ROCK TRAILS

Newsletter of the StateLine Gem and Mineral Society

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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

It is a difficult time for us to keep in touch. I have posted some information on our Facebook page, but many members don't have access to this information. So this is just a brief update on what's happening.

Carl Mulholland had a slight stroke Friday evening, September 4 and was at Evangelical Homes of Michigan Foundation, 440 W Russell St., Saline, MI 48176. He then fell on Monday, September 14 and broke his hip and had surgery at Saint Joseph Hospital , Ypsilanti , MI. His wife Beverly said surgery went well.

On September 9 Sherman Kardatzke's brother, Herman Tompkins died in West Virginia.

Glenda Gafner posted on Facebook that she was scheduled for knee replacement surgery on September 16. She had family and friends lined up to help her during her recovery.

Our Sunshine representative, Kathy Boyers has sent cards letting them know that we care. If you have information that you would like to share with other members please let someone know. Kathy sends cards as needed, and I will post information on our Facebook page when notified. I know everyone misses seeing their friends. Sandy Gerhart is doing a wonderful job in preparing the newsletter each month. I am certain she would appreciate any submissions from fellow members about past trips or stone creations.

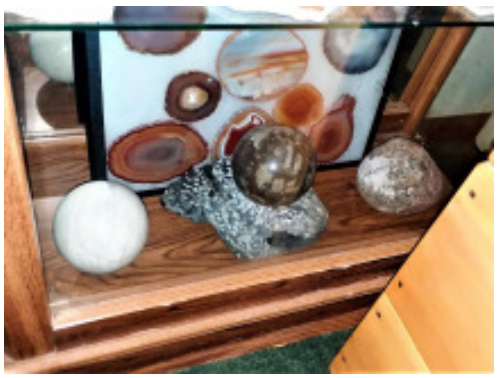
Richard Brzezicki

Carl Mulholland"s new address after hip replacement is Kresge Rehab Center, 805 West Middle St., Room 1712,Chelsea MI 48118

Shared by Tom Barnhizer

Meg and I toured the Crystal Cave on Perrys Island in late 2919. The Celestite crystals ranged in size from a few inches to over 18 inches square. This would make them the largest known specimens in the world. Access to the cave was improved when the Smithsonian Museum removed a large portion of the crystals to put on display at the Museum of Natural History. I hope that you like my photos.

Here is the top shelf of my new Rock and Mineral Display cabinet. I am working on creating ID labels for each specimen. The below attached pics are of the middle and lower shelves where I display fossils and stone artifacts.



14 Facts You Should Know About Minerals

1- A mineral is a naturally occurring substance, representable by a chemical formula, that is usually solid and inorganic, and has a crystal structure.

2- The exact definition of a mineral is under debate, especially with respect to the requirement a valid species be abiogenic (not produced or brought about by living organisms), and to a lesser extent with regard to it having an ordered atomic structure.

3- There are over 5,300 known mineral species; over 5,070 of these have been approved by the International Mineralogical Association (IMA).

4-The silicate minerals compose over 90% of the Earth's crust. Silicon and oxygen constitute approximately 75% of the Earth's crust, which translates directly into the predominance of silicate minerals.

5- Minerals can be described by various physical properties which relate to their chemical structure and composition. Common distinguishing characteristics include crystal structure and habit, hardness, lustre, diaphaneity, colour, streak, tenacity, cleavage, fracture, parting, and specific gravity. More specific tests for minerals include magnetism, taste or smell, radioactivity and reaction to acid.

6- Non-silicate minerals are subdivided into several other classes by their dominant chemistry, which included native elements, sulfides, halides, oxides and hydroxides, carbonates and nitrates, borates, sulfates, phosphates, and organic compounds. The majority of non-silicate mineral species are extremely rare (constituting in total 8% of the Earth's crust), although some are relative common, such as calcite, pyrite, magnetite, and hematite.

7-The base of unit of a silicate mineral is the [SiO 4] 4•tetrahedron. In the vast majority of cases, silicon is in four-fold or tetrahedral coordination with oxygen.

8-Minerals are not equivalent to rocks. A rock is either an aggregate of one or more minerals, or not composed of minerals at all.

9-The abundance and diversity of minerals is controlled directly by their chemistry, in turn dependent on elemental abundances in the Earth.

10- The majority of minerals observed are derived from the Earth's crust.

11- Eight elements account for most of the key components of minerals, due to their abundance in the crust. These eight elements, summing to over 98% of the crust by weight, are, in order of decreasing abundance: oxygen, silicon, aluminium, iron, magnesium, calcium, sodium and potassium.

