

The Living Stones

Livingston Gem and Mineral Society

December 2010

President's Message

Hope everybody had good times with friends and family over the last month. As you read the newsletter, check out the new and old board members. You will note that I, Marv, am still president. We had a wonderful thing happen- but also sad. Bryant, our vice president, stepped down from his nomination for president because he went back to work as a teacher (Yea! Yea!) and is loving it. I thought he would make a wonderful president, but we are very pleased for him. I told him he could come and visit as long as he had a note from his students that he could stay out late and had his homework done. GOOD LUCK Bryant!

Thanks to Ken for representing LGMS at the Hartland American Legion ceremony to thank donors to its fund to purchase a new American Flag.

Scott won the bid on the saw and flat lap. Congratulations, Scott.

We have our annual Christmas party coming up. Please bring dessert or finger food to share along with a wrapped rock-related gift of at least \$5 value if you wish to participate. If you put your name inside the gift, the recipient will be able to thank you. We'll be installing our new officers at the party.

Our snowbirds have departed to warmer weather and will still be able to enjoy shows. GOOD LUCK and BE SAFE. See you in the late spring. Everybody, please get your dues in. Thank you! Hello to all new members and if I haven't met you, let's both make an effort to meet each other. Thanks!

I'm still trying to get the name tags for those who want them. Sign up on the list in the shop. We get a better price for a bigger order. That's it for now. See you in the food line at the Christmas Party.

Marv



Field Trip/Shopping Opportunity

Visit **Bill Micol's**
treasures

Tuesday, December 14, 2010
1:30 pm.

Map to his Milford home
will be posted at the shop

Official Minutes of the Livingston Gem and
Mineral Society
November 16, 2010

Marv called the meeting to order at 6:05 p.m.
Margaret made motion to accept the October minutes, Bill seconded. Passed.
Marv reminded all that the annual dues are due.
Shop Report: Bob K reported we're getting money in from classes and using it to pay for the muff kiln. More classes will start in January. We appreciate all the cleaning that Al is doing in the shop. Bob reminded everyone that if you use the silversmith part of the shop there is a \$1 fee which goes for solder, flux, etc. This in addition to the \$1 fee to use the lapidary equipment.
Sharon moved to accept the report and Mary seconded. Passed.
Chuck has agreed to be the club historian and will soon begin interviewing some of our older members.
Marv introduced a new couple who came to visit and stayed for the meeting.
Marv is checking on the price of name tags so let him know if you are wanting one.
The grinder, motor and flat lap set in the shop is being sold. If anyone is interested, bids are being accepted. Bidding will end on November 19.
Marv reminded us to clean the equipment after we use it, including water on the mats. Thanks to Chuck for cleaning the blue saw.
New business: The annual Christmas party will be on December 21 at 6 p.m. and it was agreed that we should bring finger foods or desserts. Chuck will see if we can use the senior center. Sharon, Al, Bryant and Venus volunteered to set up for the party. Everyone should bring a rock-related gift with a value of at least \$5. New officers will be installed at the meeting.
There was discussion about casting with wax. It was decided that any time anyone does casting there should be at least two people working together. Health and safety are important.
Since Bryant recently began a full time job, he

requested that his name be removed from nomination for president because he wouldn't have the time required to do the job. Al made motion to extend Marvin's term as president for at least one more term. Sue seconded. Passed.
The nominees for offices for 2011 are: President, Marvin Martin, Vice President, Ken Blake, Secretary, Margaret Edmundson, Treasurer, Peggy Petito, second year directors, John Petito and Paul Maitre, first year directors, Violet Porritt and Lorelei Hosler. Paul M made motion to accept the nominations. Sharon seconded. Passed.
There was discussion about growing the show next year. Points included: why we want to grow the show, implications of having more dealers, need for more volunteers. Al volunteered to work on media and advertising, which needs more attention. Danielle and Sharon offered to help with this. An opinion poll was taken about whether to expand the show in 2011. A majority preferred to continue with approximately the same size show; only 3 preferred to have it grow.
At 7:42 Margaret made motion to adjourn. Isla seconded. Passed.
The group enjoyed refreshments while we watched a CD of photos taken by Tony at the 2010 Show. The pictures were excellent and we signed a thank-you card for Tony.

Respectfully submitted, Violet Porritt

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**LGMS Workshop Hours**  
**Monday 10 a.m. to 2 p.m.**  
**Tuesday 9 a.m. to 9 p.m.**  
**Wednesday 2:30 p.m. to 9 p.m.**  
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Our Mission

Our purpose is to promote, through educational means, public interest and increased knowledge in the fields of mineralogy, archaeology, paleontology, and the lapidary arts.



