

President's Message

Hi Rockhound Friends,

I hope everyone is finding time to enjoy the outdoors now that the flowers are blooming, and the trees are very green. We've certainly had a lot of rain lately, so sunny days seem few and far between.

Speaking of rain, our Ohio field trip to dig up flint, has been postponed a second time. We noticed the chance of thunderstorms had increased and we want everyone to stay safe, especially when we are in a remote place. The new date is Sunday, June 9th. We will have a picnic lunch before digging. Hopefully the third time will be the charm.

I had a lot of fun conducting ultraviolet resin workshops this May. We had 3 classes on Thursdays with about 7 people each time. It was a great way to be creative and socialize. I have posted photos of some of the finished pendants on the LGMS Members Only Facebook page.

The June picnic will be held at the Settlers Park Pavilion. Parking is behind the Hartland Township Hall on Clark Road. It is just a couple miles east of the workshop and behind Meijer. Greg Lemke will discuss rock identification. Please bring a dish for the potluck. The July picnic is still in need of a host. If no one is interested, perhaps we could have a rock swap at a metro park like we had at Seven Lakes State Park a couple of summers ago.

I have completed 2 out of 4 Ugly Duckling Rock cabochons. I will be posting each result on the Livingston Gem and Mineral Society Facebook page as I finish them. This involves taking a rock that cost very little money, and spending an hour or two to turn it into a beautiful cabochon. Over the summer, if you have time to make a beautiful cabochon please consider contributing it to our silent auction.

As the summer vacation season begins, I hope you have a wonderful time on your expeditions and drive safely.

Cinda Dawson, President



LGMS General Menbership Meeting May 21, 2019

1. **Call to Order** – 6:00 pm; Motion to approve minutes by AnnMarie, 2^{nd} by Jim with unanimous vote to approve minutes with no changes.

a. In Attendance: a total of 48

members including board members.

2. **Treasurer's Report** – Sheila York provided details of the treasurer's report. Current accounts are in good standing. If you would like to review the treasurer's report, please see Sheila any time that she is in the shop on Tuesdays and some Wednesdays.

3. Shop Updates -

a. Middle saw down, waiting for parts. b.Instruction/Reminder Signs in the shop need to be updated and laminated. Mel offered to make signs and Nancy has a laminator.

c. All new members need to be trained on the machines- Discussion/ideas: keep track of training new members digitally. Example: on T & W training days, they need to sign in on the computer that they have completed 3 training sessions before they can use the equipment.

4. Show Updates –

a. Not Applying for MI Lottery Charity Raffle License at this time – will have a prize drawing instead.

b. We have 18-19 Vendors for the 2019 which is up from 16.

c. Ed reports quality outstanding pieces are being made from his donated cabs for the auction! <u>ALL</u> members should donate at least 1 item for the silent auction, it does not have to be a rock (last year a quilt was donated) DEADLINE FOR donations is SEPTEMBER 13th. d. We need to reserve hotel rooms for the 2020 show. e.Need help with Grab Bags & Need

a few more styrofoam egg cartons for the kids' table.

5. **Wireless Speakers** for Silent Auction purchased.

6. **Visit MMS for their meeting** has changed from June 10th to September.

7. **OHIO Flint Ridge Field Trip** – was rained out twice. Now scheduled for Sunday June 9^{th} – Meet there by 11 or noon Pot Luck LUNCH there on a grill, so bring a dish to pass; sign up on the board what food you are bringing. (Area is rustic – 20 minutes to food or bathroom)

a. \$7.50 a day, then 50 cents /lb. Informational Flyers and road trip sign-up located on shop board.

8. **New T-Shirts** – Petoskey stone in the shape of MI with a heart designating Hartland.

9. **LGMS Souvenirs** – Lori Irvin researching for 2020 show.

10. **Postcard** for the 2019 Rockhound Show will be ready mid-June.

11. **Updated Membership Application**– Isla completing adding selections of interest for volunteer hrs.

12. **Keep an eye on your rocks** – if left in the big saw room, we will date them & THEN have them available for all members.

