

ROCK TRAILS



Newsletter of the StateLine Gem and Mineral Society

VOLUME 57
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FEBRUARY 2017

2016 Officers and Directors

President: Sherman Kardatzke, 517 673-5487
Vice President: Glenda Gafner, 517 403-6310
Secretary: Heidi Storehalder, 419 261-6451
Treasurer: Doris Brzezicki, 269 267-1123
Past President: Edmund Jarzembki, 419 237-2000
First Year Director: Jan Hauter, 517 286-6971
Second Year Director: Carl Mulholland, 517 539-2037
Third Year Director: Frank Kramic, 517 458-7191
Show Chairman: Sherman Kardatzke, 517 673-5487
Co-Show Chair: Glenda Gafner, (517) 451-2079
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Meetings are held the first Sunday of each month
at 2:00 PM
at 201 W. Main St., Morenci, MI 49256



Secretary's Scoop

January 8, 2017



President Sherm Kardatzki called the meeting to order and Glenda gave the invocation. It was followed by the pledge of Allegiance. This month's meeting held the annual induction of officers, who were all sworn in according to the guidelines of the club. All officers and members agreed to abide by the duties and responsibilities of their positions.

Secretary's Report:

I gave the Secretary's report in person during the meeting and Doris made a motion to accept it. This was seconded by Judy and it passed with all in favor.

Treasurer's Report:

Doris reported the club's balance and that the bills for last month's Consumer's Energy and rent, The Ohio Dept. of Taxation, Village Originals, and The Midwest Federation had been paid. She also gave a donation to the King's Cupboard in memory of Diane Storehalder. Doris also deposited member dues that had been paid, as well as income from member sales and from dealers for our show. She reported that she had to file the club's 990N, as the date for that had not yet passed. Phyllis made a motion to accept the Treasurer's Report and it was seconded by Judy. It passed with all in favor.

Doris also submitted a proposed budget for this year including anticipated expenses and incomes. Copies of this were passed around to all members present. Doris informed everyone that she had added a Building Fund of \$500 for the future hope of one day owning our own building. She then opened the floor for discussion and questions. Glenda made the motion to accept the proposed budget and was seconded by Linda M. It passed with all in favor.

Glenda thanked everyone who volunteered to help during our many fundraisers this past year.

It was suggested that we find ways to show our appreciation to our editor, Sandy Gerhart, and also to Sandy Cline, for managing our website. Ideas ranged from simple Thank Yous to sending in stories from club gatherings and rock-trips.

Glenda ordered the Moroccan geodes and received money back because of the lowered sale price. She reported that she had used some of it and ordered 66 lbs of tumbled stones from the same supplier, including Citrine, Moonstone, Tiger Eye, Rose Quartz, Sodalite, and Leopardskin Jasper. Glenda then regaled us with a story about the day the geodes arrived- the day we got the most snow and how the truck couldn't get up her driveway. She told us that the driver had offered to carry the boxes one at a time, but Glenda declined and managed to get them up her driveway with the help of her daughter Emma, another brave volunteer, and Glenda's tractor.

The idea of advertising on a billboard was suggested in the previous meeting and in this meeting we were informed that the anticipated cost would be around \$500 and after some discussion, Ed said that he would contact a company that had previously wanted to put one up on his property, as well as someone else who already had one on their property.

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Glenda informed us that the Fulton County Fair Board will not allow us to hang a banner from any of the buildings, but they will allow us to hang one on the fencing facing the road.

Judy got permission to have wire wrapping workshops in the classroom at Hobby Lobby in Adrian. The workshops will be Fridays from 11-3pm.

Glenda had done some researching into the suggested ideas of putting up yard signs advertising our show. She reported that it would cost \$125 for 50 12X16 two-sided yard signs and \$175 for the same in a bigger size. Glenda had also made a printout of a proposed design for the yard signs and asked for the member's input. Discussion was in favor of contrasting colors on different lines of text instead of everything being all the same color because the different colors made everything 'pop' and therefore easier to read. It was decided that the top line would be blue, the middle red, and the bottom also in blue, all on a white background. It was also suggested to put the date instead of '1st WKD after Memorial Day,' as it would be shorter and could be read more easily. It was put to a vote and passed 13-2 in favor of the suggestion.

Doris brought up that we needed to renew our subscription to the Rock and Gem magazine and Carl made a motion to go ahead with the 3-year plan. Ed and Jan both seconded and it passed with all in favor.

The trip to the Upper Peninsula, to search for Lake Superior Agates, was decided to be open to attending members to join in from June 10th- 13th, which would be a weekend and part of a week. Members would not be required to stay all days, but rather come for the days of their choosing. Glenda had brought a list of potential houses near the beach to rent and there was quite a bit of discussion over which would suit our needs and also about how to divide payment, as not everyone would be staying the entire time. A list of attending members was compiled, as well as how many days they planned on staying. Glenda also wanted to inform everyone that there would also be other places to rockhunt besides on the lakeshore and suggested searching for copper, as well as some other excursions.