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14 Mineral Facts

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12- Differences in crystal structure and chemistry greatly influence other physical properties of the mineral. The carbon allotropes diamond and graphite have vastly different properties.

13- Three main groups of minerals are identified on the basis of the Property of color: idiochromatic, allochromatic, and pseudochro-matic.

Idiochromatic minerals are “self colored” due to their composition. The color is a constant and predictable component of the mineral. Examples are blue Azurite, red Cinnabar, and green Malachite.

Allochromatic minerals are “other colored” due to trace impurities in their composition or defects in their structure. In this case, the color is a variable and unpredictable property of the mineral. Examples are the blue in Amazonite (orthoclase), yellow in Heliodor (spodumene) and the rose in rose quartz.

Pseudochromatic minerals are “false colored” due to tricks in light diffraction. In these cases, color is variable but a unique property of the mineral. Examples are the colors produced by precious opal and the shiller reflections of labradorite.

14- A few minerals can change their color depending on the light angle. Color change gems show different colors when viewed under different light sources, such as sunlight and indoor light. But unlike other color change gems such as Alexandrite, Zultanite’s color change is not limited to two basic colors.

http://www.geologyin.com/2017/02/14-facts-you-should-know-about-minerals.html

Spider Rock : Home of Spider Woman

Spider Woman and Spider Rock

According to Navajo legend, Spider Woman lives at Spider Rock in Canyon De Chelly. She was first to weave the web of the universe. She taught the Navajo how to weave, how to create beauty in their own life and to spread the "Beauty Way" teaching of balance within the mind, body & soul. On the other hand Spider Woman has a bit of a dark side. But let's start off with the bright.

In the Navajo creation story, the first world was small and pitch black. There were four seas and an island. In the very middle of the island was a single pine tree. Ants, dragonflies, locusts and beetles lived there and made up the Air-Spirit People of the first world.

The second world was known as blue, where life was given to Spider Woman & Spider Man. Only their inner spirits or souls were made. Their physical bodies were made later to contain their spirits when they evolved into future worlds.

In the third world the holy ones advised Spider Woman that she had the capabilities of weaving a map of the universe and the geometrical patterns of the spirit beings in the night sky. At first she did not know what they meant, and was not told how it could be done. Curiosity became her energy and driving force to learn to weave as the holy ones instructed.

On a beautiful day when she was out on the land, exploring and gathering food, she came upon a small young tree. She touched it with her right hand and wrapped her fingers around one of its branches. As she was letting go, a string streamed out the center of her palm and wrapped around the tree branch. She was not quite sure what the string was. At first she shook her hand to release the string, but it would not break free. She thought if she kept wrapping the string around the branch it might let go.

Spider Woman started maneuvering and manipulating the string into various shapes. At this particular moment, she knew this was the weaving the holy people instructed her to do. Immediately she broke the string with her left hand without hesitation. She sat and thought carefully about how to use her new gift. For the rest of the day she sat close to the tree and wrapped the string into various patterns on other branches of the small tree.

The holy ones heard about Spider Woman's new talent and came to visit her. During the visit the holy ones instructed Spider Man to construct a weaving loom and also create the tools used in the various processes of weaving. At this time Spider Woman began to sing the weaving songs, given to her by the holy ones. The songs empower the weavings and the weaving tools.

Dineh (Navajo) of today live in the fourth world, known as the "Glittering World". Young weavers are instructed to find a spider web in the early morning, glistening with sunlight and sparkles. They are told to place the palm of their right hand upon the spider's webbing without destroyi-g or damagi-g the web. At that mome-t Spider Woma-'s gift of weavi-g e-ters the you-g weaver's spirit, where it lives forever.

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Spider Rock
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Spider Woman's dark side. Navajo elders warn young children that Spider Woman is always on the look out for mischievous and disobedient children. When she finds them, she spins them tight with her web and takes them to the top of Spider Rock. There she boils and eats them. Their left over bones melt in the sun which create the white bands at the very top of Spider Rock. Yikes. Kids, be on your best behavior!

The Many Uses of Rocks

Rocks have a very varied use, both during ancient and in modern times. Rocks, in ancient times, were used as shelter by primitive cavemen. This can come in the form of caves on mountainsides, or actual dwellings made from large rocks. They also used rocks as weapons, either for throwing at or for bludgeoning an enemy or prey. Rocks are also used for art purposes in the form of rock paintings, as well as for starting fires.

