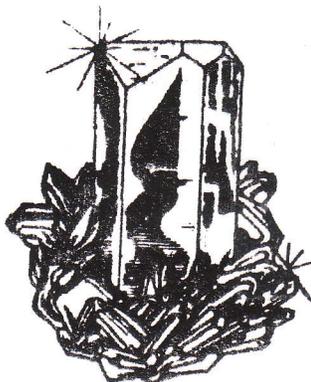


**Michiana Gem and Mineral Society**  
**Tom Noe, Editor**  
**305 Napoleon St.**  
**South Bend, IN 46617**



MARCH, 2012 Vol. 52, No. 3



# THE ROCKFINDER



**We're on the Web! See us at: <http://www.sauktown.com/Michiana>**

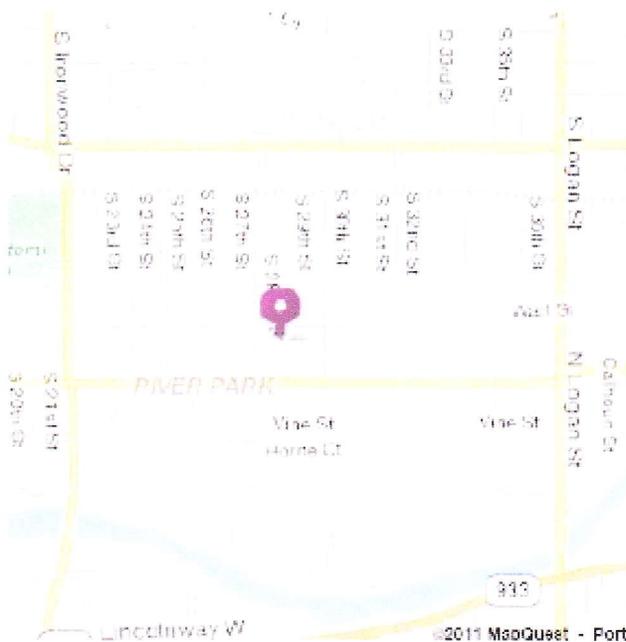
The purpose of the Michiana Gem & Mineral Society is to promote the study and enjoyment of the earth sciences and the lapidary arts, and to share lapidary knowledge and techniques. General meetings are usually held the fourth Sunday of each month at 2:00 p.m. at,

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 chose 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: \_\_\_\_\_  
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Michiana Gem & Mineral Society  
c/o Marty Perry  
29154 Frailey Dr  
Elkhart, IN 46514

# THE ROCKFINDER

MARCH, 2012  
Vol. 52, No. 3

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.



## Kathy's Column - President Kathy Miller

Now we are into March, a month of all seasons. I always look forward to this time of year when the robin's make their appearance, the pussy willows are coming out and the trees are starting to look puffy on top with tiny buds. The snow has melted on our rocks outside and they bring back great memories where we collected them.

Already John Davis has many of our members signed up for two field trips to Kentucky. Having never collected agates, I am looking forward to that trip. If you have never collected fluorite I highly suggest looking into going on that field trip, the fluorite you collect is a win/win situation. Many of us will have taken the mine safety class by the time you receive this newsletter. It promised to be well attended, making it more accessible for our members to go into those hard to get in collecting areas due to safety rules and regulations. Thank you for your participation.

The program last month was very well put on. Rev. Larry Calhoun has the rest of this year lined up with many more interesting fine programs. Diane Gram will be putting on a

Continued on Page 2

## Up & Coming

Next meeting: March 25, 2012

### Place:

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

Program: Club member Diane Gram will demonstrate puffy bead making.

*Promote the club's big show coming up August 24-26!*

FOR SALE: Club member Diane Gram has information about Dick and Doris Jones, who ran a rock shop and sold at the Fort Wayne show. They would like to sell all their fossils, minerals and equipment and retire. Contact Diane to follow up on this.

## Kathy's Column continued from Page 1

program this month that is fascinating to adults and youth alike, you won't want to miss it!

