



PNWFM

President's Message Toby Seim

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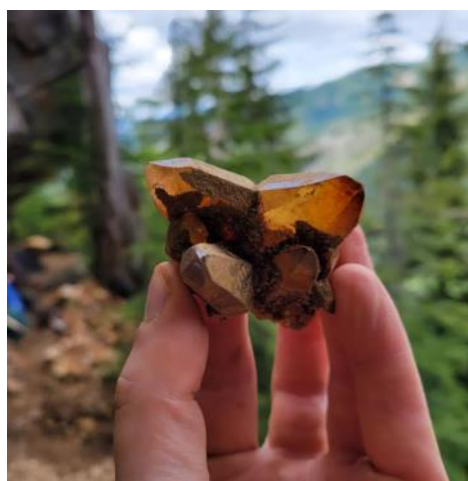
Greetings All,

I would like to start by communication of how proud I am for the results from our October Symposium "Minerals of Africa". We had a total of 91 attendants who were present at the virtual symposium and because the talks were all recorded and are available to the general public, the exposure to the talks will continuously grow. I'd like to give my thanks to all the participants and a special thanks to the people who put in the work behind the scenes to produce another successful symposium for our Pacific Northwest Chapter.

Our theme for the 2022 Symposium was thoroughly discussed and voted on : "Good and Bad Habits in the Mineral World" is our theme. While this may not be the official title of the theme, the focus will include Crystallography and Growth Habits. The 2022 Symposium committee will be busy with preparations for what we all hope will include both a virtual and live event in Kelso next October.

With the unfortunate conditions and hurdles in 2021 (Covid19, Wild Fires, Etc.) I was unable to adventure and field collect as much as I have in previous years. Fortunately even with limitations, I was lucky enough to find a few special stones like this Japan Law Twin from King County (see below photo) to add to my collection.

I am confident 2022 will be a year where there will be improved collecting opportunities and I truly believe someone from our PNWFM Chapter will bring in a game changing find. I wish you all of good health and thank you for continuing to support the advancement of minerals.



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The Use of Labeling

By Sal Noeldner

Many times, when holding a particularly interesting Pacific Northwest mineral, some of us may have had questions such as: who found this, where, when, and how was it discovered/located? Often, a label holds such useful information and sometimes a further description is present as well, but other times, due to carelessness or other reasons, provenance cannot be had for a specimen or group of specimens in a collection unearthed by researchers or surviving relatives and relatives. Is it still worth preserving?

I would argue unlabeled specimens are mainly popularized talus-turned-yardrock with 'growing moss' as the assumed, future occupation. Even though perhaps great, unknown efforts and decisions culminated in a final push to bring weighty, often awkward specimen material home safely (presumably to preserve from erosion and appreciate/share as long as possible) the piece's maximum delivered significance to humanity is serving as a pretty object d'art on a well-lit curio shelf. For less-immediately gratifying chunks such as clay, rock, and ore specimens, how can they ever be worth their storage fees without labels? Specimens with provenance may benefit from future techniques which could learn something new about a piece's formation process(es) and constituent(s) that upon discerning, could bring at minimum, knowledge and furthering our hopes, cleaner, simpler technologies.



Early in the 2000's, I happened upon a house for sale in Clear Lake, Washington with a garage/shop behind the house full of collected lapidary materials mostly from SW Washington and Oregon locations. None of the handmade wood bins were labeled. Before the buildings and contents were pushed by an excavator into a large hole to further development, quite a few 5-gallon containers full of rocks were 'saved' from reburial by a couple of people. I ended up using most in multiple garden paths made for favored family members. Often dismal rainy spells were brightened by their greatly varied colorations and patterns.

Much of the remaining collection was not labeled. Due to limitation of time or secrecy we will never know as the knowledge has passed to the ether as have his thirty some-odd mineral finds of most significance he still had yet to tell the world about, hinted heavily at when given the chance, but whenever questioned more succinctly, the conversation invariably changed to the opposing views on sharing important locality information for uncollected places with the public and how they were all still stories he had yet to write.

Recently, a portion of the University of Washington School of Mines collection was located, and because of great need, partially relabeled before allocated 'manhours' ran out before completion of the intended effort. Numerous historically interesting pieces were included with the clays and shales. I hope resources can once again be allocated for relabeling this and other similar, institutional collections seen at the time.

