Hatrockhound Gazette 2022

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 – Doug Gill
V. Pres. – Mike Filarski
Secretary – Trista Meek
Treasurer – Mel Lambert
Mbrs at Large – Louise Lambert, Laura Tiffany

Club Contact: Mike Filarski stonemorlin1@netscape.net 541-571-2593
Newsletter/Website – Judi Allison, 1701 NW 11th St, Hermiston, OR 97838 541-720-4950
Jall23.wixsite.com/hatrockhounds

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 – February 2022 Issue

February Meeting: Tuesday, February 8, 2022, 6:30 pm
Anita's Game – Anita asked if she could do a game,
so come find out what she has in store for us. ☺
Laurie and Karli are in charge of treats.
See you all the 8th!!

NOTE: If dues are not paid by the end of March, your name will be removed from the list and you will not receive a Gazette until dues are paid. (You can send your dues in to Hatrockhounds, PO Box 1122, Hermiston, OR 97838 or pay our treasurer directly) Thanks.

Hatrockhounds General Meeting
Tuesday, January 11, 2022

Although we were missing some of our regulars we had the pleasure of meeting Hope's Grandma, Donna Reuter, who was given a membership for a Christmas gift. Welcome. The fifteen folks present excluded Mike and Mel, as they had been exposed to covid on Monday, so were playing it safe. We wish them well.

We had a small amount of business to deal with. Judi passed around a sign-up sheet for treats. Laurie and Karli have signed up for February. There are still more openings, so the sheet will be available next month.

Judi also introduced a resolution that she wishes the club to sponsor. It is essentially to create the information for the Operation Procedures for the Chairperson of the Website Contest for the Northwest Federation of Mineralogical Societies (NFMS). Although there has been a contest conducted for several years, the NFMS by-laws have no procedure. The resolution will correct that. It needs the signature of the President and Secretary to be passed on to the Federation for a vote at the annual meeting in the fall. Doug signed it, but Trista wasn't available tonight to do so. The resolution first goes to the "resolution chair" who looks it over for errors and/or omissions then makes suggestions before it becomes a formal proposal.

Hopefully folks paid attention to their Gazette, as it included a calendar for the year. Judi pointed out that it included several field trips this year including Meadow Creek, Wasco area for jasper, etc. The first trip will be a trip to member, Mike Zinski's shop in the Tri-Cities on March 26 at 10:30. He has an extensive shop where one can create cabs, do lost wax casting, learn faceting and more. He is willing to teach folks if they are interested in these endeavors, so you might want to make sure you come along.

Although Mike was not at the meeting, he called and reported that the dates of May14-15 are locked in for our show. Ten vendors have already responded for sure. Be sure to keep these dates open, as we can use all hands on deck.

Karli asked if we could set up some specific meetings for the Juniors. She and Judi came up with the first Saturday of each month from 1-3:00. They will meet at Karli's (230 West Columbia, Irrigon). The first meeting will be February 5th.

Show and Tell:

Christine brought a wire wrapped piece of obsidian that she had given her mom for Christmas. Mike had her choose a stone and he polished it for her so she could wrap it.

Hope shared a rock she had found from the Hermiston Rock exchange. It was hand painted with a stack of gift boxes.

Laurie showed off a green and brown piece of jasper she had gotten from the BINGO collection at the Christmas party. Judi had sliced a couple of pieces, so one could see the inside.

Judi pointed out the skeletal remains on the unique piece of petrified wood she brought. Laurie said it was the chrysalis of a praying mantis.

Thanks all for sharing.

Door prizes went to Doug, Donna, Sue and Judi.

Program: Members worked to see if they could match a number of minerals with common household items they are found in.

Karli and Daygen work to figure out what goes with what.

Anita asked if she could do a game at the next meeting, so be prepared to win some sort of a prize for whatever she has figured out. ☺

Executive meeting: Wednesday, January 26 at 7:00 pm at Judi's. (Everyone welcome)

FEBRUARY MEETING: 6:30 pm, February 8th

A GAME BY ANITA

WEBSITE: jall23.wixsite.com/Hatrockhounds

Minutes recorded and typed by Judi Allison

Beryl

HATROCKHOUNDS Gem & Mineral Society

Executive Meeting –January 26, 2022

Present: Doug Gill, Mike Filarski, Mel Lambert, Louise Lambert, Judi Allison

We discussed the fact that we had received a request for payment to the Oregon Council and whether or not it was paid. It is not. Mel will send a check for the small amount due - $.25 per member.

Judi stated that there will be a note in the Gazette that states "If dues are not paid by the end of March members will be taken off the list for receipt of the newsletter until dues are paid."

We again discussed the show, scheduled for May 14-15 at the EOTEC. Mike said when he first saw the bill, he was very much taken aback. Compared to last year, it was about a third more: $4380. He spoke to Al (supervisor) and was able to have it reduced by $500. That still leaves $3880 with us also needing to purchase insurance.