As always Linda Miller and Mary Davis along with Florie Schuler put out a banquet of food after the program, Lawton Shank even jumped in by candy donations. We members know how to finish a club meeting!

I do hope you're all thinking about putting in a display/exhibit at our local show in August, now is the time to get started on it. You don't have to feel it should look like a Field Museum display, just something that is dear to your heart in rocks, fossils, minerals, or a related craft and put it in a simple case. As an example, like Pat Bell, I like to make things out of shells that Bob and I collected, so I have put shells in a case and told where we collected them from. So when Exhibit Chairman John Davis calls you (like a bride or groom) please say I WILL!

I hope everyone had a fun St. Patrick's Day, the sun is shining on your home in anticipation of Spring and our coming together again on March 25.

Looking forward to seeing all of you  
Rock on,  
Kathy

### Thank you notes:

Jason Hefner for the time, work, energy he did in putting out an outstanding Rockfinder. We wish him well at his new job in Florida. We will all miss Jason, Jennifer, Justin, Michael and Matthew.

Tom Noe and Diane Gram for putting together and emailing/ mailing the March and April Rockfinders until our new Editor takes over. Their team effort gives them a four star rating in our club!

Linda Garwood who solved the problem of a new Editor in a few months, Linda was able to come up with a friend of hers willing to take over.

Jim Daly who worked diligently on updating our Society's website to make it more member friendly and gets the club info out to "the world" (so to speak ☺).

To our club members who participate in attendance and those who remain as faithful members over the years, I appreciate all of you.

### NEW EDITOR COMING...

If all goes well we will have a new Editor for the May issue of the Rockfinder. With the following information I ask that you give her some articles to put in future issues so she has some "meat" to help her get started. It could be a field trip you went on, a rock, fossil, mineral you might be working on, a geology point of interest, etc. I will be giving her a President's message, Michelle Winters will be sending her the Secretary's report, John Davis will be sending her field trip info, along with programs and hostesses, but she needs ARTICLES, please let us make her feel welcome and closer to our club.

Please welcome: Mrs. Lori Vickers  
100 Slate Lane  
Greer, S.C. 29650

Email: aunpawz@gmail.com

**Under subject line be sure to put Rockfinder**

### September 3 Day Bus Field Trip

All of you attending should have received the itineraries I had made and passed out at the previous meetings. I am only writing this to remind you of the Saturday night meal on September 29, 6:30 p.m. at the Overlook Restaurant. We will be in our own private dining room for an all you can eat buffet.

Bob and I are putting the entire meal on our credit card (required by most restaurants now) and request that you pay us ahead of time for your meal(s). Please pay by check made payable to Robert W. Miller. We will cash all checks at one time (easier to keep track), thanks for your cooperation.

Since we are a non-profit organization, we are tax exempt so we just pay for the meal and gratuity-NO tax.

The price for adults \$16.51 for children 10 and under \$11.79 Tell your kids to stuff themselves!

Some of us have eaten there before and will tell you the food is delicious!

Menu: Chicken / Fried Whitefish  
Side Salad, green beans, cut corn, homemade mashed potatoes  
Fresh biscuits with strawberry preserves  
Fresh baked fruit cobbler  
Non Alcoholic beverages

Note: If you order an alcoholic beverage you pay separately at that time

Kathy

### **MINUTES of the February 26 Meeting by Michelle Winters**

The meeting was called to order at 2:00 by Kathy Miller - president.

The meeting was attended by 48 adult members and 7 junior members.

The meeting had 4 guests in attendance - Steve Bruski, Chris & Donna Losch, Jeff Tuepp (and junior member Hannah Tuepp).

The prior month's minutes were accepted through a motion by Father Calhoun and seconded by Nick Pellus.

Linda Garwood - spoke about upcoming shows around the area.

Mike Skoczylas - displays were brought in by John Davis and Lawton Shank.

John Davis - spoke about the APRIL 14-15 TRIP to Kentucky (\$25.00 a day per person).

**\*\* Hospitality - did a super job on the food this month. \*\***

Membership - Joan Hill - the membership directories are in, so please pick yours up.