I wonder about the final resting places of collections carefully curated for world fairs and international/national exhibitions by various mining districts and counties within the State of Washington over the years. Photos of such are few to be seen...what happened to their labels or correspondence? What of the early files of mining companies? Current increase in fees and inflated costs of space and energy (compared historically) may contribute to a faster rate of loss of these geological resources than what would normally be expected over time.

Careful organization and labeled description of your mineral collection (or of a friend's), plus creating notes and maps for those who come after, may be the only thing you contribute to the mineral community and further research as unlabeled stones do well diminishing the force of rain on the ground.

(The writer is looking for certain early issues of both the Mineralogist and Amateur National Mineralogist. Please contact him if you might have extras, some for sale, or be willing to let me borrow these. Also, if you have other information about historical Pacific Northwest mineralogy. Thank You!)

The new University of Arizona Alfie Norville Gem and Mineral Museum at the Historic Pima County Courthouse, is Now Open!

By Steve Kaminski, Mineralogical Society of Arizona

A new gem, and mineral museum has opened in Tucson, Arizona. The University of Arizona Alfie Norville Gem & Mineral Museum (UAANGMM) is located within the historic Pima County Courthouse, an iconic and historic building of magnificent Spanish Revival architecture in the heart of Tucson.

Following the completion of a \$13.5 Million renovation and buildout project, UAANGMM is dedicated to providing public education, the curation of minerals, gems, fossils and meteorites while also serving the research needs of professionals, students and collectors. The collection is literally universal in scope, but with specific emphasis on minerals from Arizona and Mexico. Eric Fritz is the museum's Director.



Previously housed in the basement of the UofA's Flandrau Science Center and Planetarium, the UArizona mineral collection has a new home with 12,000 square feet exhibit space. The Flandrau will continue with new exhibits featuring specimens on loan from UAANGMM.

UAANGMM adds an exciting element to the Tucson Gem, Mineral and Fossil Showcase which occurs in late January and early February. Of course, the museum will attract attention year-round. The museum space will not only be exhibiting world-class minerals, gems and jewelry, but also provide immersive activities, graphics and videos as well as interactive experiences. The visitor experience will be enhanced by the integrated exhibits highlighting research from the UArizona gem science and mineralogy programs.

Above Right: The Pima County Courthouse,
Lower left: Director Eric Fritz of the University of Arizona Alfie Norville Gem and Mineral Museum.
Courtesy of the University of Arizona Alfie Norville Gem and Mineral Museum.

UAANGMM will have four major exhibit areas; each will change on a regular basis. The four primary areas are: a Mineral Evolution Gallery, an Arizona-Mexico Gallery; a crystal interactive lab; and a Gem Gallery. In addition to the public museum space, an additional 9,000 square feet on the lower level of the courthouse will be dedicated to a reference library, research lab, and community classroom.

Mineral Evolution Hall

UAANGMM's first gallery, the Mineral Evolution Gallery will explore and expand on the developing theories around the story of our planet's mineral evolution. The exhibit will chronologically explore how the solar system formed and minerals have co-evolved on earth alongside life over time. This scientific theory is supported by NASA space research.



Rendering of the Planetary Evolution Hall inside of the University of Arizona Alfie Norville Gem and Mineral Museum. Courtesy of the University of Arizona

Similar to other rocky planets in our solar system and meteorites, Earth started with around 60 minerals. Earth is now home to over 5,600 minerals and the count continues. The museum will tell the story of how this happened. The expression of this story will touch on many topics, including, the interaction of life and oxygen and changes that followed the emergence of the new minerals.

The Arizona and Mexico Gallery

The Arizona and Mexico gallery, will feature the unique mineralogy of the region, highlighting Arizona's mining roots. One section of the exhibit will be modeled after a recreated stope within the Copper Queen Mine in Bisbee which will showcase some of the minerals that were mined during the early workings. The stope design was based on the contributions of Dick Graeme III (the expert Bisbee mineral collector, historian and miner) and his family.





A rendering of Bisbee-Azurite stope inside the University of Arizona Alfie Norville Gem and Mineral Museum. Courtesy of the University of Arizona

"We're telling the story of mining and how the copper mined in Bisbee basically set up the United States for the Industrial Revolution," Fritz said. "Without that, we wouldn't have had power and telecommunications." Copper was mined here before Arizona before became a state. "...copper helped make this the last contiguous state in the U.S."

The Crystal Lab

In the Crystal Lab, visitors will have a chance to alter the crystal structure to cause a change in color in quartz, sapphire, or diamond. "For example, if you start with a clear quartz and add a little bit of iron, you'll end up with amethyst," Fritz said. "So, they'll actually learn while doing something pretty cool."



