

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)**

**President - Doug Gill
V. Pres. - Mike Filarski
Secretary - Trista Meek
Treasurer - Mel Lambert
Members at Large - Louise
Lambert, Laura Tiffany**

**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 December 2022

HO, HO, HO, Merry Christmas!!!

Annual Christmas Party

Tuesday, December 13th, 6:00 pm

Club furnishes ham, lasagna, rolls, punch, water and utensils. Bring a main style, side dish, salad or dessert and come join the fun!

Dinner, Rock BINGO and A gift exchange (Details Below)

Christmas Party:

The club will furnish ham (prepared by Mel and Louise), lasagna, rolls, punch, water and plates and utensils for the meal. Membership has signed up for the following items.

(If your name is not on the list, feel free to bring an item of your choice.)

Side Dish	Main Style Dish	Salad	Dessert
Mel & Louise-Mashed Potatoes	Tarah & Jayson-Meatballs	Karli – Broccoli Salad	Laura – Apple Betty
Chris – Yams		Judi-Rich Jello type	Gordon – Ice Cream Doug Judi - Candy

We will play ROCK BINGO. It is essentially a BINGO game with a rock for a prize. The club will furnish a number of rocks, but if you want to bring some for prizes, that would be great! We will also have a gift exchange for those who wish to take part. Please bring a rock related gift with a value of approximately \$10. You can mark if it is specifically for a male or female. We draw numbers to distribute the gifts. (You don't need to put who it is from on the outside, but you are welcome to do so on the inside.) We will play a short exchange game, then individually open each gift, one at a time, so others can enjoy seeing what each person receives. If this sounds like something you would like to take part in, please bring a gift.

See you at the Christmas Party!!!

Hatrockhounds Gem and Mineral Society

Meeting Minutes, November 8, 2022

Sixteen members joined together for tonight's meeting.

General Business The meeting was called to order at 6:45 by President, Doug. Judi then commented about the upcoming year. She had made some suggestion forms for next year, but forgot them at home. They will be available at the Christmas Party for folks to fill out and make suggestions. Based on some of the previous suggestions and discussions, we set April 22-23 for the Field trip to the Owyhee's led by Randy and Gordon. Judi also let the membership know that she has asked Bill Hamel of the Lakeside Club to give a presentation for the March meeting. He will give some information on mineral identification and share some of his specimens. We will play a fossil Jeopardy game in January. Sandra has consented to do another workshop, either at a meeting or separately. We will work out particulars of that later.

Our Christmas party will be on our regular meeting night, December 13th. We will gather by 6:00, have a potluck with ham, lasagna and punch provided by the club. We will play Rock BINGO and have a gift exchange for those wishing to participate.

Judi spoke about the proposal she is working on to present to the NFMS for hosting the 2024 Show. We have requested May 19-21 at EOTEC. We will probably plan on having the Oxford Inn as the host hotel and hold both the breakfast and the banquet there. The capacity is only 50, but since the Federation was hard pressed to get 40 attendees in Hillsboro, we will simply need to cap our attendance. We discussed ideas for some activity after the show-on the following Monday. We are considering offering a geocaching excursion, let by Laurie and a possible wagon ride coordinated by Karli.

Doug reviewed the budget that was presented in the Gazette and asked for a motion to adopt it. Mel made a motion, Gordon seconded and the motion was passed.

Show and Tell:

Judi displayed the earrings she was wearing. She bought them in Turkey. The commercial name for the stone is Zultanite.

Gordon had a piece of Plume agate that came from the Owyhee Mountains.

Mary brought in a lovely piece of chrysoprase/malachite/azurite.

Door Prizes: Karli drew a pair of earrings. Laurie found a heart in her bag. Gordon won a baculite and Timber got some tumbled stones.

Program: Annual "I Did It" Contest. We had 6 entries in I found it, 6 in I bought it and 4 in I made it. Karli walked away with the "I Found It" plaque, Laura with the "I Bought It" and Timber with the "I Made It". Thanks to all who entered.

Executive meeting: Monday, November 28, 7:00 at Judi's. Everyone is welcome (We "met" via text and email, since many couldn't attend.)

DECEMBER: Tuesday, December 13, 6:00 (Notice time difference)

ANNUAL CHRISTMAS PARTY-POTLUCK AND ROCK BINGO

WEBSITE: jall23.wixsite.com/hatrockhounds

Judi Allison, Acting Secretary **Announcement: Remember Dues for 2023 are now due and can be paid to our Treasurer. \$12 individual, \$20 couple, \$25 family and \$3 for Juniors.**

I Bought It

I Found It

I Made It



What are Common Opal Colors?

October 10, 2022 [0](#)



Mexican fire opal occasionally exhibits subtle flashes of greenish-yellow opalescence due to partially formed silica-spherule layers. Photo by Steve Voynick. Common opals lack the glittering, multicolored opalescence of its precious counterpart, but it is nevertheless a beautiful gemstone with its own unique qualities.

Opal: Precious & Common

Both the common and precious varieties of opal consist of hydrous silicon dioxide.

Despite having a composition similar to that of quartz (silicon dioxide), opal's properties are much different. Because of its attached molecules of water, opal is substantially softer, more brittle, and less dense than quartz. Most importantly, unlike quartz, common opal does not form crystals. With its amorphous structure and variable chemical composition, all forms of opal are classified as mineraloids—natural, mineral-like materials that do not meet all the qualifications of a mineral. But because opal was historically classified as a mineral, the International Mineralogical Association recognizes tradition and continues to list it as a valid mineral species.

