

MAPLEWOOD ROCK AND GEM CLUB

2022
JUNE



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General meeting: June 20

Our meeting is at the clubhouse at 7 pm on June 20th. For a while longer we are requiring people to wear masks in the building.

Bring a rock or mineral for our Show and Tell. This is your chance to share that cool crystal you found on a mountain or at a rock and gem store.

Also, you will probably want to bring cash or a check to buy raffle tickets and to bid in our silent auction.

You can acquire beautiful or interesting specimens at our silent auction and from the raffle where we have many winning tickets each month.

Banner photo

The banner photo is a piece of brucite from the Killa Saifullah District, Balochistan, Pakistan. Image by [Géry Parent](#)
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*Jade found near Darrington
Example of a Show and Tell rock*



*Tiger eye
These are examples of rocks you might see in the silent auction.*

Maplewood Rock Show

We are holding a Rock Show on August 13 and 14. Mark those dates down on your calendar and look for details in upcoming newsletters.



Jim Miller's knapping display



Laura Hayes at her booth in a rock show



Mike Collins at his booth in a rock show



Carla James selling her creations at a rock show.

Here's a shout-out to those
with June birthdays

Happy Birthday!

We hope your June is filled with
happy times and love from
friends and family,
especially on
your day.



Your birthstones are pearl, alexandrite, and moonstone!

Juniors' Page — Many, Many Minerals

What is a mineral?

A mineral is something that is

- solid
- a group of chemical elements bound together with a fairly well-defined chemical formula
- in a specific crystal structure
- created naturally in pure form

Substances that are only created by living animals are usually not considered minerals. Pearl is a considered a gemstone but not a mineral, because it is made by a living creature: an oyster or mussel.



Pinctada Pearl Oyster
by [Didier Descouens](#); CC SA 4.0

Is “mineral” another name for “rock”?

No, but a rock can be made up of a single mineral. You might find an agate, which is a type of the mineral quartz on the beach. The two agates at the left were found on Oregon beaches, and the top one has been cut into a cabochon.

How many min- erals are there?

In January the International Mineralogical Association listed 5,780 different minerals. But, if you had asked how many there were a year ago, the answer would have been different. It's not that new types of minerals are being created, but rather that they are being discovered. About 30 to 50 are added and perhaps two or three are removed from the list each year.



Amethyst is a mineral. It's a type of quartz.

Mineral of the Year Award

In 2021 the International Mineralogical Association awarded the mineral, seaborgite, with "[Mineral of the Year](#)." The crystals have a habit of growing in blades that radiate out from a central point. Seaborgite was discovered in the Blue Lizard mine in Utah.



From: **Seaborgite, $\text{LiNa}_6\text{K}_2(\text{UO}_2)(\text{SO}_4)_5(\text{SO}_3\text{OH})(\text{H}_2\text{O})$, the First Uranyl Mineral Containing Lithium**

American Mineralogist. 2021;106(1):105-111. doi:10.2138/am-2020-7540




Figure Legend:

Diverging group of seaborgite blades with ferrinatrite. The field of view is 0.68 mm across. (Color online.)

Seaborgite, 2021 Mineral of the Year

Anthony R. Kampf, Travis A. Olds, Jakub Plášil, Joe Marty, Samuel N. Perry, Loretta Corcoran, Peter C. Burns; Seaborgite, $\text{LiNa}_6\text{K}_2(\text{UO}_2)(\text{SO}_4)_5(\text{SO}_3\text{OH})(\text{H}_2\text{O})$, the first Uranyl Mineral Containing Lithium. [American Mineralogist 2021](#); 106 (1): 105–111.

Not too far — Nearby Rock Shows Coming Soon



Maplewood

Rock & Gem Club

Since 1951

15th Annual | Rock & Mineral Sale

August 13-14, 2022

— Saturday, 9am-5pm

— Sunday, 10am-5pm

All Kinds of Rock,
from Rough to Jewlery

Free Rock for the Kids

Free Admission

Fantastic Mineral
& Fossil Specimens


Huge Selection


Over 20 Dealers

8802 - 196th St. SW
Edmonds, WA 98026

Our Clubhouse is located
just 3 miles west of I-5.