Rocks have also been used as currency since ancient times. Our ancestors have utilized these rocks in exchange for goods way before the use of coins or paper bills. They utilized anywhere from large circular stones to pebbles with holes or carved symbols.

Ancient Egyptians used rocks made primarily out of limestone to create the pyramids. Meanwhile, sandstone was the main type of rock used for the construction of Stonehenge. Lastly, sandstone, marble, and slate are the key components in the creation of the Taj Mahal. Even now, modern building materials such as concrete utilize gravel and other types of rocks in their composition. Due to the unique structure as well as their ability to sculpted, rocks can also be made into decorative pieces of art. Michelangelo's David and Venus de Milo are made of marble and have stood the test of time. Stone furniture such as fountains, birdbaths, kitchen counters, and other ornaments can also be done.

One of the main uses of rocks is that they are containers for precious minerals which would otherwise be difficult to find. Mining minerals from rocks is a multi-trillion dollar industry, and many countries thrive because of this. As materials for industries such as electronics or medicine cannot be created artificially, reliance on mining is essential for growth.

While some may think of rocks as boring pieces of pebbles, dust, and stones. However, there is actually a lot of interesting information about them, if you only do your research. In fact, that's the entire reason why there's an entire field of study dedicated to rocks.

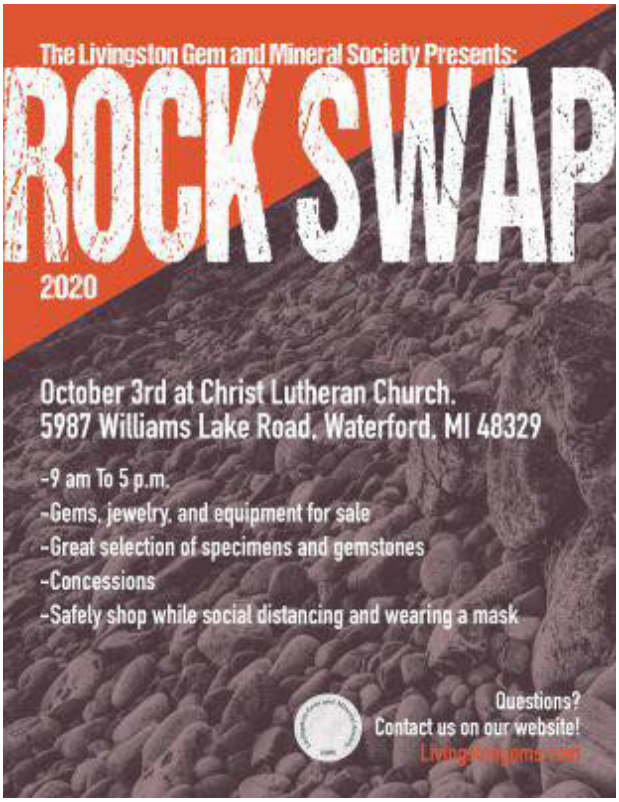
Rocks take form and shape through countless millennia. Our time on this Earth, to rocks if they were capable of sentient thought, is akin to a blink of an eye. They have been a part of this Earth for over four billion years. They will be here long before we are gone. As such, along with their amazing properties and functions, they deserve our respect and awe. Rocks may seem simple enough, but they hold the mysteries of the world. As such, you should never look at boulders and pebbles the same way again.

https://poplisticle.com/science/5-weird-facts-about-rocks/

Upcoming Events

No October Meeting

State Line Gem & Mineral Society
monthly meeting
201 W. Main St.,
Morenci, MI 49256



Oct. 16 - 18
Fort Wayne, IN
Three Rivers Gem & Mineral Society Show
Home & Family Arts Bldg.
Allen County Fairgrounds
2726 Carroll Road
Fort Wayne, IN
MASKS MANDATORY, gloves suggested

Oct. 17 - 18
Clio, MI
Flint Rock & Gem Club
Carter Middle School
300 Rogers Lodge Dr.
Clio, MI

Ongoing - Currently canceled
Richard Brzezicki is at the clubhouse on
Thursdays 1:00 pm - 6:00 pm. It is best to check with
him first before you go. Cell (269) 267-7666

Sherm Kardatzke will be holding cabbing classes on
Thursday evenings, 6:00 pm - 9 pm.

Wire Wrapping Sessions at Hobby Lobby in Adrian on
Fridays 11:00 am - 3:00 pm.
Linda Miller (419) 923-2090 and
Judy Snyder (517) 902-3990
(check to verify there will be someone there)

Rock Trails

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

Meetings are held the first Sunday of each month at 2:00 PM at 201 W. Main St., Morenci, MI 49256