Sterling Hill Mining Museum. Excerpted from the internet 04/04/18. Visit their website [HERE](#).



# An Enormous Crack Just Opened Up In Africa, Evidence Africa Is Literally Splitting In Two

by Trevor Nace, excerpted from [forbes.com](https://forbes.com) 4/2/2018

A massive crack suddenly appeared in Kenya, prompting new discussion on the breakup of Africa into two land masses. The crack continues to grow in size as heavy rainfall in Kenya's Narok County exacerbates the kilometer-sized chasm.

The sudden appearance of the crack is related to a regional zone of weakness and broadly associated with the continued breakup of the African continent. The leading hypothesis behind the breakup of the African continent is caused by an underlying superheated plume. This plume is causing Africa to split in two along the eastern edge of the continent. Thankfully, the rifting process will take many millions of years as the crust begins to thin and sink and a small seaway begins to intrude the rift zone.



Splitting a continent in two is quite common, for instance, it led to the opening of the Atlantic Ocean. Notice how Africa and South America would fit perfectly together, this is because they were once one landmass, eventually sutured apart by the Mid-Atlantic Ridge. While scientists have known for quite some time about the rifting in Africa, the underlying cause has been hard to pin down. Evidence suggests it is due to a superplume upwelling along the eastern edge of Africa, figuratively "burning" a hole in Earth's crust.

This superplume created the East African Rift System (EARS), the system associated with the breakup of the African continent. The East African Rift Valley, produced as a result of the ongoing splitting of the African continent, stretches more than 3,000 km from the Gulf of Aden to Zimbabwe. The rifting, which began about 25 million years ago, will eventually create two separate continental masses associated with the Somalian and Nubian tectonic plates. The process, however, will take millions of years at the current spreading rate of a few millimeters per year.

Continued next page

# Africa Is Splitting In Two from previous page

While the larger rifting system could be the underlying mechanism for the 50 feet deep and 66 feet wide chasm, the sudden appearance was likely due to heavy rainfall in the area, exposing the crack. The surface expression of the rifting is responsible for a wide zone of volcanism, seismic activity, uplift and subsidence of the ground, and the creation of fissures and cracks.

Over millions of years, the eastern edge of Africa will begin to be separated from the rest of Africa by a small and shallow sea. As rifting continues, Earth will exhibit a large island in the Indian Ocean. This island will likely consist of parts of Ethiopia, Somalia, Kenya, and Tanzania.

Trevor Nace is a PhD geologist, founder of [Science Trends](#), Forbes contributor, and explorer. Follow his journey @trevornace.



Photo credit [AllEastAfrica.com](#) 03/20/2018