For club information and
membership:
ask.sandra@yahoo.com





www.maplewoodrockclub.com
www.facebook.com/MaplewoodRCG

Cascade Gem & Mineral Show

Saturday, August 20 from 10 am to 6 pm

Sunday, August 21 from 10 am to 4 pm

Green River College
Phys. Ed Facility
12401 SE 320th St
Auburn, WA 98092

Free admission and parking

Free polished rock for every child

<https://www.facebook.com/cascadegemandmineralshow/>

9am-3pm



ROCK SALE AT OUR FARM

with

WE-R-SPHERIOUS, MIKE COLLINS AND GUEST VENDORS



We invite you to come to our farm for a outside socially distanced rock sale the second Saturday of each month from April thru September. We will have tables and tables of rocks- ie spheres, rough, polished, thunder eggs, jewelry, figurines, crystals, and of course, slabs! Please bring a bucket for your rocks and a umbrella in case of rain. Coffee, hot cocoa and tea provided to keep you warm as well as cold water to keep you cool. Please contact us if you are looking for something specific. Cash and cards are accepted.

4707 Strumme Road Bothell, WA 98012

425-280-1833

2022

SALE DATES-April9, May14, June11, July9, Aug13, Sept10

Featured Mineral - Brucite

Brucite was discovered by Archibald Bruce (1777 - 1818). The few regions that produce quality collecting pieces are Wood's Chrome Mine, Cedar Hill Quarry, Lancaster County Pennsylvania; the [mountainous Killa Saifullah District of Baluchistan, Pakistan](#); and mines in Russia. The Pakistani mines yield up a rare yellow brucite. The Pennsylvania mine has rare green and blue brucite. Most specimens found are colorless or pearly white.

Brucite sometimes forms along the structures of other magnesium-rich minerals, like serpentine, and it can form in the cracks of phyllite and metamorphosed magnesian limestone.

Because brucite is rather soft (2.5 - 3.0 on the Mohs scale) and its tenacity is sectile (easy to crush or break), mining is often done by hand for collectable pieces.



Brucite from Bruce Samuels' collection

Brucite basics

Category: oxide mineral

Formula: $\text{Mg}(\text{OH})_2$

IMA symbol: Brc

Crystal system: trigonal

Crystal class: hexagonal
crystal family

Crystal habit:
tabular crystals
with rhombohedral
terminations; platy or
foliated masses and
rosettes; fibrous to
massive

Color: White, pale green,
blue, gray; honey-yellow
to brownish red

Cleavage: perfect in one
direction

Fracture: irregular

Tenacity: sectile

Mohs: 2.5 - 3.0

Luster: vitreous to pearly

Streak: white

Diaphaneity: transparent

Specific gravity: 2.39 -
2.40

Optical properties:
pyroelectric

Chemical bonds in the crystals

Brucite forms in a layered structure of sheets of MgO_6 octahedra with hydrogen bonds linking the crystals together. Each crystal apex in the sheet is topped with a hydrogen atom, and the layers are stacked so that the apexes fall into the cavities of the layers above and below. The layers do not have regular crystal bonds holding them together. So, brucite easily fractures with a perfect basal cleavage.

Industrial uses

Synthetic brucite is primarily used in industry

- to produce MgO , which is a refractory insulator
- as a flame retardant
- as a source of Mg

Flame retardant

Natural brucite is ground to a powder and sold in 85-95% concentrations as a flame retardant. Synthetic brucite is generally 99% pure as a flame retardant.

Magnesium oxide cement

To reduce carbon emissions in the production of cement, a magnesium oxide cement was invented in Tasmania, Australia. Unfortunately, independent scientists have not yet proven that this type of cement locks up more CO_2 than ordinary portland cement.

This method involves exposing cement to MgO and water resulting in brucite formation. The brucite is an expansive material that can create a mechanical stress in the hardened cement. However, if the Mg is carefully controlled, the expansion can counteract the normal shrinkage of the concrete, and the microstructure of the cement can be strengthened by blocking and filling voids and pores. This reduces the risk of cracking in the hardened cement. Over time the cement bonds with ambient CO_2 which some say makes up for the CO_2 released during the manufacturing process, and others claim it does not.