Opalescence Explained

Opal is a solidified, colloidal silica gel with an amorphous structure consisting of randomly arranged, interspersed layers of hydrated silica molecules and microscopic spherules of anhydrous silica. The opalescence of precious opal is created when layers of microscopic silica spherules diffract white light into its component colors. When reflected, these diffracted light waves become reinforced to produce the phenomenon of optical interference and the iridescent colors seen in precious opal.

Common Opal Colors

Common opal either lacks silica spherules or consists of spherules that are too large or too small to create opalescence. Although lacking opalescence, common opal has varying degrees of translucency and scatters light internally to produce a soft, warm glow similar to that of moonstone.

While some common opal is white or colorless, most exhibit a color range caused by traces of accessory elements, usually iron. The colors of common opal include orange-red fire opal, white milky opal, green prase opal, Peruvian pink and blue opal, yellow honey opal, brown wax opal and yellowish-green hyalite.

Non-gem-quality common opal is fairly abundant and occurs as fracture and seam fillings, grain cement in sedimentary rocks and even as opalized wood.

Precious opal is by far the rarest variety of opal, followed by gem-quality common opal.

Fire Opal

The best-known and most valuable type of common opal is fire opal; its rich, orange-red color is caused by microscopic inclusions of hematite. In describing opal colors, "fire" can refer to the opalescence of precious opal or to the orange-red color of common fire opal.

In terms of both quality and quantity, the best fire opal comes from central Mexico.

Because of its unusual degree of transparency, Mexican fire opal is usually faceted, while all other types of common opal are cut as cabochons. Mexican fire opal occasionally exhibits subtle flashes of greenish-yellow opalescence because of partially formed, silica-spherule layers that diffract and reflect only part of the incident light.

Hyalite

The only truly transparent common opal is hyalite, in which subtle hints of greenish-yellow are caused by traces of iron. Hyalite also exhibits the rare phenomenon of “daylight fluorescence” which occurs when sunlight energizes electrons within the opal. These electrons then release excess energy as visible, greenish-yellow light. The combination of daylight fluorescence and hyalite’s base color produces a particularly pure and lively greenish-yellow hue. Hyalite’s daylight fluorescence and its strong, ultraviolet fluorescence are because of traces of the radioactive element uranium.

While most opal solidifies directly from silica gel, hyalite forms when silica-laden gases emitted by rhyolitic magma condense into silica gel that subsequently solidifies into botryoidal masses. Although hyalite rarely occurs in sizes large enough to facet, botryoidal free forms are often wire-wrapped and worn as pendants.

Opal from Peru: Pink & Blue

The color of Peruvian blue opal is because of tiny inclusions of the copper-bearing mineral chrysocolla.

Peruvian pink opal, a rare example of organic coloration in gemstones, consists of a mixture of hydrated silica, chalcedony, and palygorskite, the latter a complex hydrous magnesium aluminum silicate. Palygorskite’s fibrous crystals have a strong affinity for organic molecules. The pigments in Peruvian pink opal are reddish-colored quinones, hydrocarbon compounds that originated as ancient plant materials in a now-buried lake bottom within a basaltic environment. With an abundant supply of magnesium from the basalt, palygorskite formed, attached quinone molecules and became part of the silica gel that solidified into Peruvian pink opal.

Peruvian blue opal, characterized by its blue-to-blue-green color and soft translucency, comes from an old copper-mining district in southern Peru. Its unusual color is produced by microscopic inclusions of the copper-bearing mineral chrysocolla.

Other Common Opal Colors

White milky opal, the most abundant type of common opal, has bluish or orange undertones and an attractive, moonstone-like translucency. Photo by Steve Voynick.

Milky opal, not to be confused with white precious opal, is the most abundant type of gem-quality common opal. It has an off-white color, a moonstone-like translucency, and a warm glow caused by the internal scattering of light. The presence of iron often produces soft, bluish or orange undertones. Milky opal is fashioned into beads and cabochons.

Prase opal’s distinctive, chrysoprase-like green color is caused by a nickel chromophore. The dark, spiderweb-like patterns of dendritic opal are created when black manganese oxides fill tiny fractures in the crazed (fractured) opal surface. Multicolored, banded opal, which has only limited translucency, forms from variations in the chemical composition of silica gel during the solidification process.

So while precious opal may always rule the roost in the opal hierarchy, common opal is nevertheless a fine and distinctive gemstone—even without opalescence.

This story about common opal colors appeared in Rock & Gem magazine. Story by Steve Voynick.

Blue topaz is the more prominently known birthstone for December and displays a lovely light blue shade, much like that of a crisp, cold December sky.

December actually has multiple birthstones. This fact does create some confusion but the multiple options for some months was created **in order to allow more affordable options in addition to the traditional more expensive stones**. The final attempt to standardize the birthstone system came in October 2002 when December was given a third birthstone option. The traditional December birthstone is the Blue Zircon, but there

are various alternatives that are considered representative of December including turquoise, blue topaz and tanzanite.

[Blue Topaz. December Birthstone Color is Blue - Whiteflash](https://www.whiteflash.com/gems-and-gemology/guid...)

[https://www.whiteflash.com > gems-and-gemology > guid...](https://www.whiteflash.com/gems-and-gemology/guid...)

[Birthstone Guide - Birthstones by Month - Onecklace](https://www.onecklace.com/tips/birthstones-by-month)

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