Mike checked the Community Center which was $3000+ and we would have to rent tables and set up. Judi spoke to Maxwell Pavilion, which came in at about $1800 with about 3600 square feet, no lighting, no tables and no heat or air. It might also be very difficult to charge admission there.
With that information, we are simply "biting the bullet" and following through with the show at EOTEC in the hope we will at least not end up in the red.
Mike is raising the dealer fee to $4.75 a foot per day, which is still around a thousand short of covering the cost of the building. In reality, we can't raise the dealer fees any more, as our show doesn't bring in enough people for the dealers to warrant the extra charge.
Louise did suggest an idea we will follow through with. The entry will be $3.00, as usual, with an option to buy a two day pass for $5.00. Hopefully, that will bring in a bit more.
It seems all entities are facing the same issues, so we may have to keep brainstorming for possible solutions.
Judi pointed out that the calendar was in the Gazette for January. She will bring a few copies to the next meeting. The field trip to Mike Zinski's shop in March has been set for Saturday, the 26th. We will firm up who will be attending at our March meeting. The field trip to Wasco-China Hollow and Beers Mountain-on April 23 has been confirmed, so be sure to mark your calendars.
Mel will write a check for $150 as a donation to the church for the use of the meeting room.

ALL THE ROCKS IN YOUR LIFE

A philosophy professor stood before his class and had some items in front of him. When class began, wordlessly he picked up a large empty mayonnaise jar and proceeded to fill it with rocks, rocks about 2 inches in diameter. He then asked the students if the jar was full? They agreed that it was. So the professor then picked up a box of pebbles and poured them into the jar. He shook the jar lightly. The pebbles, of course, rolled into the open areas between the rocks. He then asked the students again if the jar was full. They agreed it was. The students laughed. The professor picked up a box of sand and poured it into the jar. Of course the sand filled up everything else. "Now," said the professor, "I want you to recognize that this is your life. The rocks are the important things - your family, your partner, your health, your children, your relationship with God - anything that is so important to you that if it were lost, you would be nearly destroyed. The pebbles are the other things that matter like your job, your house, your car. The sand is everything else. The small stuff." "If you put the sand into the jar first, there is no room for the pebbles or the rocks. The same goes for your life. If you spend all your energy and time on the small stuff, you will never have room for the things that are important to you. Pay attention to the things that are critical to your happiness. Spend time with your GOD. Play with your children. Take time to get medical checkups. Take your partner out for a special evening. There will always be time to go to work, clean the house, give a Dinner party and fix the disposal." "Take care of the rocks FIRST - - - - the things that really matter. Set your priorities. "The rest is just sand." I found this little story when looking for one of my forgotten books and thought you'd enjoy it. How many times have you /we taken ourselves so serious that we forget the really important things in life? Especially with all the political and health issues that plague us in these stressful times. Sometimes we need to remember not to take ourselves so serious that we forget to enjoy the really important things in our life. This is not intended to be a religious or political verse, but just a simple reminder to take time for ourselves, and loved ones. Take care, be safe and stay healthy..
(Publication of Yakima Rock & Mineral Club Vol. 5 No. 1 January 2022)

What are Iron Minerals?

What are iron minerals? Iron plays a large role in our earth's history. Understanding iron and magnets helps us unlock a deeper understanding of the earth.

Our Iron-Rich History

Iron minerals played a major role in our history. After the Bronze Age came the Iron Age. Iron also plays an important role in our health. We are red-blooded thanks to the atoms of iron in every red blood cell. It grabs oxygen, carries it where needed, and releases it. Without it, we would be anemic and die.
Some iron minerals like magnetite, or lodestone, are attracted to a magnet. Others are not. Iron minerals like siderite and hematite are not affected by a magnet because the iron in them is combined in a mineral compound different from magnetite.

Understanding Magnets and Magnetic Force

We know that for a magnet to work things must line up internally. The “things” are electrons, which have to spin in the same direction creating a north-south influence. This is why nails, or needles, become magnetized from electricity, which flows in one direction.

Stroking the needle in one direction with a magnet will magnetize it. But once formed, are magnets permanent? Over time a magnet’s strength may slowly weaken. Hitting, or dropping it, will disrupt the electron spin and disrupt the alignment of electrons and magnetism.

The same thing happens with magnetite. Its electrons all spin in the same direction. Aligning in the same direction dictates the strength of the magnetism. The electrons of an element, like iron, also influence the chemistry of minerals.

Forming a Mineral

All elements are composed of protons and electrons. Forming a mineral requires an element acting as a metal, called a cation, which gives up its electrons to form a mineral. Iron does this and is positively charged as a result.

To form a mineral compound, a non-metal, like oxygen, takes in electrons and becomes negatively charged. This negatively charged non-metal oxygen joins the positively charged iron to form a mineral compound.

Iron and oxygen can join in a variety of ways to form compounds, so we get different iron minerals, magnetic magnetite and non-magnetic hematite, siderite ad infinitum and even rust.

What are Iron Minerals? - Magnetite

Most mineral collectors are familiar with minerals centered on iron-like magnetite, a natural magnet. Magnetite tends to be black in color, lustrous and is found in many locations. Its crystals are cubic in the isometric system, but cubes are not common.

