

MAPLEWOOD ROCK AND GEM CLUB

2021
JUNE



Inside this issue

Board meeting	17
Connect with us	17
Cryptogram answer	15
Do you sell rocks, gems, crystals, or minerals?	7
Facebook	16
Field trips	7
Final Online auction	1
General meeting: June 21	1
History of the club	10
How to impress your beau	9
Image license attributions	17
June Birthdays	5
Juniors' Page - Pearls	2
Natural and cultured pearls	13
Pearls of Wisdom puzzle	14
Pearly prison	4
Rock Sales: We-R-Spherious	3
Rock shows	8
Saddle Mountains field trip	6
Sister club in Australia	18
Videos for kids and adults	15
Walker Valley thundereggs	8

General meeting: June 21 (maybe?)

As this newsletter is being published, the Board is considering whether to have an outdoor in-person general meeting this month instead of on Zoom. People would bring their chairs and wear masks. The meeting might be changed to a different date and time. Watch for Sandra's email about the meeting.

Final Online auction

Members can participate in our last online auction by going to our [Facebook page](#) and clicking on the event, "MRGC silent auction" and select *Discussion*. To bid on an item comment with a dollar amount. The auction is scheduled to end at 10 pm on June 21.



One of the rocks being sold is this specimen with crystals growing in columns according to their natural crystal habit. Your next chance to buy rocks and minerals is [August 14 - 15 at our Summer show](#).

Banner image

The image of the pearls is from [James St. John](#) and is republished here under the Creative Commons license [BY 2.0](#). The image was resized to fit.



Pearl necklace
by [tanakawho](#)



Pearl diving suit
from Kuwait, 1300's
by [Kuwaitsoccer](#)
[CC BY-SA 3.0](#)



Pearl Trader
painting on mica
from 1870, India,
[Walters Art Museum](#)

Juniors' Page - Pearls

Pearls are rare in nature

Have you eaten clams or oysters? They are delicious, especially served with garlic aioli or tartar sauce, and you don't have to worry about bones — they don't have any. These animals belong to the mollusk family which has about 85,000 separate species including octopuses, oysters, and garden snails.

All mollusks that have shells are able to make pearls, but most individual animals never will. They only make pearls when something gets under their skin and they can't get it out, like a splinter. (A mollusk's skin is called its mantle.)

When people talk about pearls, they almost always mean pearls made out of nacre (mother of pearl) which is iridescent. Only about 35 species do that. These creatures also line their shells with nacre.

Pearl hunting

People have been diving into oceans for thousands of years to find pearls. The earliest written records are from places on the Indian Ocean. Scientists think people were hunting pearls long before they could write about it.

Cultured pearls

Now, people culture pearls; this means they create the conditions for encouraging the animals to grow pearls. The three saltwater oysters shown here are commonly used for this. Almost all cultured pearls are from China and Japan.



Pearl, [James St. John](#)
[CC BY 2.0](#)



Abalone
by [James St. John](#)
[CC BY 2.0](#)



Nautilus
by [Chris 73](#)
[CC BY-SA 3.0](#)



Saltwater pearl oysters
Black-lipped pearl oyster
Japanese pearl oyster
Gold-lipped pearl oyster
by [James St. John](#)
[CC BY 2.0](#)

Rock Sales: We-R-Spherious

July 10 from 9 am to 3 pm

4707 Strumme Rd, Bothell, WA 98012
425-280-1833

You will find plenty of rocks at Beverly and Dennis Ryder's Saturday sale. Dennis cuts and polishes gorgeous spheres of rocks — in countless stones, sizes, and colors. You will find these glossy globes for sale along with cabochons, crystals, wands, knapped stone,

fossils, bowls, unworked rocks, and much more.



Stone spheres



You can find We-R-Spherious on [Facebook @WeRsph](#)

Mike Collins will have a table at the show too. Mike cuts and polishes cabochons, hearts, and other items.



