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)

Officers:
President – Bill Shipp
V. Pres. – Mike Filarski
Secretary – Rita Watterson
Treasurer – Mel Lambert
Member at Large – Laura
Tiffany

Newsletter/Website – Judi Allison, 1701 NW 11th St, Hermiston, OR 97838 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 - March 2021 Issue

March Meeting: Tuesday, March 9, 2021, 6:30 pm
Come Say Hi To Our Friends, Old And New
Program: Faux Sand Creation in a Bottle
I guess you will have to come to the meeting to find out
what this is all about.

Bring a specimen to share with others. The March birthstones are aquamarine and bloodstone, if you have either of those to share. . .or anything you choose.

Hatrockhounds Gem and Mineral Society Meeting Minutes February 9, 2021

This is our first meeting since last July. We had 13 participants join us.

General Business Mike acting as president called the meeting to order at 6:45 pm. His first order of business was to ask for any correspondence. Our Treasurer, Mel related the information about receiving a check from John VanMechelen for dues plus a donation. John had also mentioned his wife passing last May. Mel returned the check with a sympathy card, thanking John for his generosity and explaining that we were not collecting dues for this year because of Covid. Mel also reported that the NFMS dues and dues for the Oregon Mineral Council had both been paid.

Mike then gave an overview of the preparations for the Show we are HOPING to have May 22-23rd. We tried to get the third weekend back, but EOTEC had the date filled. He let the membership know that he Mel and Judi has met to discuss various alternative possibilities for the show, such as an outside venue or different location. After weighing all the pros and cons, the decision was to remain at EOTEC. Mike has spoken to between 11-13 dealers who all are interested and willing to participate. He said the food vendors, Judy and Darrel Scott had sold their truck, but still had supplies to vend. Trista and Warren mentioned some friends of theirs from Ukiah who also are vendors. They passed the information on to Mike. Judi let the NFMS newsletter and know and sent the information the Rock and Gem online bulletin. Let's all hope for this to come to fruition.

Show and Tell:

Karli brought some items to share including an agate piece and coral. (This note taker (Judi) did not transcribe her notes until later and was unable to decipher what she wrote, so she apologizes to Karli.)

Mike showed a couple of small "evergreen trees" on which he used small stones and varying sizes of wire. **Hope** had a collection that included quartz, a small geode, agate piece, and an oyster shell she gave to her Aunt.

Chris was excited to learn her rock was a pyrite sun. She also shared an amethyst her husband bought for her, rose quartz and small geode.

Door Prizes: Judi deferred her prize to Hope who received a set of Lucky Strike thundereggs donated by Trista and Warren. Jim and Hope each gained necklaces thanks to Trish. And Warren received a sphere from the prizes purchased by the club. Thanks to the donors and congratulations to the winners.

Program: Members were given a list that included the 7 **crystal systems**. There were seven specimens on the table that aligned with each of the systems. The job was to match each to its respective system.

Executive meeting: Monday, February 22 7:00 at Judi's. Everyone is welcome

MARCH MEETING: Tuesday, March 9th 6:30 (Masks required)

FAUX SAND CREATION IN A BOTTLE (You will have to come to find out. ⁽²⁾)

WEBSITE: jall23.wixsite.com/hatrockhounds

Judi Allison, Acting Secretary

CRYSTAL STRUCTURE

All minerals, by definition are also **crystals**. Packing of atoms in a **crystal structure** requires an orderly and repeated atomic arrangement. Such an orderly arrangement needs to fill space efficiently and keep a charge balance. Aug 31, 2015 tulane.edu/~sanelson/eens1110/minerals

What are Crystal Systems and Mineral Habits? gemsociety.org/author/donclark They are cubic, tetragonal, orthorhombic, monoclinic, triclinic and hexagonal (trigonal)

The Isometric or Cubic System

The first and simplest crystal system is the isometric or cubic system. It has three axes, all of which are the same length. The three axes in the isometric system all intersect at 90° to each other. Because of the equality of the axes, minerals in the cubic system are isotropic. Minerals that form in the isometric system include diamond, gold, lapis-lazuli, pyrite, silver, and spinel.



The Tetragonal System

The tetragonal system also has three axes that all meet at 90°. It differs from the isometric system in that the C axis is longer than the A and B axes, which are the same length.

Minerals that form in the tetragonal system include apophyllite, idocrase-vesuvianite, rutile, scapolite wulfenite and zircon



The Orthorhombic System

In this system there are three axes, all of which meet at 90° to each other. However, all the axes are different lengths.

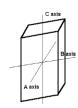
Minerals that form in the orthorhombic system include and alusite, celestite, chrysoberyl, alexandrite, cordierite, Tanzanite, zoisite, thulite, fibrolite, olivine and topaz



The Monoclinic System

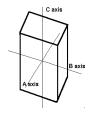
The previously discussed crystal systems all have axes/sides that meet at 90°. In the monoclinic system, two of the axes, A and C, meet at 90°, but axis B does not. All axes in the monoclinic system are different lengths.

Minerals that form in the monoclinic system include azurite, diopside, malachite, albite, jadeite, staurolite, orthoclase, hiddenite and kunzite.



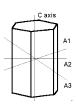
The Triclinic System

In the triclinic system, all the axes are different lengths. None of them meet at 90°. Minerals that form in the triclinic system include kyanite, aventurine, plagioclase, labradorite, rhodonite and turquoise.



