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Livingston Gem and Mineral Society

October 2014

President's Message

Dear club members,

Thank you for your hard work this past month. Whether it was cleaning the shop Tuesday, Friday set-up, working at one of the tables on Saturday or Sunday, or tear down Sunday evening, thank you for your willing spirit to make this year's show one of our most successful in a long time. You can ask our treasurer, Peggy Petito, for the exact numbers, but it was great. I am so happy that so many of you understand that to be part of a club means to give some of your time and sweat back to the club for all the benefits it gives you.

Now that the show is over, it is time for us to reward ourselves for another successful year. Our club is 44 years old and still going strong! The LGMS Banquet will be Tuesday, October 21, at 6 p.m., and our after-dinner presentation will be by Jeff Anderson. PLEASE notify and pay Vi Porritt, Peggy Petito, or one of the officers by October 10. We need a final number for the caterers. You do not want to miss this. Where else can you get a meal and a show for \$14?

Once again, thank you. There were so many people I saw working hard I can't mention you all for fear of missing some. Please just know that your hard work was not unnoticed.

Workshop Hours

Monday: 10 a.m. to 1 p.m. Tuesday: 9 a.m. to 9 p.m. Wednesday: 10 a.m. to 9 p.m. Friday: 10 a.m. to 2 p.m.

Correction

The date of our annual Banquet is **October 21, 2014.**

It was incorrectly reported in the last newsletter.

So sorry for the inconvenience!



Bryant

General Meeting

Sept 16, 2014

Meeting was called to order by President Bryant Hiiter. Nineteen members present. There were no minutes from last month.

Treasurer's Report: Peggy Petito stated that the club finances are doing well. All financial commitments have been met and the club is in good standing. Motion was made to accept the report by Ed Oller and seconded by Bob Kalis. Passed

Shop Report: Shop Chairman Chuck Amberger informed club members that all machinery and such are in good working order. Member Bob Kalis brought to the meeting a request for new splash guards on the wheels. It was also brought to the meeting that everyone needs to remember to clean up after themselves, also the problem with the trays draining properly was discussed.

No Old Business.

New Business: Past President Ken Blake was hospitalized and is now recovering at home. A card was sent from our members. A request for donation of plastic grocery bags for the show was made by President Bryant. Member Bob Kalis requested that we limit the time we can cut rocks during the show, perhaps doing this only at the end of the day. There was discussion about moving the silent auction table to a more desirable spot. Bryant informed the members that we can begin readying the gym for the show at 12:30 on Friday. Continuing with the discussion of the upcoming show, remarks on the number of carts that are available for club use was brought before the meeting. Tables are to be delivered on Thursday. There will be no

kids from the Legacy group to help with the setup for the show, as has been in years past.

Bryant thanked everyone for the major cleanup performed today, and said that the shop looked great.

No further business was discussed and no one brought snacks for after this meeting. Motion made to adjourn meeting made by Bob Kalis and seconded by Jill Allen.

Respectively submitted,

Sheila York, secretary, from minutes taken by member Sharon Krautheim



2014 Officers and Chairpersons

President: Bryant Hiiter, 248-889-3974 Vice President: Gayland Allen, 810-275-3444

Secretary: Sheila York, 810-695-0509 Treasurer: Peggy Petito, 248-887-8847 First year Director: Margaret Edmundson, 248-634-5046

Paul McEwen, 810-735-5832

Second year Directors: Ed Oller, 810-241-8801 Third year Director John Petito, 248-887-8847

Hospitality: Venus Sage, 810-458-4290 Sunshine: Isla Mitchell, 248-685-7804

Shop Chairperson: Chuck Amberger, 248-787-6586

Newsletter and Membership:

Isla Mitchell, 248-685-7804 imvm.1@netzero.com

Show Chairman and Historian:

Chuck Amberger, 248-787-6586

Library: Bryant Hiiter, 248-889-3974

Webmaster: Emily Saling

General Membership Meetings are held monthly on the 3rd Tuesday at 6 p.m. (Except in January and February when board meetings are held in

the shop at 1 p.m.)

National Fossil Day October 15th

The National Park Service and the American Geosciences Institute are partnering to host the fifth annual National Fossil Day on October 15, 2014 during Earth Science Week. National Fossil Day is a celebration organized to promote public awareness and stewardship of fossils, as well as to foster a greater appreciation of their scientific and educational value. Fossils discovered on the nation's public lands preserve ancient life from all major eras of Earth's history, and from every major group of animal or plant. In the national parks, for example, fossils range from primitive algae found high in the mountains of Glacier National Park, Montana, to the remains of ice-age animals found in caves at Grand Canyon National Park, Arizona.

See http://nature.nps.gov/geology/nationalfossilday

Bardarbunga volcano, Iceland Eruptions August 31, 2014.





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.