The annual trip to Bedford, IN will be June 23-25th. Glenda compiled a list of members who were interested in going so that she had an idea how many hotel rooms to reserve.

Unfortunately neither Glenda or Sherm would be able to make a trip to Kentucky to go to a Fluorite mine or to search for Kentucky agates, so those may be tabled until next year. Though Glenda says that she will look into a trip to Flint Ridge, and a couple of quarries. Other trip suggestions included a trip to Brown County, IN and a fossil excursion near Cincinnati.

Ed made a motion to adjourn and it was seconded by Carl. It passed with all in favor.

Respectfully submitted,
~Heidi Storehalder

Please add this new member to your List of Members:

Shelly Bowman 6373 Alcock Dr. Sand Creek, MI 49279 (517)918-3448
sales@turtleracingproducts.com

Large, Exceptional Gem Diamonds Formed from Metallic Liquid inside Earth's Mantle

New research in the journal *Science* explains how diamonds of exceptional size and quality formed — from metallic liquid deep inside Earth's mantle.

To date, researchers have puzzled over the origin of large diamonds like the famous Cullinan Diamond, discovered in South Africa in 1905; the Koh-i-Noor, found in India in the 13th century; or the widely publicized Lesedi La Rona stone, uncovered in Botswana in 2015.

Historically, research into such diamonds has been nearly impossible due to the high value of the jewels and the fact that they rarely contain inclusions that might shed light on their geological origin.

“Some of the world's largest and most valuable diamonds exhibit a distinct set of physical characteristics that have led many to regard them as separate from other, more common diamonds,” said study senior author Dr. Wuyi Wang, director of research and development at the Gemological Institute of America.

“However, exactly how these diamonds form and what they tell us about the Earth has remained a mystery until now.”

Dr. Wang and co-authors studied large gem diamonds by examining their so-called ‘offcuts,’ which are the pieces left over after the gem's facets are cut for maximum sparkle.



The researchers determined that these diamonds sometimes have tiny metallic grains trapped inside them.

In addition to the metallic inclusions, some of these exceptional diamonds contain mineral inclusions that show the diamonds formed at extreme depths, likely within 224-466 miles (360-750 km) 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 93-124 miles (150-200 km).

“This new understanding of these large diamonds resolves one of the major enigmas in the study of diamond formation — how the world's largest and most valuable diamonds formed,” said study first author Dr. Evan Smith, also from the Gemological Institute of America.

“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.

“Previous experiments and theory predicted for many years that parts of the deep mantle below about 155 miles (250 km) contain small amounts of metallic iron and have limited available oxygen,” Dr. Smith said.

“Now, the metallic inclusions and their surrounding methane and hydrogen jackets in these diamonds provide consistent, systematic physical evidence to support this prediction.”

The results are also important for understanding how volatile substances like carbon might cycle through Earth’s interior over time.

Evan M. Smith et al. 2016. Large gem diamonds from metallic liquid in Earth’s deep mantle. *Science* 354 (6318): 1403-1405; doi: 10.1126/science.aal1303

<http://www.sci-news.com/geology/diamonds-metallic-liquid-earths-mantle-04459.html>



Bench Tips

by Brad Smith
See all Brad's jewelry books at
Amazon.com/author/BradfordSmith

ADJUSTABLE CHUCK FOR DREMELS

Many of us have a Dremel motor tool to use at home or when out to a class or workshop. The one thing that makes this tool much more productive is the addition of one inexpensive option, an adjustable chuck.

The basic motor tool as sold typically comes with a collet chuck. This means you have to use a wrench to change every tool bit, you have to switch collets to use different shaft sizes (3/32 or 1/8 inch bits), and you can't use ordinary drills at all - only the special ones that have a 3/32 shaft.

A simple and inexpensive (\$12) adjustable chuck solves all of this. It's available in most large local hardware stores or modelmaking outlets. Tightening the chuck is done easily by hand to any size shaft. No key is required.



IDENTIFYING UNMARKED SOLDERS

There are plenty of ways to mark your sheet or wire solders, but suppose you forget and have a couple that you can't identify. The answer is to compare the melting temperature of the unknown with that of a known solder. What I do is take a thick scrap of copper or nickel and arrange several solders on it. Ideally, I have a sample of easy, medium and hard known solders surrounding the unknown solder. Then I heat the plate from the bottom and watch the order in which the solders melt.