13. **Surveillance for 2019 Show** - Discussion Ideas as follows:

a.Security printed on the back of several our T-Shirts.

b.Mel will research camera rentals & Angela will research Live Feed options. We will have the live feed being watched at the Admission table for ALL to see our heightened security.

14. **Gayland's Garage Sale** will be mid-June 15. **Adjournment** – Motioned by Jim, 2nd by Ed with unanimous vote taken to adjourn meeting at 6:59 pm with presentation to follow.

16. **Presentation by Patti Graves-Wesolosky** – "Hunting along the Lake Superior Shoreline of the UP".

17. **Thank you Ed** for donating all the items for the meeting prize giveaways!!!

18. **NEXT MEETING** June 18th at Settlers Park behind Meijer @ M-59. (See directions on page 6 of this newsletter.)

Respectfully submitted, Lori Irvin, Secretary



Workshop Hours

Monday: 10 am to 3 pm Tuesday: 9 am to 9 pm Wednesday: 10 am to 9 pm Friday: 9 am to 2 pm

Rock of the Month Club

Wednesday, June 12, 2 pm (second Wednesday of the month)

Jim Hansen and Bryant Hiiter will lead the discussion on **Michigan stones A - L**

Come to learn and share your specimens!

Lizzadro Museum Moving Sale

Lizzadro Museum is moving from Elmhurst, IL to Oak Brook, IL. It is having a massive moving sale on June 21 and 22, 2019, 10 am-4 pm each day. Items available will include slabs, rough and polished stone, mineral specimens, rocks and fossils as well as cabinets and fixtures. Location: 220 Cottage Hill, Elmhurst, IL 60126 Information at info@lizzadromuseum.org

2019 Officers and Chairpersons

President: Cinda Dawson 810-423-0464 Vice President: AnnMarie McFadden, 248-884-8126 Secretary: Lori Irvin, 810-820-0494 Treasurer: Sheila York, 810-695-0509 Second year Directors: LaVonne Foldenauer, 517-546-5463 Bill Magee, 734-981-6117 First year Directors: Dan Goodwin 810-252-0026 Jim Parker 517-548-0675 Hospitality and Sunshine: Venus Sage, 810-458-4290 Shop Chairpersons: Jim Hansen, 248-933-1482 Bill Magee, 734-981-6117 Sharon Parker, 517-548-0675 Newsletter and Membership: Isla Mitchell, 248-685-7804 imvm.1@netzero.com Membership: Cinda Dawson, 810-632-6922 Historian: Chuck Amberger, 248-787-6586 Library: Bryant Hiiter, 248-210-6138 Webmaster: John Myer www.livingstongems.com or www.livingstongemandmineralsociety.com General Membership Meetings are held monthly on the 3rd Tuesday at 6 pm (Except in January and February when board meetings are held in the shop.)



"LGMS Rocks for Members Only" group page

A Short History of Rocks and Minerals

A synopsis from the Great Courses Series by the Teaching Company Chuck Amberger, LGMS Lifetime member

We now have an almost infinite abundance of rocks and 4,400 cataloged minerals at our disposal. Where did they all come from? Were they all here from the beginning or just a precious few that have grown and even evolved over the billions of years? Before we get too far into this discussion, maybe we should come to an understanding about the difference between rocks and minerals. Rocks are effectively just hard, unknown aggregates of various atomic elements. Minerals, however, are a known compostion of one or many atomic elements. Quartz, for example, is one atom of silicon surrounded by four atoms of many combinations of silicon oxide with other atoms. They comprise about 80% of the earth's crust.

Sorting all this out for us, we are lucky to have a rather well-known geologist and paleontologist by the name of Dr. Stuart Southerland, who has recently delivered a course of 24 new lectures to the Great Courses Series of the Teaching Company. The sixth lecture in this series is titled "Minerals and the Evolving Earth". Here in brief is what he says has happened over the many billions of years.

Dr. Southerland starts 13.7 billion years ago. Shortly after that there were only two atomic elements in existence, hydrogen and helium. These two elements, over vast periods of time, gathered together into super massive suns that went supernova and transformed, by nuclear fusion, into the first 14 elements in our Periodic Table. These elements may have then transformed into microscopic crystalline minerals, such as diamond, granite and various silicates. Great galaxies formed, and then about 7 billion years later our Milky Way galaxy formed. Back about 4.6 billion years ago, our own solar system formed along with our 96 common elements and 10 or more unstable elements with very short life spans.