Show Report - Marie Crull signed the contract with the fairgrounds already and Joe Perry has show fliers.

Webmaster - Jim Daly - all meeting Rockfinders are online.

#### **NEW BUSINESS:**

Directories - Diane Gram - she did an excellent job on the new directories.

Field Trips - September 28-29 the annual trip to southern Indiana.

Delegate needed - for AFMS/MWF CONVENTION in July.

Open discussion - Jason Hefner- has taken a new job in Florida, so he can no longer be editor for the Rockfinder. Tom Noe has agreed to be editor for the next two months.

**\*\* Motion was made to accept Lori Vickers, who lives in North Carolina, to do the editor job. \*\***

## Michiana Gem & Mineral Society's 49<sup>th</sup> Annual

# Jewelry, Gem & Mineral Show and Sale

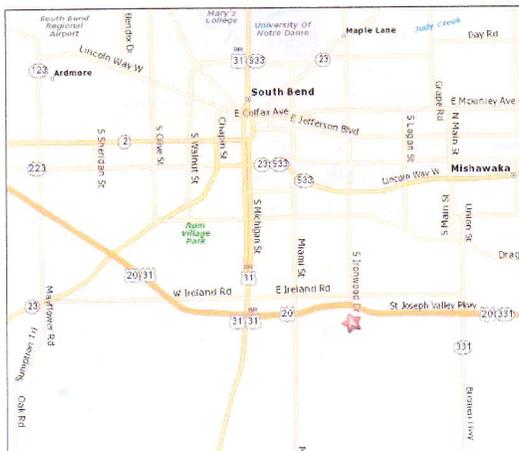
**August 24, 25, & 26, 2012**

Friday 2-7 pm \* Saturday 10-6 pm \* Sunday 10-4 pm



St Joseph County 4-H Fairgrounds  
Esther Singer Building  
5177 South Ironwood Road  
(Ironwood and Jackson Road)  
South Bend, IN 46614

For information contact:  
(574)272-7209 or (574)291-0332  
Show Chair Society President



[www.sauktown.com/Michiana](http://www.sauktown.com/Michiana)

Admission:  
Adults: \$3.00  
Kids 6-12: \$1.00  
Under 6: FREE  
Parking: FREE

- \*Quality Dealers
- \*Displays
- \*Demonstrations
- \*Kids Korner
- \*Door Prizes
- \*Silent Auction
- \*Exhibits and more!

Michiana Gem and Mineral Society ([www.sauktown.com/Michiana](http://www.sauktown.com/Michiana)), is a not-for-profit organization affiliated with the Midwest Federation of Mineralogical Societies <http://www.amfed.org/mwfi/> 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.

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Hospitality:  
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Sherry Kobie 574-522-0189

Webmaster: Jim Daly  
219-778-2196



## Apache Tears

By Margie Hawkins, club member

Apache Tears are made from obsidian. Obsidian is a volcanic glass composed primarily of silicon dioxide,  $\text{SiO}_2$ . Unlike olivine, which is one of the first minerals to crystallize from magma (molten rock), obsidian is one of the last products of a volcanic eruption, and cools so quickly that there is no time for the molten material to form into crystals. Over time, obsidian gradually changes as the silica combines with other elements

There are many legends about Apache tears, and the most widely known is the one associated with Picket Post Mountain near Superior, Arizona. The legend relates the tale of a band of Apache warriors who were surrounded by the U.S. Cavalry on the top of the mountain. Rather than be captured by the soldiers, the warriors leapt with their horses to their deaths. When their wives and lovers came to the site to bury the bodies, their tears turned into the black, glassy drops of obsidian that are found on the flanks of the mountain. Visitors can purchase their own Apache tears in local gem shops, or by visiting Picket Post Mountain in the Tonto National Forest. Directions to the mountain and other nearby attractions are on many internet sites.

and the molecules rearrange themselves. This process is called devitrification. Vitrification refers to crystallization of a crystal-free glass, so devitrification describes the opposite process.