Upcoming Events

Sunday, February 5, 2017

State Line Gem & Mineral Society
monthly meeting & induction of officers
2:00 p.m.
201 W. Main St.
Morenci, MI 49256

March 3 - 5, 2017

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

March 25, 2017

Midwest Mineralogical &
Lapidary Society (rock swap)
St. John's Lutheran Church
13115 Telegraph
Taylor, MI
Sat 10-5

March 4 - 5, 2017

The Roamin Club (silent auction)
Schoolcraft College
18600 Haggerty Road
Livonia, MI
Sat 11-6, Sun noon-6

April 6 - 8, 2017

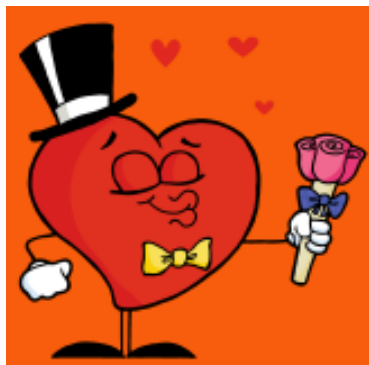
Indian Mounds Rock and Mineral Club
Roger's Plaza Town Center
28 th Street at Clyde Park
Wyoming, MI
Thurs & Fri 9:30-9,
Sat 9:30-8

March 17, 18, 19, 2017

Michigan Gem & Mineral Society
Annual Show
See flyer on page 8

April 8 - 9, 2017

Columbus Rock & Mineral Society
Northland Performing Arts Center
4411 Tamarack Blvd.
Columbus, OH
Sat 10-6, Sun 11-5



MICHIGAN GEM & MINERAL SOCIETY PRESENTS

WE WILL ROCK YOU

MGMS ANNUAL SHOW 2017

MARCH 17-18-19

FRI 10 am - 7 pm

SAT 10 am - 6 pm

SUN 11 am - 5 pm



*GEMS
ROCKS
BEADS
RAFFLE
FOSSILS
EXHIBITS
JEWELRY
MINERALS*

DOOR PRIZES

*SILENT AUCTION
DEMONSTRATORS*

SEE YA
THERE!



Adult \$4
Senior \$2
Student \$1
5 & Under FREE

**Girl/Boy Scouts & Military
Personnel in Uniform FREE**

School Groups & Other Organizations Welcome

Contact Us for More Information

Sally 517.522.3396

www.mgmsrockclub.com

info@mgmsrockclub.com



American One Event Center

Jackson Co. Fairgrounds 200 W. Ganson St, Jackson, MI

From the Internet!

via The Rockpile, Jan 2017

I found this timely, because today I was in a store that sells sunglasses, and only sunglasses. A young lady walks over to me and asks, "What brings you in today?" I looked at her, and said, "I'm interested in buying a refrigerator." She didn't quite know how to respond.

Am I getting to be that age?

I was thinking about how a status symbol of today is those cell phones that everyone has clipped onto their belt or purse. I can't afford one. So I'm wearing my garage door opener.

I was thinking about old age and decided that old age is when you still have something on the ball, but you are just too tired to bounce it.

When people see a cat's litter box they always say, "Oh, have you got a cat?" Just once I want to say, "No, it's for company!"

Employment application blanks always ask who is to be called in case of an emergency. I think you should write, an ambulance.

The older you get the tougher it is to lose weight because by then your body and your fat have gotten to be really good friends.

The easiest way to find something lost around the house is to buy a replacement

Did you ever notice: The Roman Numerals for forty (40) are XL

The sole purpose of a child's middle name is so he can tell when he's really in trouble ..

Did you ever notice: When you put the 2 words 'The' and 'IRS' together it spells "Theirs"

Aging: Eventually you will reach a point when you stop lying about your age and start bragging about it.

Some people try to turn back their "odometers." Not me. I want people to know 'why' I look this way. I've traveled a long way and some of the roads weren't paved.

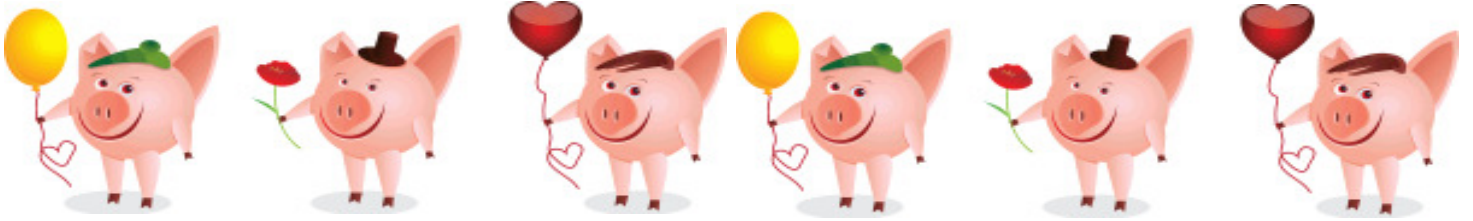
You know you are getting old when everything either dries up or leaks.

Ah! Being young is beautiful but being old is comfortable.

Lord, keep your arm around my shoulder and your hand over my mouth.

May you always have Love to Share, Cash to Spare, And Friends who Care.





Rock Trails

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704 W. US Hwy 223, #205
Adrian, MI 49221

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Morenci, MI 49256

