

# Hatrockhound Gazette 2023

PO Box 1122, Hermiston, Oregon 97838



Meetings at 6:30 on the 2<sup>nd</sup>  
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](mailto:stonemorlin1@netscape.net) 541-571-2593  
Newsletter/Website – Judi Allison, 1701 NW 11<sup>th</sup> St, Hermiston, OR 97838 541-720-4950  
[Jall23.wixsite.com/hatrockhounds](http://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 2023 Issue

**Meeting: Tuesday, February 14, 2023, 6:30 pm**

**Have some Heart**

**Bring a heart shaped rock to share. Do you have a story about it?**

**Let's see what kind of variety we can produce.**

**Laurie and Laura are in charge of treats.**

## **Hatrockhounds Minutes**

### **Meeting January 10, 2023**

Judi will resend the newsletter. The newsletter also contains a calendar. February 14<sup>th</sup> meeting-bring a heart shaped rock.

**Treasurer's report:** Mel wasn't here because he broke a tooth. He is going to the dentist tomorrow.

**Old Business:** Judi sent in a formal proposal for 2024 Federation Show.

**New Business:** Mike read a report from the Oregon Council. Judi went to the Oregon Council meeting. She was impressed by their outreach program. We are the only ones on the east side of the state. Doug received several emails regarding getting the clubs all back together.

**Upcoming 2023 Show:** Mike sent out contracts. EOTEC has to adjust their contracts and will probably have some additional fees. EOTEC will contact Mike. Last show: Two most asked questions: Do you take credit cards? Do you have an ATM? Mike found a company that disperses ATMs for events \$200-\$250 with transaction fee of \$3-\$4 and we may get back twenty-five cents for each transaction. Mike thinks that would be a good idea. It would be too expensive to get the equipment to use credit cards. Judi moved and Donna seconded that we rent an ATM for the show. All were in favor with a show of hands. Motion passed. Mike will check with Banner Bank to see if they would set one up for the show, since we bank there.

**Show and Tell:** Judi brought three samples of copralite-dino poop.

**Door Prizes:** Tarah, Gordon, Jonnie, and Jayson

**Program:** Fossil Jeopardy. All seemed to enjoy the activity. Donna, the great competitor, led her team to the first place position. ☺

Secretary, Trista Meek

**Executive meeting:** Wed January 25, 7:00 at Judi's Everyone welcome.

**Website:** [jall23.wix.com/hatrockhounds](http://jall23.wix.com/hatrockhounds)

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 Gem & Mineral Society**

### **Executive Meeting –January 25, 2023**

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

Judi presented the completed form for the Federation dues. The total with the \$1.00 offset was \$126. Mel and Judi also checked to update the members who have paid dues for 2023. If you have not paid, or are not sure, please ask.

Mel paid for the post office box. It went up to \$182 for the small box this year. Louise suggested the possibility of looking into changing to the Umatilla post office, as it appears they charge quite a bit less. Judi asked if we had given the church a donation for the year and if we paid for the ALAA membership. Mel checked and neither were done. He has now sent the remittance for ALAA and will give Judi a check to pass on to the church.

Mel mentioned that he would be unavailable to attend the midyear NFMS Federation meeting in Kennewick on April 29. Mike will go in his place.

Judi spoke a bit about the Federation Show that we are planning to host in 2024. She pointed out that the Federation will be in charge of the silent auction and will receive all proceeds from it. (One thing we ended up with last time we did a Federation show was the balance of the donated rocks. It gave us a nice supply for a while.) She did request that members could put in no more than two high end items for a long term auction with a 70/30 split. The club will maintain all proceeds from the kids' corner. After all expenses are paid for, the net balance will be split equally with the Federation. Although this seems at first like we are losing money, the additional attendance has historically added more than the usual, even with the split. The idea is to cover most expenses through the dealer fees (which we may make a bit higher). Mel asked that we create a reusable card for the three day entry fee. Plans are to charge \$4 per day or a three day fee of \$10.

We will be responsible for coming up with an idea for individual favors for the banquet (50) and centerpieces for the tables (10). Our theme will continue to be "Natures Treasures Under Foot", so if anyone has any ideas, please share them.

Mike spoke more about the ATM idea we voted on at the last meeting. The original place he spoke with that First National ATM's out of Boise. After speaking with Al at EOTEC he found out that the Fair Board is the one to set up the ATM for the fair and rodeo. He called the lead there and was told they use Premiere ATM. After speaking with them, the quote was around \$100, significantly less than the other company. (Guess which one we will use. ☺) Mike has also sent out all but three of the contracts.