A common product of the devitrification of obsidian is perlite, an amorphous solid (amorphous is a Greek term that means without the shape or the rigid order found in crystals). Perlite forms when the glassy obsidian is hydrated, usually by the absorption of groundwater. The molecular structure of this silicon dioxide is neither glassy like obsidian nor crystalline like quartz, but appears to be flowing. Perlite is lightweight and can expand greatly when heated. It is mined for use in horticulture, construction insulation and industrial fillers. Go to [www.perlite.net](http://www.perlite.net) to find out more about the many uses of perlite.



Dinosaur Feathers Found in Alberta Amber  
By Emily Chung, CBC News (9/15/11)

Feathers believed to be from dinosaurs have been found beautifully preserved in Alberta amber.

The primitive, hairlike feathers known as protofeathers likely belonged to theropods—dinosaurs similar to tiny *Tyrannosaurus rexes*—that roamed the swampy forests of Alberta 80 million years ago, said Alexander P. Wolfe, a University of Alberta earth sciences professor who coauthored the research published Thursday in *Science*.

The protofeathers don't look like feathers from any modern bird, but are similar to those seen in fossils of theropods.

"Protofeathers aren't known from any modern, existing groups of birds and therefore the most obvious interpretation is that they belong to dinosaurs," he said.

Theropods, which are thought to be closely related to modern birds, were already known to have feathers, based on features surrounding fossils found in China. But a lot of details were lost in the fossilization process. "The feathers get altered, they get substituted by minerals and you can't see any of the detail," Wolfe said.

"With amber, it's different. We have the actual object. . . . we actually have this protofeather for the first time in the flesh."

The feathers are preserved down to the pigments that show what color they are and microscopic details of their structure.

Based on the fact that the protofeathers were just single filaments or clumps of filaments, just two centimeters long, the researchers concluded: "these had nothing to do with flight," Wolfe said. Instead, he believes they were used to keep the dinosaurs warm. The protofeathers may look very hairlike, but the researchers confirmed they were feathers by looking at them under a microscope, Wolfe said. Hair, found on mammals, has microscopic scales. Feathers, found in birds and dinosaurs, have features called nodes and internodes instead.

The protofeathers were among a wide range of feathers found in Alberta amber specimens by Ryan McKellar, a

researcher who recently completed his Ph.D. under Wolfe's supervision. McKellar's research was initially interested in insects, but stumbled upon some very birdlike feathers in the process of sorting through amber from the Royal Tyrell Museum and the University of Alberta's collection, Wolfe said.

He decided to keep an eye out for other feathers. After sorting through around 4,000 chunks of amber, each less than two centimeters in diameter, he had collected a wide range, from the protofeathers to more complex feathers from the same time period that were most certainly from birds.

Some were downy "like the kind you have in your pillow," Wolfe said. Others look like modern flight feathers. Some also had special features found in diving birds such as grebes.

Wolfe, an expert in amber chemistry, said such birds likely shared the same ecosystem as the dinosaurs—a steamy, "very buggy" coastal forest similar to Florida's everglades, dominated by cypress and cedarlike trees. The remains of the forest were compressed into coal deposits in Alberta where the amber samples were found.

Wolfe said now that the new research, including photographs, has been published, he hopes researchers in other parts of the world where feather dinosaur fossils have been found will start keeping an eye out for dinosaur feathers in amber. He also hopes to do a biochemical analysis on the proteins in the feathers.

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## FROM THE AMERICAN FEDERATION

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### A CELEBRATION OF AGATES

By Sandy Fuller

Agates, agates, agates! Almost every area has some type of local agate, a distinctly banded chalcedony quartz.

This July, agate enthusiasts and novices are gathering at [A Celebration of Agates](#), an international symposium and show in Minnetonka MN. The event is being held in conjunction with the American Federation of Mineralogical Societies annual convention. Festivities begin July 26. . .

Host Minnesota Mineral Club has invited other clubs in the state to sponsor field trips during Monday through Wednesday, July 23-25. Details will be posted as they become available.