Rendering of the Crystal Lab inside of the University of Arizona Alfie Norville Gem and Mineral Museum. Courtesy of the University of Arizona

The Gem Gallery and Treasury

The final exhibit, the Gemstone Gallery and Treasury, will showcase minerals that have been manipulated by humans and turned into jewelry, carvings and works of art, demonstrating human-kind's innate appreciation for natural beauty. The Treasury resides in the center of the gallery and displays a collection of minerals, jewelry and gemstones from all over the world. The majority of displays showcased in the treasury are on loan from the *Somewhere in the Rainbow*, a gem and jewelry private collection from Phoenix. The UArizona Department of Geosciences is offering a new track as the result of an endowed chair in gem science, funded by The RealReal. The gem science track is preparing students for careers in the gem trade. The University begins teaching classes in the program this Fall 2021. Eric Fritz and museum Assistant Curator Susan Leib will co-instructing the first undergraduate course.

The upgraded mineral museum will contribute to the new gem sciences track, providing opportunities for students to study in the museum's labs and classrooms. According to Fritz, "The hope is that the classroom in the lower level will become the gem science classroom for students." Museum leaders are also hoping to make these areas available to school groups and local organizations to increase interest in gem sciences and mineralogy throughout the community.



Rendering of the Treasury inside of the University of Arizona Alfie Norville Gem and Mineral Museum. Courtesy of the University of Arizona Alfie Norville Gem and Mineral Museum.

IT'S OPEN

The University of Arizona Alfie Norville Gem & Mineral Museum is now open with Summer Hours. Visit Monday-Friday from 10am-2pm (summer hours). Last Tickets sold at 1pm. The museum will open from Monday-Friday 10am-4pm starting on August 23th. Purchase tickets in-person at 115 N Church Ave, Tucson, AZ, 85701. Information can be found at: <https://gemandmineralmuseum.arizona.edu/>

Thanks to Eric Fritz, Selena Gabriella Valencia and W. Lesley Presmyk for their review and comments.

References:

UA's planned new gem and mineral museum downtown aims to enrich Tucson community; Alfie Norville Gem & Mineral Museum, Nov. 1, 2019;

<https://gemandmineralmuseum.arizona.edu/news/2019/11/uas-planned-new-gem-and-mineral-museum-downtown>

UArizona Alfie Norville Gem & Mineral Museum is One Step Closer to Opening; Alfie Norville Gem & Mineral Museum, Feb. 17, 2021;

<https://news.arizona.edu/story/uarizona-alfie-norville-gem-mineral-museum-one-step-closer-opening>

Photos provided by University of Arizona Alfie Norville Gem & Mineral Museum Media contact: Selena Valencia, Alfie Norville Gem & Mineral Museum, 520-621-7320, selena.valencia@arizona.edu