**CALL IT CHERT:** Geologists call it chert, archaeologists call it flint, Indians used it for arrowheads, spearheads and cutting tools, and rockhounds collect it. It's a rock, not a mineral, being composed largely of quartz molecules and trace minerals, in tiny, equidimensional granular crystals. By any name, or use, chert remains a something of a mystery, since even when easily identified on sight and by simple tests, a shroud of scientific mystery cloaks its chemical composition. Cherts are often unexciting, gray colored masses that may form in extensive beds or layers. Novaculite is a form of chert found in massive beds in Arkansas. At Cado Gap, Arkansas, novaculite beds aggregate a thickness of over 9,000 feet. Even the most exacting professionals do not agree on its solubility and insolubility, of its silica and calcium content, of the precise age determination and the role of primary versus secondary processes in deposition or sedimentation. Chert, which has a smooth surface, hardness and density near quartz, sharp edges and curved or conchoidal fractures, accumulates in streambeds as gravel and on hillsides and slopes within the soil. Being brittle, dense and harder than glass, chert stream gravel is valuable for road construction and for concrete aggregate. If the chert has a high clay content, it looks like shale and loses its hardness and utility. There are various types of chert. The 'ugly' sorts of flint (dark like dull obsidian, finer grained and occurring in irregular nodules rather than layers), of jasper (containing even more impurities especially iron oxides, for reddish, brownish, greenish iron stains, of low luster and breaking with an even or flat conchoidal fracture.), of agate (more refined and translucent banded, pearly to colored), of Tripoli and mozarkite are all varieties of chert. Its form varies from nodules, concretions, lenses and stringers to rounded and irregular tube material. If formed on land, chert is deposited like opal, opalite, porcelaineous; like the pearly gray waxy lustered nodules of the Mojave. When of oceanic origin, it can form as flint in pillows, or is layered with clay, or minerals, or volcanic ash, like the Waddell chert off the San Mateo coast. Chert is inconsistent in coloring, size and shape. It appears in most shades of the prism colors, being stained by iron oxides red, rust, tan, yellow and brown. Rockhounds know where to find chert, but scientists are still looking for a logical answer to how it got there. Courtesy February 2023 Golden Spike News - Golden Spike Gem & Mineral Society Via Del Aire club Feb 2023

## How Stalactites and Stalagmites Form in Caves-

June 13, 2022

0

How stalactites and stalagmites form is one of the most common questions asked by visitors to the National Park Service's limestone caves. The answer is found in a bit of basic but fascinating chemistry.

Stalactites and stalagmites form when surface water dissolves carbon dioxide from the atmosphere or soil to form carbonic acid. Percolating downward through limestone strata, this weak acid dissolves small amounts of calcium carbonate. When it reaches a cavern roof and contacts cavern air, this acid begins to lose its dissolved carbon dioxide just like a newly opened can of soda.

This loss of carbon dioxide decreases acidity causing the dissolved calcium carbonate to precipitate out of the solution. As water drips from cavern ceilings, this precipitation of calcium carbonate forms stalactites, which hang from cave ceilings like icicles. At the drip point directly beneath the growing stalactites, the same process causes stalagmites to build upward from the cave floor.

### Growth Rings



While cave visitors admire stalactites and stalagmites for their beauty, colors and fantastical shapes, scientists are more interested in their concentric growth rings which are similar to those of trees. This sequence of growth rings is visible when stalagmites and stalactites are cut in cross-sections and polished.

Thanks to a new ability to "read" these growth rings, stalactites and stalagmites are revealing their ages and providing additional insight into the geological and climatic conditions that existed at the time they formed.

Getty Images/ Blaine Reavis / 500px Because of variations in seasonal and drought cycles that control the abundance of surface water, growth rates are often uneven and erratic. Maximum growth occurs during peak availability of surface water in rainy seasons, periods of snowmelt or wet climatic cycles. But when water is in short supply or unavailable, growth rings may not develop at all.

Because of their faster growth rates, stalagmitic growth rings are thicker and more distinct than those of stalactites and have a greater scientific value. When water drips onto a stalagmite, the impact instantly "degasses" the water, sharply reducing acidity, accelerating the precipitation of calcium carbonate and creating large, well-defined growth rings. In the past, scientists visually counted annual growth rings to roughly estimate the age of stalactites and stalagmites. But researchers now employ a far more accurate radiometric dating technique.

### Radiometric Dating

Uranium, which has a chemical affinity for calcium, is present in trace amounts in virtually all rocks, including stalactites and stalagmites. Being radioactive, uranium disintegrates continuously into an orderly "decay chain" of elements and isotopes, one of which is thorium. Unlike uranium compounds, those of thorium are not water-soluble. The thorium in stalactites and stalagmites therefore formed after calcium carbonate was

deposited. Measuring the relative amounts of thorium and uranium present in growth rings can thus reveal the age of stalactites, stalagmites, and entire cave systems such as Carlsbad Caverns - even caves that are millions of years old—to an accuracy of just a few hundred years.

So, while the question of how stalactites and stalagmites form has a simple chemical answer, there is much more than meets the eye to these beautiful cave formations.

*This story about how stalactites and stalagmites form in caves previously appeared in Rock & Gem magazine. [Click here to subscribe!](#) Story by Steve Voynick*

## What's Up?

- Be sure to make our March meeting. We will be learning about minerals from Lakeside member, Bill Hamel
- Remember that Randy and Gordon will be leading us on a field trip April 22-23 to the Owyhees. Make your plans now, so you will be ready.
- April 29-30 will be the Lakeside Gem and Mineral Show at the Fairgrounds in Kennewick. The NFMS will have the mid-year meeting there during the show. Mel is unable to go, so Mike will be going as our Director to represent the club.
- May 13-14 Our show has arrived. Put on your volunteer caps and be ready to help put on another great show. Friday, the 12<sup>th</sup> will be set up, so we need help then, too.
- August 3-6 the Billings Club will be hosting the NFMS/AFMS show. If you have the opportunity to go, it is bound to be a good show. And you get to see some of Montana. There are reports of some field trips after the show also, so keep that in mind-lots of things to find in Montana.

