

Hatrockhound Gazette 2021

PO Box 1122, Hermiston, Oregon 97838



**Meetings at 6:30 on the 2nd
Tuesday of each month
First Christian Church of
Hermiston:
775 West Highland
(Go to back of church)**

**President - Doug Gill
V. Pres. - Mike Filarski
Secretary - Trista Meek
Treasurer - Mel Lambert
Newsletter/Website - Judi
Allison**

Contact Numbers: Mike 541-571-2593, Judi 541-720-4950



**Hatrockhounds Gem and Mineral Society is Affiliated with:
The Northwest Federation of Mineralogical Societies
And The American Federation of Mineralogical Societies**



AFMS Rockhounds "Code of Ethics"

I will respect both private and public property and will do no collecting on privately owned land without permission from the owner.

I will keep informed on all laws, regulations or rules governing collecting on public lands and will observe them.

I will, to the best of my ability, ascertain the boundary lines of property on which I plan to collect.

I will use no firearms or blasting material in collecting areas.

I will cause no willful damage to property of any kind such as fences, signs, buildings, etc.

I will leave all gates as found.

I will build fires only in designated or safe places and will be certain they are completely extinguished before leaving the area.

I will discard no burning material - matches, cigarettes, etc.

I will fill all excavation holes which may be dangerous to livestock.

I will not contaminate wells, creeks, or other water supplies.

I will cause no willful damage to collecting material and will take home only what I can reasonably use.

I will practice conservation and undertake to utilize fully and well the materials I have collected and will recycle my surplus for the pleasure and benefit of others.

I will support the rockhound project H.E.L.P. (Help Eliminate Litter Please) and will leave all collecting areas devoid of litter, regardless of how found.

I will cooperate with field-trip leaders and those in designated authority in all collecting areas.

I will report to my club or federation officers, Bureau of Land Management or other authorities, any deposit of petrified wood or other materials

on public lands which should be protected for the enjoyment of future generations for public educational and scientific purposes.

I will appreciate and protect our heritage of natural resources.

I will observe the "Golden Rule", will use Good Outdoor Manners and will at all times conduct myself in a manner which will add to the stature and Public Image of Rockhounds everywhere.

Hatrockhound Gazette - September 2021

Tuesday, September 14th, 6:30 pm UGLY ROCK CONTEST

Find a rock you think is an unworthy, ugly thing and bring it to the meeting.

Maybe it (and you) will win a prize

Treats by Mike Filarski and Judi Allison

No August Meeting, So No Minutes

And a Good Time Was Had By All. . .

Although I did not make it to the picnic, I heard all enjoyed the day. . .great food, great rocks and a great auction!

HATROCKHOUNDS Gem & Mineral Society (Executive Meeting –August 30, 2021)

Mel gave us a report of the total money in the treasury. He said that the reimbursement for the incorrect deposit slips had been credited. It was put in the account as a deposit, so it took him a bit to correlate the two. Mel is sending out a second check for the Oregon Council of Rocks. We had sent a check in January at the same time our NFMS dues were sent. Neither check made it to its intended destination. The Federation money was resubmitted earlier.

Mel reported that after the shelter and chicken costs, the auction brought in enough to net \$6.01.

We filled out the credentials for Mike to fill in for Mel at the Northwest Federation annual meeting to be held on September 11th.

We plan for our show to be May 14-15. Mike will verify it with EOTEC.

We will be having elections again in October for Vice President and Treasurer. Mike and Mel are both willing to continue to serve in those capacities. We also are ready and willing to take nominations from the floor, if anyone is interested.

We decided to have an Ugly Rock Contest for the September 14 meeting. Mike will furnish a prize, so dig out something you think is really ugly. Judi and Mike will bring treats. We can still use a second person for October and November treats, so please consider volunteering.

5 Of the Most Valuable Gemstones

Pink & Blue Diamond Pink and blue diamonds are the rarest diamonds on earth. The blue is created by trace amounts of boron trapped in the diamond crystal. The pink is caused by stress or distortion in their crystal structure. A pink diamond could sell for as much as 1.19 million dollars per carat. A blue diamond can cost almost 4 million dollars per carat.

Tanzanite Tanzanite is a dark blue to purple variety of the mineral zoisite. It is only found in the nation of Tanzania. Gem-quality tanzanite has a very rare

property called *trichroism*, which means, *three colors*. The color you see in the gemstone depends on which direction you look at it. From one direction it is deep blue. From another it is purple.

From another it is red. A very good tanzanite gem will cost at least 1,200 dollars per carat.

Beryl var. Emerald There are a number of different varieties of beryl that are cut into gemstones. The most valuable is emerald. Some high quality emeralds are even more valuable than diamonds of the same size. An excellent beryl gemstone can be worth more than 305,000 dollars per carat.

Alexandrite Alexandrite is a gem variety of the mineral chrysoberyl. Its color depends on what kind of light is shining on it. When it is seen in sunlight it is green. When it is seen in lamplight it is red. Some people have said that alexandrite is “emerald by day and ruby by night.” A high-quality alexandrite gem is worth at least 70,000 dollars per carat.