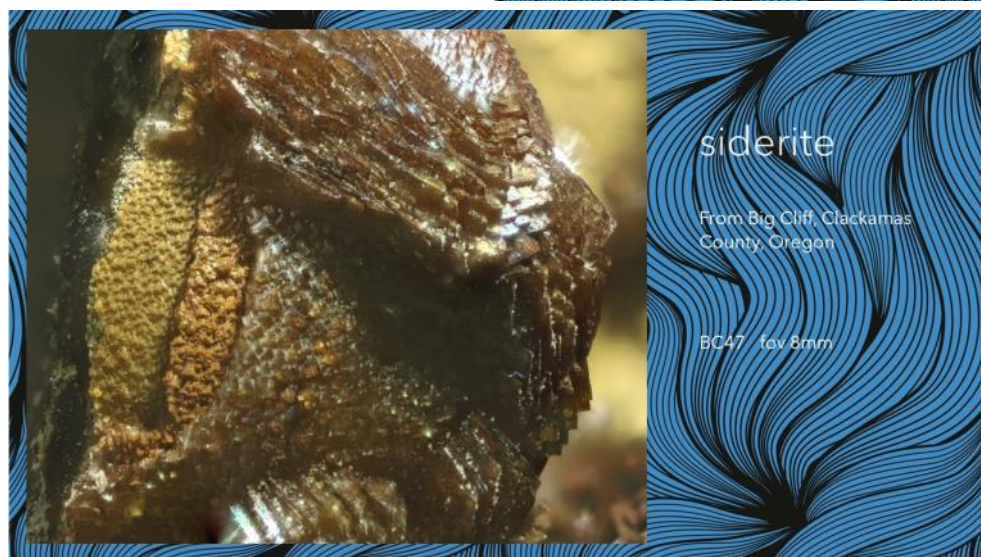
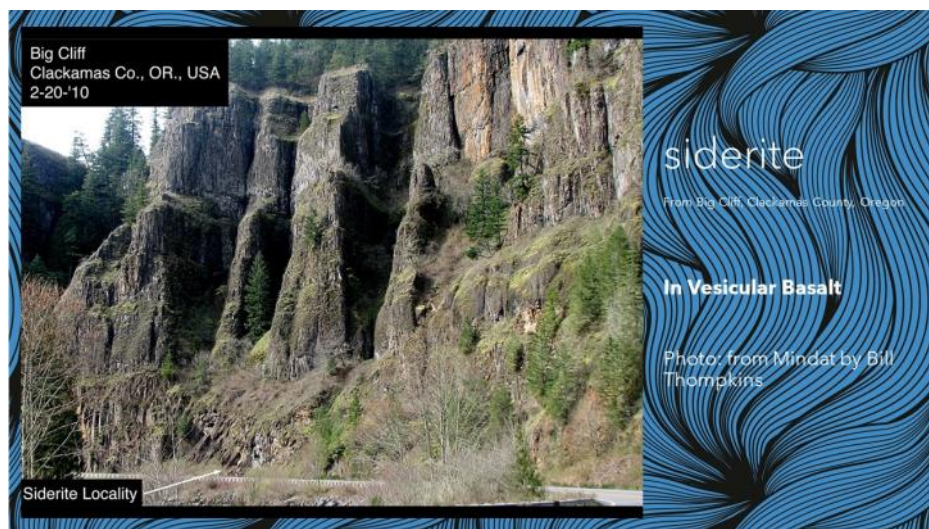
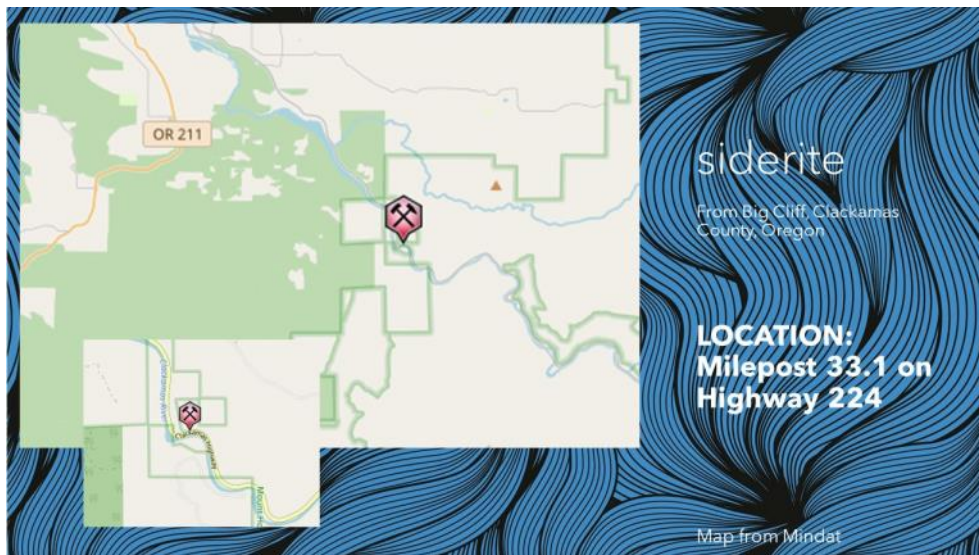