Both photos above are brucite from the Killa Saifullah District of Baluchistan, Pakistan
by [Géry Parent](#); [CC BY-ND 2.0](#)

Philosopher's stone

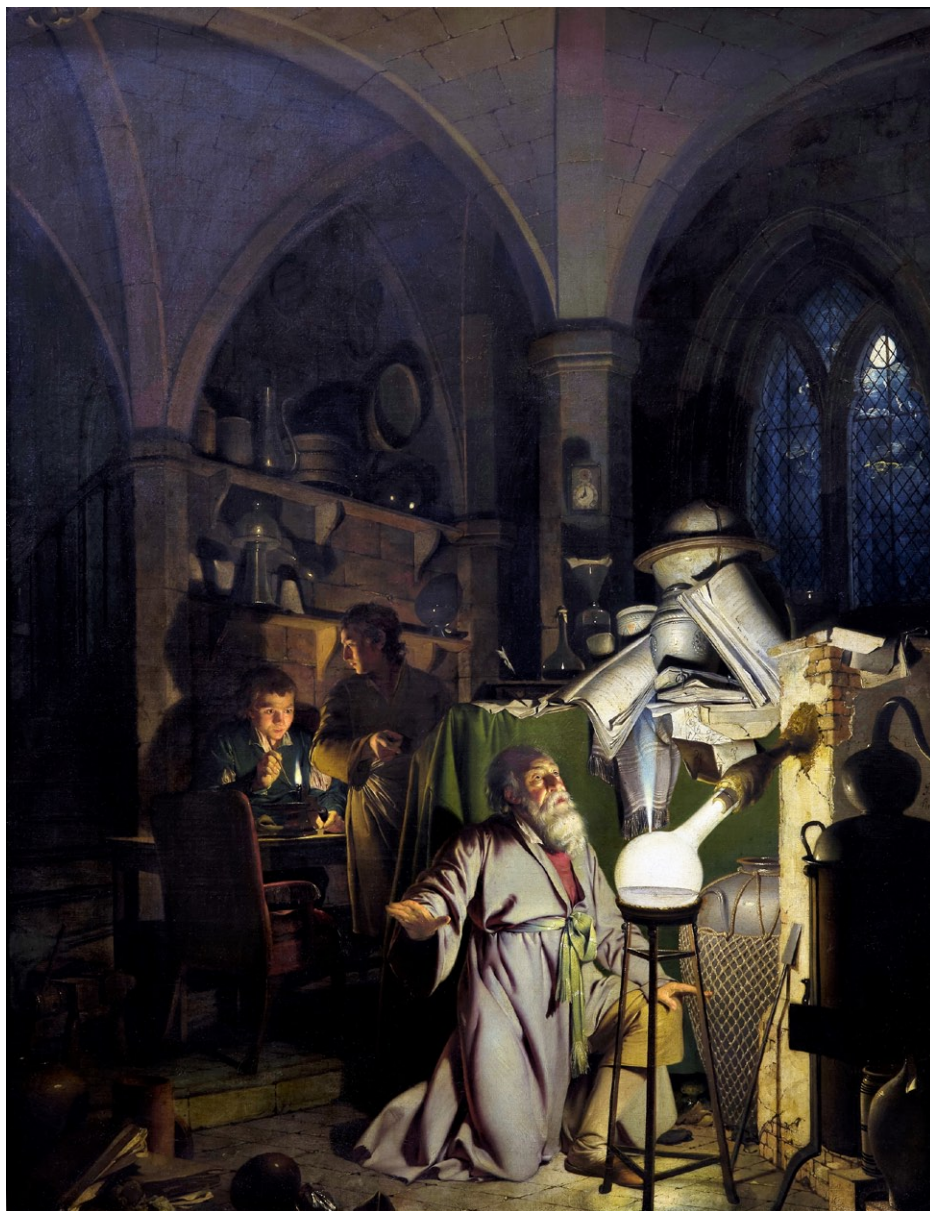
Centuries ago scientists believed that the world was made up of four elements: earth, air, fire, and water. They thought that if they could just understand how gold was made up of these elements, they could change another metal, like lead, into gold or silver and become abundantly wealthy.

Alchemists investigated substances in hopes of isolating the mysterious Philosopher's Stone.

The first element that was isolated and thus, discovered was phosphorus.