Ruby The mineral corundum is a fairly common mineral. Most corundum crystals are crushed to make sand paper. But deep red, gem-quality corundum, known as ruby, is very valuable. Rubies (and sapphires and all corundum) is number 9 on the mineral hardness scale. The only mineral harder than corundum is diamond. High-quality ruby gems are worth at least 1.18 million dollars a carat. (The values for these gems that Diamond Dan used here are from this web site: <https://www.thepearlsource.com/blog/most-valuable-gemstones/>)

5 Most Common Rock Forming Minerals

Feldspar Feldspar is the most common mineral in the earth’s continental crust. Granite and pegmatites contain a lot of feldspar. Granite (like the granite mountains of New Hampshire, USA) are mostly pink orthoclase feldspar. (There are many different types of feldspar.) The different types of feldspar include orthoclase feldspar, microcline feldspar and labradorite feldspar. The green variety of microcline feldspar is called amazonite. Labradorite is found as masses. When the masses are sliced and polished, they show flashes of iridescent colors (yellow, blue, purple, red all mixed together).

Quartz The second most common mineral in the earth’s continental crust is quartz. Quartz crystals can be as small as a grain of salt. And they can be as large as a car. And they always have six sides due to the fact that they crystallize in the hexagonal crystal system. Much of the quartz is massive. And sometimes it is present only as small grains, like the grains of quartz in granite. But very often, quartz can be found in large, beautiful, glassy crystals. And it is found in many colors: purple, yellow, brown, black, green, blue, red, pink.

Amphiboles There are many different amphibole minerals. The name “amphibole” is the name of a group of minerals. They are formed in igneous and metamorphic rocks They can be green, black, colorless, white, yellow, blue, or brown. The International Mineralogical Association currently call amphiboles a mineral “supergroup.” This is because there are two main groups and within the two groups there are more smaller groups. Here are some of the better-known amphibole minerals: Amphiboles are minerals of either igneous or metamorphic origin. Anthophyllite, Tremolite, Actinolite, Hornblende, Riebeckite (or Crocidolite, a form of asbestos), Arfvedsonite, Richterite

Micas Mica minerals can be found in metamorphic and igneous rocks. And they can be found in nicely-formed crystal groups. And mica minerals are interesting because they can be split into very thin sheets. This is called micaceous cleavage. So a mica “crystal” is actually hundreds of sheets of mica piled on top of each other forming one larger crystal. You will find mica flakes in granite. Take out your hand lens (magnifier) and look for shiny flakes of mica. Some of the varieties of mica that you might have heard of are biotite (black), phlogopite (brown), muscovite (silvery-white to yellow), and lepidolite (light purple).

Calcite The mineral calcite has a chemical formula of CaCO₃. Limestone (a sedimentary rock) and marble (a metamorphic rock) are both composed of CaCO₃. Good calcite crystal specimens, however, are found in sedimentary rocks like limestone and sometimes even in igneous rocks. Calcite can be colorless, green, red, yellow, brown, black, golden yellow. (Mini Miner Monthly Vol 13 No. 8 August 2021)

RUTILATED QUARTZ

First off, quartz is the most common mineral on Earth. It is found in nearly every geological environment and is a component of almost every rock type. I’ll bet somewhere in your collection you have at least one

piece of quartz. Did you know that it makes up about 12% of the earth's crust, occurring in a wide variety of igneous, metamorphic, and sedimentary rocks? It is also the most varied in terms of variety and color. Quartz is a 7 on the Mohs scale of hardness but you already know that because we've spoken about that several times before. The name quartz comes from the Saxon word *querklufferz* which meant cross vein ore. Rutilated quartz (sometimes referred to as Cupid's darts, Venus hair stone, and *fleches d'amour*) is quite simply quartz stone with rutile enclosures. Rutile is a mineral that is made up mostly of titanium dioxide, or TiO_2 . As a mineral, rutile is very high on the refractive index and disperses more than almost any other mineral. This means that when rutile appears in other minerals, it almost always appears in long, thin shots of color. Rutilus is, in fact, the Latin word for red. The mineral gained this name because some specimens are a lovely deep red color. Rutile, however, can also appear in brown and gray tones. Rutile often forms needle-like crystal inclusions inside quartz and this form of quartz is known as rutilated quartz and it looks like small bars of imbedded gold. Rutile is a 6 on the Mohs scale. Because of the difference in hardness between the two materials and because of the way rutile forms inside, this can be a difficult stone to attain a smooth surface without pits. Rutilated quartz is found in Australia, Brazil, Kazakhstan, Madagascar, Norway, Pakistan and the United States. From a mythical perspective, rutilated quartz is believed to bring forth each person's strengths, originality, aids sleep, relate to others. Rutile itself is said to intensify the metaphysical properties of its host crystal and to enhance one's understanding of difficult situations. It is also said to enhance creativity and to relieve depression and loneliness. Rutilated quartz is also believed to slow down the aging process and is said to be a strong healer. Guess I'll give it a try and see if it helps with my hair line. ~ DW (via Rocky Trails, November 2011)
West Seattle Petroglyphs April 2021

Why Judi Wasn't at the Picnic. . .

A little Gneiss in Skagway



Glacier Bay



Princess Cruise Line



Mendenhall Glacier



Ketchikan built on a rock



Near Skagway

Totem in Ketchikan