2010 Officers and Chairpersons

President: Marv Martin, 517-521-3135

Vice President: Bryant Hiiter, 248-889-3974

Secretary: Violet Porritt, 810-235-6286

Treasurer: Peggy Petito, 248-887-8847

Second year Directors:

David Riggs, 810-632-7146

Bill Barnett, 734-449-2907

First year Directors:

Ken Blake, 810-750-6078

John Petito, 248-887-8847

Sunshine and Hospitality:

Mary Barnett, 734-449-2907

Shop Chairpersons:

Bob Krautheim, 810-701-3776

Chuck Amberger, 248-446-0818

Marv Martin, 517-521-3135

Newsletter and Membership:

Isla Mitchell, 248-685-7804

Chuck Amberger, 248-446-0818

Library: Bryant Hiiter 248-889-3974

General Membership Meetings are held monthly on the 3rd Tuesday at 6 p.m. (Except in January and February when they are held in the shop at 1 p.m.)

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. This society was established in 1970. Annual dues are \$15 per person or family. Annual shop fees are \$10.00 per person. 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 1st of each month. Articles or correspondence can be sent to LGMS, Hartland Consolidated Schools, 9525 E. Highland Rd. Howell, Michigan 48843-9098.

Holiday Closing Schedule

The Lapidary Shop (and the HESSC Building) will be
closed as of Thursday, December 23, 2010

Reopening on Monday, January 3, 2011

Remember your dues are due!!

Tear off and mail

2011 Livingston Gem and Mineral Society Dues

Name _____

_____ adult member \$15

_____ family membership\$15

_____ annual workshop fee\$10
(each member who uses the shop must pay this fee)

_____ total payment

Please note any changes in address, email address or phone number _____

newsletter preference: _____ printed, _____ email _____ shop mail folder

LUSTROUS BEHAVIOR

The splendor of diamond, the dullness of clay and the gleam of galena are all examples of mineral luster. Luster is an important mineral property that refers to several different sorts of interaction of light with minerals.

Luster is defined by the Glossary of Geology as " the appearance of a mineral in reflected light". This is a definition typical of those found in most mineral texts, and it is easily misunderstood. When I was a kid, I bounced light off of a mirror onto a mineral's surface, to see what it looked like in "reflected light". I was confused and disappointed because the mineral looked the same as it did in "normal light"! I was being misled by a confusing definition. When told that the two important types of luster are metallic and non-metallic, most people start to understand. There is something about the way metal looks that makes it easy to recognize from a distance, some light property that is independent of its color. After all, we can tell a piece of gray plastic from a piece of gray metal without them picking them up.

A mineral with a metallic luster will absorb or reflect virtually all light that strikes its surface. Since no light penetrates into them, metallic minerals are opaque in even the thinnest slivers. This property has to do with the closeness of the atom spacing in the structure and the kind of bonds holding the atoms together.

A non-metallic mineral allows at least some light to penetrate through it. Some non-metallic minerals are transparent, others will let light through on only thin edges. Biotite mica is a good example. Big chunks of biotite are dark brown and seem opaque. however, if you break off tiny flakes and hold them up to the light, you can see, especially with the use of a hand lens, that light gets through the biotite.

A few minerals, such as goethite and sphalerite, show submetallic luster. in which a tiny amount of light penetrates into them. We may not be able to detect this on thin edges with the eyes, but the light penetration is enough so that the mineral, though dark, does not have the typical surface appearance of a metal. Non-metallic minerals are commonly subdivided into different luster categories due to the way light behaves when it hits the mineral's surface, or as it passes through the mineral. The most common non-metallic lusters are adamantine, vitreous, resinous, greasy, and pearly. Adamantine luster is the brilliant luster for diamonds and other gemstones. The sparkle originates from the slow speed of light through the mineral and the way it is bent as it passes through. Diamond cuts are angled to take advantage of this and focus and emphasize the light rays still more. Vitreous, or glassy, lusters do not bend or slow the light as much, producing a shiny, but not spectacular, gleam. A resinous luster has the appearance of broken shellac and is due to a further slowing of the light. Greasy lusters are due to the light interacting with a surface_film on the mineral. A good example is halite, which usually has a film of absorbed water on its surface. Another example is a refrigerator door opened by too many dirty hands! Pearly lusters occur when light is split into its different colors by layers below the minerals surface, acting as natural prisms.

Some minerals such as clay have a dull or earthy luster. These minerals consist of masses of tiny, randomly oriented particles that scatter the light. Instead of absorbing the light or reflecting it back at a particular angle, each grain reflects some of the light back in a different direction. That makes the surface look dull, with no shine in any one direction.

And, at the risk of ending on as dull note, that is the sparkling story of luster.

Bill Cordua, U.W. - River Falls

References:Sinkankas, John, 1964, *Mineralogy for Amateurs*, N.Y., Van Nostrand Reinhold publishers, 585.

Gary, Margaret, McAfee and C. Wolf, editors, 1974, *Glossary of Geology*, American Geological Institute, Falls Church, Va.

Livingston Gem and Mineral Society

9529 E. Highland Road

Howell, MI 48843-9098



Annual Christmas Party
6 p.m. Tuesday
December 21, 2010
at the Senior Center

**Bring food or dessert to share and
a rock-related gift of at least \$5.00 value**