**May you all have safe,
healthy
and Happy Holidays
no matter how you celebrate
them**

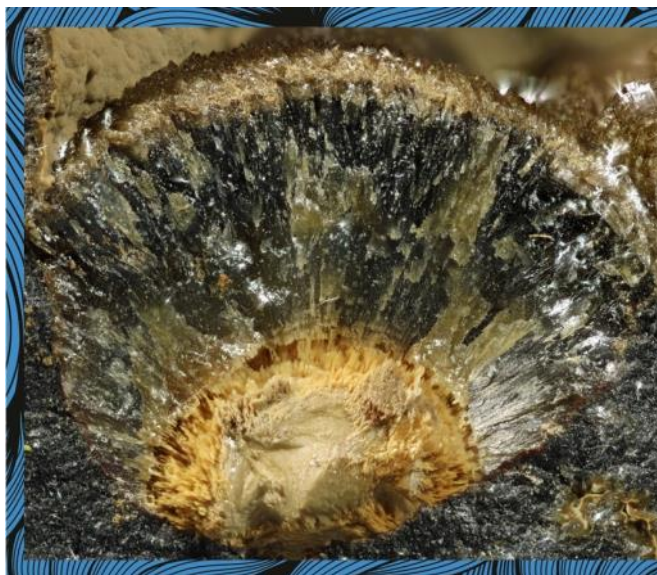


Siderite, $(\text{Fe,Mg,Ca,Mn,Zn,Co})\text{CO}_3$, from Big Cliff, Clackamas County, Oregon

By Beth Heesacker



Layers and more layers



siderite

From Big Cliff, Clackamas
County, Oregon

BC4 fov 10.5mm

**SIDE VIEW
of a sphere**



siderite

From Big Cliff, Clackamas
County, Oregon



**Two major forms (rhombs
and hemispheres)
and combinations of both**

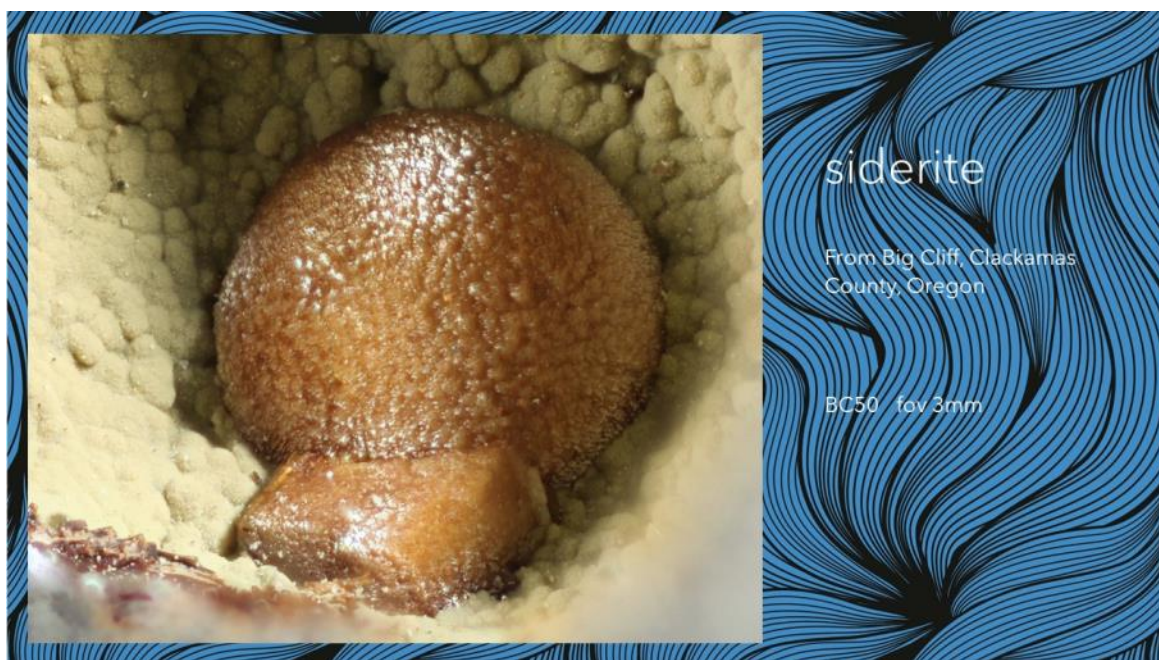
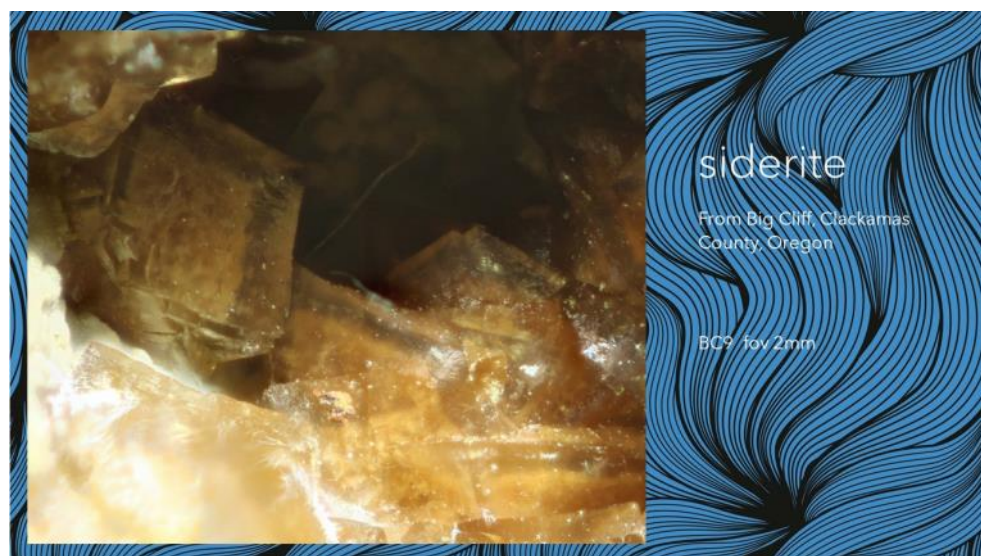


