## PRESIDENT'S MESSAGE

#### 44th Annual LGMS Rockhound's Dream Show

Two Weeks Away. Calling All Members!

Please Make a Note on Your Calendar:

September 12 - Tuesday SHOP CLEANUP STARTING IN THE AFTERNOON GENERAL MEETING IN THE SHOP, 6:00 PM Show time is Show-Off time! We need to Clean and Polish the Shop and we need every member to help.

September 14 – Thursday BEGIN STAGING FOR THE SHOW We have rocks to move from Sheila's house. Trucks and Muscles Needed!

September 15 – Friday – Noon SHOW SETUP!

September 16 – SHOW OPENS! Have you signed up for a shift? Donated an item to the Silent Auction? Baked something for the Hospitality Room? Created a Display?

September 17 – SHOW CLOSES AT 4 PM – BEST SHOW EVER!!
CLEAN UP AND CLEAN OUT THE GYM
Again, muscles, trucks and a little organization will go a long way to getting our Shop back in order.
Attached to this newsletter is a jpg file with flyers for our show. I encourage you to make copies and take them with you. We can cover a lot of territory if we all pitch in. (Copies are also available at the shop for members who get printed newsletters.)

#### LGMS CLUB BUSINESS

At our September meeting, a Nominating Committee will be selected to identify candidates for vacant or expiring Board and Committee Chair positions.

Thank you to everyone who worked on our 2018 Calendar project. The Board of Directors decided to delay production of the calendar until a design plan and budget are developed.

Lots going on! Thank you Marianna Z. for keeping our Facebook page looking so good. I expect mucho action in the next couple of weeks.

Sherlynn Everly, President



## **Workshop Hours**

Monday: 10 am to 1 pm Tuesday: 9 am to 9 pm Wednesday: 10 am to 9 pm Friday: 10 am to 2 pm

Closed on Labor Day, September 4, 2017

## 2017 Officers and Chairpersons

President: Sherlynn Everly, 810-965-5899 Vice President: AnnMarie McFadden, 248-884-8126

Secretary: Lori Keefer, 248-634-8657

Treasurer: Sheila York, 810-695-0509

First year Directors:

Jim Hansen, 248-933-1482

Sharon Parker, 517-548-0675

Second year Directors:

Sharon Krautheim, 810-701-3776

Dennis Gougherty. 810-986-9671

Hospitality and Sunshine:

Venus Sage, 810-458-4290

Shop Chairpersons: Ed Oller, 810-241-8801

Sharon Parker, 517-548-0675

Newsletter and Membership:

Isla Mitchell, 248-685-7804

imvm.1@netzero.com

Historian: Chuck Amberger, 248-787-6586

Library: Bryant Hiiter, 248-210-6138

Webmaster: Marc Lampcov

www,livingstongems.com or

www.livingstongemandmineralsociety.com General Membership Meetings are held monthly on the 3<sup>rd</sup> Tuesday at 6 pm (Except in January and February when board meetings are held in

the shop.)

#### Kiln for sale

Excellent condition,
outside dimension is 11 1/2" square,
inside dimension is 6 1/4"
includes tools and a supply of dichroic glass
\$300.00
contact Isla for additional information,
imvm.1@netzero.com or 248-685-7804

A big thank-you to Roger and Maryann Pedigo for their gift to LGMS to help in

especially with 4-H.
You are generous and thoughtful!

educating youth in the lapidary arts -



"Livingston Gem and Mineral Society"

#### **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.



# The Amazing Calcite Plant at Rogers City

Crawford's Quarry is the world's largest limestone quarry, operated by Carmeuse Lime and Stone Company. It was founded in 1912 and covers 12.5 square miles. The quarry is 4.1 miles long and 1.5 miles wide, about 8,024 acres. Fossila found there are 3.25 million years old from the Devonian period.

This facility provided all the foundation stone for the Mackinaw Bridge. Limestone is used in making steel, toothpaste, shingles, asphalt, glass, road aggregates, paint, plastics, paper, bricks, chicken feed, and in the process of making Doritos. It is also used in the process of turning sugar beets into sugar, in baby formula, powdered milk as a calcium additive, and for air purification in power plants.

The plant blasts 3-4 times each week and the average blast produces about 67,000 tons. There are 66 screens in the plant used for material sizing. There are 114 conveyors on the property. The center-to-center length is 22, 604 feet or 4.3 miles of conveyor. The total conveyor belting in use is 46,809 feet or 8.9 miles.

The company's largest truck is a Cat 789B; it holds 195 tons. It is 26 feet 9 inches high, 25 feet wide and 39 feet high at full dump. It has an 850-gallon fuel tank and the top speed, loaded or empty, is 35 miles per hour. With a V-16 engine, 1771 hp, it holds 52 gallons of engine oil. The tires costs \$28,000 dollars each.g A new truck would cost \$3 million. The truck weighs 700,000 pounds loaded, which is equal to 4,667 average weight people, or 101.5 pickup trucks weighing 6,900 pounds each. It would take 400 half-ton pickup loads or 4000 wheelbarrow loads to fill the truck.