In Germany in 1669 Hennig Brand, a military officer and physician, noticed an unusual substance on the floor of his cow barn. He scraped it up and began testing it, including putting it into his distilling apparatus. During the night he noticed a faint glow coming from a waxy material in the testing container.

Brand had not, unfortunately discovered the Philosopher's Stone. Instead, he was the first to isolate an element, phosphorous. He distilled cow urine and discovered naturally occurring phosphorous, which is represented by the letter *P* in chemical formulas.



The Alchemist, in Search of the Philosopher's Stone
by Joseph Wright of Derby, 1771
Derby Museum of Art Gallery, Derby, UK

Field trips

Contact the host a week before the trip to get details. Be sure you obtain the required parking pass, such as a Discover Pass. Arrive at the meeting site 30 minutes before the scheduled time, and be sure to have everything you might need including a full tank of gas, tools, food, water, appropriate clothes, rain gear, and first aid supplies.

The trips hosted by All Rockhounds Pow Wow have a small fee, but you get breakfast, so it's a good deal.

Below are the field trips planned for 2022.



*Listwanite slice on top of a large slice of serpentine
From Bruce Samuels' collection*

Date	Search for	Details
June 18	Rainbow chert	Meet: Verlot Ranger Station at 9 am Tools: light hard rock Host: Ed Lehman; wsmced2@outlook.com; 425-760-2786 or 425-334-6282
June 23-28	Petrified Wood Thundereggs Agate Jasper	Meet: Madras, OR fairground at 8 am Host: All Rockhounds Pow Wow; Larry Vess; vessel3755@gmail.com; 253-473-3908
July 16	Travertine	Sweetwater Meet: Darrington Show Tools: river bar Host: Darrington Rock and Gem Club; Ed Lehman; wsmced2@outlook.com; 425-760-2786 or 425-334-6282

Aug. 6-7	Agate Jasper Petrified Wood Opal Thunderegg Fossils Lilypad jasper	Greenwater Meet: Foresst Service Station in Enumclaw Little Naches Hwy 410 and Forest Road 19 at 10 am Tools: all Host: PVGMC; Dennis Bachelor; 360-870-8741
Sept. 10	Thunderegg Fossil Lilypad jasper	Little Naches Meet: Little Naches Hwy 410 and Forest Road 19 at 10 am Host: NOA; Tony Johnson; ynotopals@outlook.com; 253-863-9238
Sept. 10-11	Agate Geode Jasper Jade	Red Top Teaway Camp at 8 am Host: All Rockhounds Pow Wow; Larry Vess; vessel3755@gmail.com; 253-473-3908
Oct. 15	Picture jasper	Skykomish Meet: Money Creek Campground, Hwy 2 at 9 am Tools: Rock and crack hammer Host: Ed Lehman; wsmced2@outlook.com; 425-760-2786 or 425-334-6282
Nov. 12	Dalmation stone	Alger I-5 exit 240 at 9 am Hard rock Host: Ed Lehman; wsmced2@outlook.com; 425-760-2786 or 425-334-6282



*Two large finds by Mary Garvey.
The left one is sealed asbestos, and
the right rock is jade.*

Rock and Gem Shows

June 17, 10 am - 5 pm	Lower Umpqua Gem & Lapidary Society Reedsport Community Building 451 Winchester Ave Reedsport, OR	
June 18, 9 am - 5 pm		
June 19, 10 am - 4 pm		
June 18, 10 am - 6 pm	Bitterroot Gem and Mineral Society	\$3 adults
June 19, 10 am - 5 pm	Hamilton Fairground Interstate Building 100 Old Corvallis Road Hamilton, MT	12 and under are free
Aug. 5, 10 am - 5 pm	Far West Lapidary & Gem Society The Mill Casino 3201 Tremont St North Bend, OR	\$1 adults
Aug. 6, 10 am - 5 pm		12 and under are free
Aug. 7, 10 am - 4 pm		with an adult
Aug. 12, 9 am - 5 pm	Maplewood Rock and Gem Club 8802 196th Street SW Edmonds, WA	
Aug. 13, 10 am - 5 pm		
Aug. 20, 10 am - 6 pm	Cascade Mineralogical Society Green River College 12401 SE 320th St Auburn, WA	
Aug. 21, 10 am - 4 pm		
Aug. 26, 10 am - 5 pm	Southern Washington Mineralogical Society Silver Lake Grange 4200 Spirit Lake Hwy, Exit #49 on I-5 5 miles up Spirit Lake Hwy Castle Rock, WA	
Aug. 27, 10 am - 4 pm		
Sep. 10, 9 am - 5 pm	Clallam County Gem and Mineral Association Vern Burton Community Center 308 East 4th St Port Angeles, WA	
Sep. 11, 10 am - 4 pm		
Sep. 24, 10 am - 5 pm	Springfield Thunderegg Rock Club Willamalane Adult Activity Center 215 W C St Springfield, OR	
Sep. 25, 10 am - 3 pm		