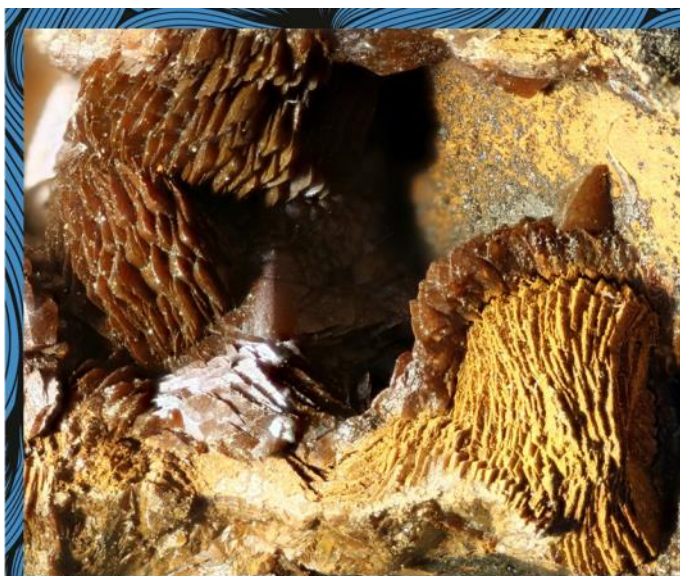
siderite

From Big Cliff, Clackamas
County, Oregon

BC3 fov 3mm

**COLOR
AND
ZONING**





siderite

From Big Cliff, Clackamas
County, Oregon

BC22 fov 9mm



siderite

From Big Cliff, Clackamas
County, Oregon

BC51 fov 6mm



siderite

From Big Cliff, Clackamas
County, Oregon

BC8 fov 4mm



siderite

From Big Cliff, Clackamas
County, Oregon

BC10 fov 3mm



siderite

From Big Cliff, Clackamas
County, Oregon

BC38 fov 12mm



siderite

From Big Cliff, Clackamas
County, Oregon

BC32 fov 9mm

IRIDESCENCE



siderite

From Big Cliff, Clackamas
County, Oregon

BC40 fov 4mm

IRIDESCENCE



siderite

From Big Cliff, Clackamas
County, Oregon

BC30 fov 2.5mm

COATED



siderite

From Big Cliff, Clackamas
County, Oregon

BC51 fov 6mm

COATED

The minutes of the October meeting were not received by the date of publication for this edition but I hope to have them for the next edition.

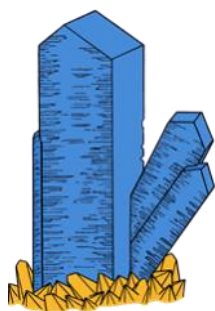


Editor's Plea

Please, we need your articles and mineral photos to make this the newsletter what it should be.

Please email articles and photos to
heesacker@coho.net

The next deadline will be
March 3, 2022




Interested in a wonderful resource for teaching children about minerals?

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www.PNWFM.org

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MINERAL MEETING CALENDAR

2022:

Pacific Micromineral Conference (MSSC) - **TBD**

Seattle Mineral Market - **May 21-22**

The Hangar 30 building at Magnuson Park
7110 62nd Ave NE
Seattle, WA

NCMA - **TBD (maybe later part of May)**

Eldorado Community Hall
6139 Pleasant Valley Rd.
Eldorado, CA

NW Micro Mineral Study Group - May, **TBD**

Stay Safe and Healthy!