The newest loader is a Cat 994F; it was bought in 2007 at a cost of 3.25 million dollars. The tires are 13 feet high and cost 79,000 dollars each. The chains in the front are to protect the tires from rock cuts and cost \$72,000 for the set.

908,366,341 tons of limestone have been shipped since the quarry opened. In 2016, 4.7 tons were shipped and they expect to ship about 8 million tons in 2017.

Information excerpted from company handout provided by John and Peggy Petito. Thanks!



## September 8-10, 2017 Toledo Gem and Rockhound Club Annual Show

Stranahan Theater and Greater Hall, 4645 Heatherdowns Blvd, Toledo, Ohio Info: Steve Shimatzki 419-861-0147, sjs132@gmail.com

## Our very own LGMS Rockhound's Dream Show September 16 and 17, 2017

Hartland Community Education Service Center Your volunteer time is needed and your display case is welcome! All details are in the shop.

## September 30 – October 1, 2017 Grand Traverse Area Rock and Mineral Club Annual Show

Heritage Center, 322 Sixth St, Traverse City, MI Info: Pierre LaFoille 586-907-3512, pals0210@gmail.com

## September 30 - October 1, 2017 Midwest Mineralogical and Lapidary Society Rock Swap Wayne County Fairgrounds, 10871 Quirk Rd, Belleville, MI Info: Tom Morris 313-278-5063

### October 13 – 15, 2017

#### Michigan Mineralogical Society Annual Show

Macomb Sports and Expo Center, Bldg P, 14500 E. 12 Mile Rd, Warren, MI Info: John Peters 313-255-7774, joopett13@hotmail.com

#### October 20-22, 2017

## Central Michigan Lapidary and Mineral Society Annual Show

Main Arena, Ingham County Fairgrounds, 700 E Ash St, Mason, MI Info: Roger Laylin 517-349-3249, <a href="mailto:linkage:linkag

## October 21-22, 2017 Flint Rock and Gem Club Annual Show

Carter Middle School, 300 Rogers Lodge Dr, Clio, MI Info: Bill Wendling 810-638-5796, bwrockbarn@centurytel.net



## **Iron Sand**

Paolo Sanchez, Pasadena Lapidary Society, 3<sup>rd</sup> place winner, 2005 Junior Article Contest printed in the A.F.M.S.Newsletter, April 2017

One day when I was at the beach, I coincidentally had a magnet with me. But what happened was that I accidentally dropped it into the sand. I thought that the magnet would look and stay the same when I was about to pick it up. But once I did the whole magnet was covered in a very fine black sand that was attracted to it. Later on I discovered that this strange material was called iron sand.

Iron sand is named for its large amount of iron that composes most of the sand. But it is also called black sand or iron filings. Due to the heavy concentrations of iron in the sand, it can be easily picked up by a magnet. This sand mostly contains the mineral magnetite yet it can contain hematite and other iron ore minerals, which make it easily magnetized. It can also contain different elements like titanium, vanadium, manganese, calcium, and sometimes precious metals, like gold and platinum. It is extremely common and can be found all over the world, especially on the beaches and shores of all continents, or anywhere where there is fine sand made of iron-rich rock.

The formation of iron sand like all other sands in the world, is actually quite simple. This sand originates as iron ore or (very rarely) from iron meteorites or space dust. After many years of erosion and weathering, the parent rock crumbles and weathering brings the particles or iron in the rock down to fine particles. Then, the newly-formed iron sand gets carried away, and it gets deposited in places where most sands would deposit, like in places where a river merges with the sea. But since this sand is heavier than most sands, it sinks to the bottom or it just gets trapped in rock crevices, like gold. That is why many gold prospectors find this sand in the bottom of their gold pans.

But you do not need a gold pan to find iron sand! All you need is a simple magnet and a good location to find the sand – like a sandy beach or a river bank. In some countries, like New Zealand, large magnets pull tons of iron sand from beaches to be refined to make steel. Even though iron sand doesn't really have a high value to it, it is still a really amusing object to play with when it is magnetized.





Livingston Gem and Mineral Society 9525 E. Highland Road Howell, MI 48843-9098





General Meeting on Tuesday, September 12, 2017 6 pm at the shop

(note second week of the month, not the usual third week)

\*\*cleaning bee starts in the afternoon\*\*

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, and the lapidary arts. This society was established in 1970. The annual membership fee is \$50.00 for youth ages 13-17. There is an additional fee of \$1.00 per day for workshop use. Annual dues and annual shop fees are due on January 1 of each year. The Livingston Gem and Mineral Society publishes The Living Stones. Non copyrighted articles may be reprinted provided that they are properly attributed. Newsletter deadline is the 20th of each month. Articles or correspondence can be sent to LGMS Hartland Consolidated Schools, 9525 E. Highland Rd. Howell, Michigan 48843-9098.