All of these elements were melted and cooked together in the first 500 million years after the birth of our solar system, when our planets began to form. This super hot fusion raised the total mineral count to about 60.

The mineral count rose to about 500 when the earth's crust became cool enough to be covered in water, some 4.4 billion years ago. The mixing of water into the magma added even more minerals to the count.

Four billion years ago the first granitic and basaltic crust began to form. Granitic melts helped to concentrate the rare and lighter elements into granitic rocks, thus raising the mineral count to 1000.

The next stage in the evolving mineral evolution is thought to have happened only on Earth. This is plate tectonics, when continents began floating on molten lava. As they push, grind and slide past each other, they form even more minerals. Then oceanic salt water became ground up and mixed into the basaltic rock crust which brought the mineral count up to 1500.

Life plays perhaps the greatest role of all in raising the mineral count to 4,400. There is evidence that life of a single cell bacterial nature began about 3.4 billion years ago. About 2.5 billion years ago certain microbes spreading acrosss the planet developed a photochemical trick called photosynthesis. They began to chew on water and hydrogen sulfide. The hydrogen was incorporated into their bodies and the oxygen was released into the atmosphere. Oxygen was toxic to most microbes at that time. However, it was beneficial to the microbes who could use it. That is, the animal kingdom, who expelled carbon dioxide out, which is beneficial to the plant kingdom, who take it in. Oxygen made it possible for the mineral world to become overrun with oxides, hydroxides, sulfates and carbonates. Earth began to rust, especially iron, which accounts for the vast tonnages of ferrous and ferric oxides everywhere.

Sooo.. as our world grinds on exceedingly fine, you can expect more and more minerals to evolve. Consider the mineral trinitite, a glassy substance. It was created when they exploded the first atomic bomb over the sands of New Mexico. Neat lookin' stuff but rather radioactive...

Upcoming Events

June 8, 2019

Indian Mounds Rock and Mineral Club's Summer Super Sale

Woodland Drive-In Church, 2600 Breton SE, Grand Rapids, MI, 9 am to Noon Info: LaDonna Austhof 616-426-7169 or www.indianmoundsrockclub.com

June 8-9, 2019 The Richland Lithic Lapidary Society Annual Show

Arts and Crafts Building, Richland County Fairgrounds, 750 N. Home Rd, Mansfield, Ohio Info: Tom Kottyan, (419) 562-1152; themineralhouse@netzero.net, www.rlls.webs.com

June 21-23, 2019 Lawrence County Rock Club Annual Show

Lawrence County Fairground, US Hwy 50, Bedford, Indiana Info: Dave Treffinger, (812) 295-3463; www.lawrencecountyrockclub.org

August 5-8. 2019 Keweenaw Peninsula, Keweenaw Wee Field Trips

10 am – 4 pm daily Info: Norm Gruber (906) 228-6764, ngruber@charter.net, www.ccrmc.info

August 9-11, 2019

UP Michigan, Copper Country Rock and Mineral Club Annual Show and Silent Auction

Contact: Norm Gruber, (906) 228-6764; ngruber@charter.net, www.ccrmc.info



Our Mission

The Livingston Gem and Mineral Society is a nonprofit organization and member of the Midwest Federation of Mineralogical Societies and the American Federation of Mineralogical Societies. Our purpose is to promote, through educational means, public interest and increased knowledge in the fields of mineralogy, archaeology, paleontology, and the lapidary arts. Livingston Gem and Mineral Society 9525 E. Highland Road Howell, Michigan 48843-9098





Tuesday, June 18, 2019, 6 pm

Potluck Picnic and General Meeting at Settlers Park

from the LGMS shop, go about 1 ½ miles east on M59 to Clark Road

(just past Meijer), then north (make a Michigan left)

on Clark Road about 34 mile to the park on the left.

Bring your own plate, silverware, beverage and a dish to share - plus, maybe a chair..

Board will meet from 3 pm to 4pm. Tuesday, June 18, 2019

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