Sep. 30, 10 am - 6 pm	Portland Regional Rock and Gem Show	\$5 adults
Oct. 1, 10 am - 6 pm		12 and under are free with an adult
Oct 2, 10 am - 5 pm	Wingspan Event Center 801 NE 34th Ave Hillsboro, OR	
Oct. 1, 10 am - 5 pm	Marysville Rock and Gem Club	
Oct. 2, 10 am - 5 pm	Evergreen State Fairgrounds Display Building #500 14405 179th Ave SE Monroe, WA	
Nov. 19, 10 am - 5 pm	Kitsap Mineral and Gem Society	
Nov. 20, 10 am - 5 pm	The President's Hall 1250 NW Fairgrounds Road Bremerton, WA	
Feb. 25, 10 am - 6 pm	Idaho Gem Club	
Feb. 26, 10 am - 5 pm	Expo Idaho 5610 Glenwood Boise, ID	

Schedule a time in the Lapidary Shop

The lapidary shop is open on Thursdays. You can sign up for a 2 1/2 hour session to use our saws and cabochon machines. The sessions run from 3 - 5:30 pm and from 5:30 - 8 pm. Each session is \$5 and masks are required. In July the fee for using the shop will be \$7.

We will be going to an online system for scheduling your shop time in the near future, but for now, please schedule your time by emailing ask.sandra@yahoo.com

The Shop Stewards also sell grit and saw oil. You do not need to schedule time in the shop, but you do need to contact the stewards at least a day ahead.



Board meeting

If you have questions for the board or if you'd like to attend a meeting, please email our Board maplewoodrocks1@gmail.com.

Connect with us

Website: <http://www.maplewoodrockclub.com/>

Facebook page: [Maplewood Rock & Gem Club](#)

Facebook group for members: [MRGC Sales and Trades](#)

Address: 8802 196th St SW, Edmonds, Washington 98026

Washington State Mineral Council

Our club, along with many other rock and gem clubs in the state, is a member of the [Washington State Mineral Council](#).

This organization helps us by

- advocating for access to public lands
- advocating for beneficial land use policies
- compiling and sharing maps and other information
- publicizing shows and field trips so members learn about and can participate in events at other clubs

Read their latest [Newsletter](#).



Image license attributions

We use abbreviations in the license attributions. Here are the definitions.

CC: Creative Commons license

BY: attribute the author, link to the license, and indicate if changes were made.

SA: share alike - If you publish the image, you must use the same license.

ND: no derivatives - You may not alter the image.

NC: non-commercial use - You may not use the image for commercial use.

3.0 or other number: version of the license

Sister club in Australia

Our sister club in Australia is the Atherton-Tableland Mineral & Lapidary Club in Tolga, Queensland. Connect to them on Facebook:

www.facebook.com/groups/197340266987276

One hundred million years ago the eastern edge of the Australian continent extended much farther to the east. Tectonic forces broke off and submerged the eastern section into the ocean while a rising mantle caused the remaining land to lift.

Beginning 4 million years ago large basalt flows filled river valleys and formed a relatively flat landscape. Following that period the volcanoes became more gaseous spewing lava in violent eruptions. This landscape is now called the Atherton Tablelands. You can learn more on Wikipedia.



This issue

Maplewood Rock and Gem
Club News

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News to share? A suggestion? A correction?

Please send news ideas and images you'd like to share to the newsletter editor, Nancy Samuels at mrgc@nancysamuels.com.