The Hexagonal System

The crystal systems previously discussed represent every variation of four-sided figures with three axes. In the hexagonal system, we have an additional axis, which gives the crystals six sides. Three of these are equal in length and meet at 60° to each other. The C or vertical axis is at 90° to the shorter axes. Minerals that form in the hexagonal system include beryl, aquamarine, emerald, morganite and zincite.



The Trigonal Subsystem

Mineralogists sometimes divide the hexagonal system into two crystal systems, the hexagonal and the trigonal, based on their external appearance. Corundum (sapphire), is sometimes described as trigonal. Quartz is also listed as trigonal. However, for gemological purposes, the above six categories are sufficient.

Gem Material Without Crystal Systems

Amorphous materials are not minerals. Thus, they don't form in any of these crystal systems. Examples include amber, obsidian and opal. Some materials used as gems may contain crystals of minerals but can't themselves be described as crystals because they don't have a uniform crystal structure. These materials are called Crystallite. Agate is a variety of quartz (which has a hexagonal mineral habit) that is an aggregate or polycrystalline material.



CRYSTAL HABITS AND QUARTZ

On some photos you'll notice the normal or Hexagonal prisms characterizing many of the quartz crystals showing rhombohedral terminations A crystal habit refers to "the overall shape of the crystals. It can be needle-like, prismatic or barrel-like. In contrast, "Form is described as a group of crystal faces, all of which have the same relation to the elements of symmetry and display the same chemical and physical properties because all are underlain by like atoms in the geometrical arrangement" (21 Edition: Manual of Mineralogy, Cornelis Klein & Cornelius S. Hurlbut. Jr. 1993. John Wiley & Sons, INC). Was that **clear as mud?** Crystals seldom grow perfect in nature. The laws governing the intricate crystal lattice structure are perfect, but growth factors such as impurities and changes in the growth environment can affect a crystal's growth pattern, as can the interference of associated minerals during its formation. At one location, the crystal may be tabular or fibrous. At another place it may be equant, having all axes the same length. Good illustrations of these habits within Quartz can be viewed at the following website: http://www.quartzpage.de/crs habits.html

_ct January Pebble Patter

Elections

Since elections were to be held last October and we weren't meeting then, we will be holding elections for Secretary and President at our March meeting.

We have a qualified candidate for each position. Doug Gill has agreed to again take the helm as President now that he has regained his good health. Trista Meek accepted the request to run for the Secretary position.

Our thanks to each of them for their willing volunteerism.

Nominations will also be called for from the floor, so if you are interested in filling either of these positions, please speak up.

Hatrockhound Executive Meeting Wednesday, February 22, 2021

Present: Judi Allison, Mike Filarski, Mel Lambert

Mel gave a total for our treasury after deducting everything. He has paid the post office for this year:

\$119.

Show Discussion: We spent most of the rest of our time discussion the show and ideas surrounding it. Mike has talked to EOTEC and locked in the dates: May 22-21. Brad, who had been the supervisor, is not gone and Whitney is temporarily in charge of contracts. The base price for the two days is \$1800. Rental of PA system, staff coverage for problems adds \$610 for a total contract of \$2460. WE are also required to have liability insurance which they can provide at an additional cost of \$60 for the weekend. Although the price keeps climbing, Mike believes it can be covered by the dealers' fees. There is a clause that gives us a refund if the event can't be held. . .ie Covid guidelines. Judi said she would solicit demonstrators. We will plan to have silent auction, kids' area and displays.

March Meeting: Faux Sand Art in a Bottle Come find out what this activity entails After the meeting Mike and Judi discussed consideration of a possible suggestion by Trish. Mike will look into the possibility of a contingency plan or possibly alternate plan of using the area outdoors where the fair is held. Judi will check out the possibility of the Maxwell Center. The idea would be to downsize. With an outdoor venue or even in the Maxwell Center the dealers would be asked to furnish their own tables. (The charge would be less.) We could still have the activities for the silent auction, kids area and such. . .and a few display cases. Part of the idea of this is the possibility of downsizing also in the future, since it is sometimes difficult to get enough help. So. . .stay tuned. . .

COLLECTING & CASTING AWAY

I'm sure that the older, crustier rockhounds will remember the song, "Turn, Turn, Turn" written by Pete Seeger in the late 50's. The Lyrics were taken out of Ecclesiastes in the Old Testament of the Bible. One of the verses reads: To every thing there is a season, and a time to every purpose under the heaven: . . . A time to cast away stones, and a time to gather stones together. Well, there you have it. Isn't that just the way we rockhounds do things? We collect rocks and minerals until our cabinets are bursting at the seams, and then, years later, without too much fanfare, we decide to sell, trade, give away, or chuck them into the yard for all of the birds to admire. There was a time - and perhaps you can relate - when I got quite attached to certain specimens. Perhaps it is because those minerals and I went through a lot together; memories of how we acquired them in the first place, the excitement of discovery, smashed thumbs, multiple moves, from one part of the country to another, packing and wrapping in tissue paper, newspapers or bubble wrap, backbreaking work carrying boxes of rocks up and down a flight of stairs, earthquakes and bumpy gravel roads. But over time, memories grow dimmer, along with the energy required to stay excited over every detail of acquisition. Then, in later years, simplifying one's life through downsizing and subsequently less stuff, takes on a special charm of its own. Eventually, in axons to come, some of the collected mineral specimens could conceivably enter the rock cycle again.

But I need not worry about that just yet! While a mineral collection is under our care, we have the privilege of enjoying them, learning from them, and at times using them as teaching props. __ct Alaska Pebble Patter Dec 2020



Hope's Goodies

Mike's Trees

Chris's Pyrite Sun