Magnetite usually occurs as small octahedrons, or tiny grains, in a variety of rock types. When crystallized, it is often found as simple octahedrons to an inch on an edge.

Fine examples of octahedral magnetite have regularly been dug by rockhounds on Twin Peaks, Millard County, Utah. The octahedrons are usually under an inch in sharp clusters.

One major use of magnetite in early history was in the Age of Navigation to indicate north and south. A type of magnetite, called lodestone, was used in navigation and is named “lode,” which means “journey.”

What are Iron Minerals? - Lodestone

During the second century BCE, early people were naturally curious about lodestone because of its magnetic property. In China, they found that if they floated a lodestone needle on water it would indicate direction. A liquid “compass” wasn’t used on a ship, but if the needle was suspended in air, it would indicate direction.

A compass works because the earth itself is surrounded by a life-saving magnetic field. What’s very interesting, and maybe scary, is we know the earth’s magnetic field reverses. We just don’t know why or know the consequences.

Be that as it may, it’s a good thing the earth has a magnetic field because it protects us from most of the lethal radiation constantly discharging from the sun. Some of that radiation, like ultra-violet rays, does penetrate. But the earth’s magnetic field makes life as we know it possible.

Earth’s Formation: The Core

Since we depend on the earth’s magnetic field, we need to know what produces this life shield. To understand, we have to look at the earth’s core. We can’t peer that far into the earth, so we must use other means. Earthquakes are one way to “look” into the earth.

An earthquake causes the entire earth to vibrate. The rock structures of the earth can slow, speed up, or deflect those vibrations which tell us something about the rock layers within the earth.

From this, we are convinced the earth’s innermost core is a solid nickel-iron suspended in an outer semi-liquid nickel-iron-rock core. As the earth rotates, the inner core rotates slower creating that all-important magnetic field.

If we are right about the earth’s core where did the iron come from? The general theory is that the earth was formed by accretion, the repeated crashing together of individual rocky masses, comets, and meteors as gravity pulled them in. That material was leftover from ancient exploding stars.

Note that iron, atomic number 26, is the heaviest element that a star like ours can create by atomic fusion. Gravity pulled all this space debris together to form the earth 4.6 billion years ago and we are still growing.

Earth's Formation: The Crust

So why are the heavier elements like gold not deep in the earth? We find them in the crust. Luckily, crustal movement caused by great internal heat causes super hydrothermal solutions to bring the heavier elements up into the crust and we mine them!

During the earth's early millennium, the crust was rich in meteorite iron while the earth's early atmosphere was methane, ammonia, and carbon dioxide. Then an organic life form called stromatolites developed photosynthesis, which takes in carbon dioxide and produces oxygen changing the atmosphere. Oxygen, combined with the available iron in the crust, form massive amounts of iron compounds like rust, hematite, siderite, magnetite and other iron minerals.

We now find these huge iron oxide deposits and mine them in Australia, Alabama, Minnesota and elsewhere. The huge Mesabi iron range, among others, are what made America a huge steel producer.

We have to be grateful to magnets and the earth with its magnetic field. Its slowly rotating nickel-iron core has made life possible on earth and protected it so we can enjoy the benefits of our red blood cells as we collect iron minerals magnetite, hematite and siderite all the while dealing with annoying hydrous iron oxide: Rust!

This story about iron, the Earth's Protector, appeared in the August 2021 issue of Rock & Gem magazine. January 17, 2022 0 *Story by Bob Jones.*

UPCOMING ACTIVITIES

February 5-Hatrockhound Juniors Meet
February 8-Hatrockhound Meeting
February 12-13 Rock Show: Whidbey Island Gem Club The Center in Oak Harbor
March 5-Hatrockhoun Juniors Meet
March 8-Hatrockhound Meeting
March 11-13 Rock Show: Tualatin Valley Gem Club Forest Grove National Guard Amory
March 12-13 Rock Show: Northwest Montana Rock Chucks, Kalispell MT
March 26-Hatrockhounds Field Trip to Mike Zinksi's Shop
April 2-Hatrockhound Juniors Meet
April 13--Hatrockhound Meeting
April 22-24 Rock Show: Yakima Rock and Mineral Club
April 23-Hatrockhound Field Trip to China Hollow/Beers Mountain
May 7-Hatrockhound Juniors Meet
May 10-Hatrockhound Meeting
May 14-15 Rock Show: Hatrockhounds EOTEC Hermiston
May 21-22 Rock Show Lakeside Gem and Mineral Club/NFMS Mid-Year Meeting Kennewick WA
May 28-29 Rock Show: Everett Rock and Gem Club near Monroe, WA

What Mineral Am I?

I am red, but I can also be colorless, green, blue or yellow. Mineralogists give a different name to each of my color varieties. I crystallize in the Hexagonal crystal system and usually form as 6-sided crystals, like the one in this picture. I am a silicate mineral and belong to a special group called cyclosilicate minerals. When I am red I am called Bixbite. When I am yellow, I am called Heliodor. When I am green, I am called Emerald. When I am blue, I am called Aquamarine. My mineral name is _____.

Check your answer placed in a text box in this paper.