Upcoming Events

October 10, 11, 12, 2014 Greater Detroit Gem, Mineral, and Fossil Show

Macomb Community College, 12 Mile and Hayes, Warren, MI Info: www.michmin.org

October 18 and 19, 2014 Flint Rock and Gem Club's 47th Annual Gem-Jewelry-Mineral Show

Carter Middle School, Rogers Lodge Drive, Clio, MI

October 21, 2014

Indian Mounds Rock and Mineral Club's Silent Auction

Wesley Park United Methodist Church, 1150 32nd St, Wyoming, MI Info: donvandyke@tm.net or 616-530-9571

October 24-26, 2014

Central Michigan Lapidary and Mineral Society's 49th Annual Show

Ingham County Fairgrounds, Main Arena, 700 E. Ash St, Mason, MI Info: lr.laylin@gmail.com or 517-349-3249

November 1-2, 2014 Mid-Michigan Rock Club's Annual Show

Midland Convention Center, 1500 W. Wackerly St, Midland, MI Info: dale989@sbcglobal.net or 989-837-1829

November 10, 2014

Michigan Mineralogical Society's Annual Auction

Cranbrook Institute of Science, 39221 Woodward Ave, Bloomfield Hills, MI Info: hurtmillie@gmail.com or 248-398-6693

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LGMS, Hartland Consolidated Schools, 9525 E. Highland Rd. Howell, Michigan 48843-9098.

Petrified Wood Colors and Petrification Information/Fact sheet Information from the Petrified Forest National Park

Red and pink: these colors are produced by the presence of hematite. Hematite is a form of oxidized iron. The chemical composition of hematite is Fe_2O_2 . The intensity of the red and pink color depends on the quantity of hematite present in the petrified wood. Iron dissolves in ground water when there is no oxygen present (in other words the iron becomes soluble in oxygen-depleted water which is usually always the case with ground water). As the water moved through the tree trunks it came in contact with oxygen. The oxygen then bonded with the iron causing the iron to precipitate out of water and produce a solid form of iron called hematite, which was incorporated into the wood cell walls. This is the same process that occurs when iron stains porcelain sinks. The soluble iron found in ground water becomes oxidized into a solid form of iron when it comes in contact with oxygen-laden air, which then sticks to porcelain causing a reddish stain.

Yellows, brown, and orange: these colors are produced by the presence of goethite. The chemical composition of goethite is HfeO₂ and Fe₂O₃. Goethite is a hydrated iron oxide that is derived by weathering from iron bearing minerals. It crystallizes into tablets, scales, and needles, radial and concentric aggregates.

Green: this color in the petrified wood is produced by pure reduced iron. The chemical composition is Fe. This form of iron is referred to as native iron and is quite rare in terrestrial rocks but common in meteorites. This form of iron is a magnetic, malleable mineral. The chief reason for the small supply of native iron is the fact that iron rusts very easily, which is only the popular way of saying that it readily combines with oxygen. Native iron combines with chlorophyll to give tree leaves and plants their green colors.

White: this color is produced by pure silica. The chemical composition is SiO₂. Since silicon, Si and oxygen, O, are the two most abundant elements in the earth's crust, silica group minerals are common everywhere. Free silica, SiO₂, occurs most commonly as quartz and scientifically is referred to as silicon dioxide. The structural arrangement of the silicon and oxygen creates an open bonding structure that permits other ions such as the various forms of iron to occupy interstitial positions in the molecule and bond to it, thus producing variations in color. Quartz is the principal constituent of glass. In many respects quartz is the most interesting of all minerals. It has a larger number of distinct varieties and there are wider differences between them than in the varieties of any other mineral. Among the most abundant types are quartz pseudomorphs after shells, after wood, and after corals, etc. Petrified wood, also referred to as silicified wood, is the commonest illustration of a quartz pseudoporph. The wood is slowly replaced, cell-by-cell, by silica, until not a trace of the original material remains.

Black: this color is produced by either organic carbon or pyrite. The chemical composition of pyrite is FeS₂ (iron sulfide), and this mineral is the most abundant and widespread sulfide mineral. This mineral formed in the petrified wood when hydrogen sulfide from decaying organic matter interacted with iron, which in turn formed pyrite inside the wood. Often it is called "fool's gold" because it has been mistaken for gold. Pyrite, translated freely, means "fire mineral". An allusion to the fact that it gives off sparks when struck.

Purple and blue: these colors are produced by manganese dioxide. The chemical composition is MnO₂. This is a secondary material formed when water leaches manganese from igneous rock and redeposits it as a concentration of manganese dioxide. As a result it occurs more often as coatings on other minerals than as large crystals. Manganese is very important in the manufacture of steel.

Petrified wood that is uniformly tan colored is often referred to as per mineralized wood. The tan color just indicates that there are not very many other minerals besides silica present in the petrified wood. However, the cell structure is much better preserved in the tan specimens than in the others, so it looks more like real wood. It should be noted that all the petrified wood in the national park is per mineralized.

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





LGMS Annual Banquet Tuesday, October 21, 2013, 6 p.m. in the Senior Center

\$14.00 per person
make your reservation with Vi Porritt
810-515-1550 or vporritt@comcast.net

Jeffrey Anderson will be our very special guest speaker.
Come to enjoy good food, great company!