Wands, stars, and a bowl



Cabochons



Ammonite fossils



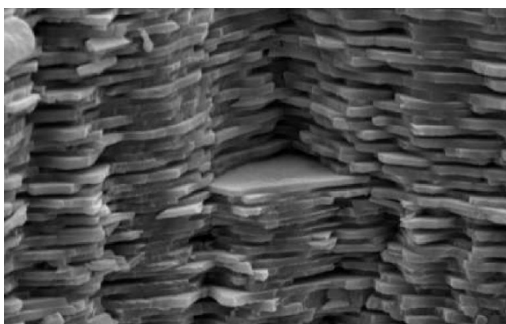
Bins of rocks ready for you to work or display

Pearly prison

A shelled mollusk forms a pearl to work as a jail cell locking danger within. Mollusks cannot expel all harmful parasites, stones, or other irritants that enter their shells. To defend against being physically hurt, a mollusk encapsulates the irritant with the same substance that coats the inside of its shell, essentially jailing the dangerous body.

Nacre instead of iron bars

To make a pearl the mollusk layers hexagonal platelets of aragonite (a form of calcium carbonate). These platelets are microscopic at 10-20 microns wide and .5 microns thick.



Fractured nacre viewed with an electron microscope
by [Fabian Heinemann](#)

Like a brick wall, the platelets overlap so there is no vertical space going down through the layers. The platelets are staggered as layers are laid down upon previous rows. This inhibits transverse crack propagation.

About 35 species make nacreous pearls which are strong and resilient due to their structure. These species separate layers of platelets with sheets of elastic biopolymer called conchiolin. The elastic protein layers between the brittle staggered platelets yields a material that has high toughness: it can absorb energy and plastically deform under pressure without fracturing. Nacre is almost as strong as silicon.



Pinctada margaritifera
by [Didier Descouens](#)
[CC BY-SA 4.0](#)

Pearl basics

Category: carbonate mineral and protein

Formula: CaCO_3

Crystal system: orthorhombic

Mohs: 2.5 - 4.5

Cleavage: none

Fracture: uneven

Color: white, pink, silver, cream, brown, green, blue, black, yellow, orange, red, gold, purple, iridescent

Luster: vitreous

Streak: white

Specific gravity: 2.6 - 2.85

Birefringence: 0.156

Refractive index: 1.52 - 1.66

UV fluorescence: some

June Birthdays

Happy birthday to everyone born in June! August and December are the only other months with three birthstones. June's gems are pearl, moonstone, and alexandrite. Among those three, do you have a favorite? If not, read on and perhaps one of these gems will win your favor.

Pearl

Pearl is the only gem created by living creatures. It is also unique among birthstones and gems in that it is not a rock, stone, or mineral.

Rocks are formed in three ways: magma within the earth cooling (igneous); river and sea bottom deposits slowly turning to stone (sedimentary); and existing rocks changed by heat and pressure into new rocks (metamorphic). Stones are nonmetallic minerals, yet most gem pearls are a composite of the mineral aragonite (calcium carbonate) and conchiolin, a protein.

Because pearls have been enhancing jewelry alongside rubies, emeralds, and other gemstones for millennia, people have continued the tradition of classifying pearl as a gem.



Moonstone

Moonstones are the only gemstones that are mined on Earth's moon. Well, that would be cool if it were true, but it's not. Moonstone's pearly opalescent schiller can be as mesmerizing as a pearl. As light shines through the stone it seems to glow, like a full moon. This light effect is created by layers of orthoclase and albite creating myriad surfaces to reflect light down throughout the stone.



[Alexandrite color change](#)
by Salexmccoy
license: [CC BY-SA 3.0](#)



Alexandrite

Alexandrite is treasured because it shows different colors. Its pleochroism causes it to color-change when viewed from various angles. It also appears as different colors depending on the light source. Alexandrite absorbs some wavelengths of light which most often shows a green appearance in sunlight and red in incandescent light.

Saddle Mountains field trip

by Bruce Samuels

On May 23rd Ed Lehman led a field trip to Saddle Mountains with Hunter Bryson assisting. The group met at the Lep Re Kon Harvest Foods in Mattawa and convoyed to the Saddle Mountains dig site for petrified wood.



Petrified wood

Petrified Wood

Hunter and Ed helped people learn to find hidden petrified wood. The group looked for small pieces among the desert sage brush and bunchgrass.

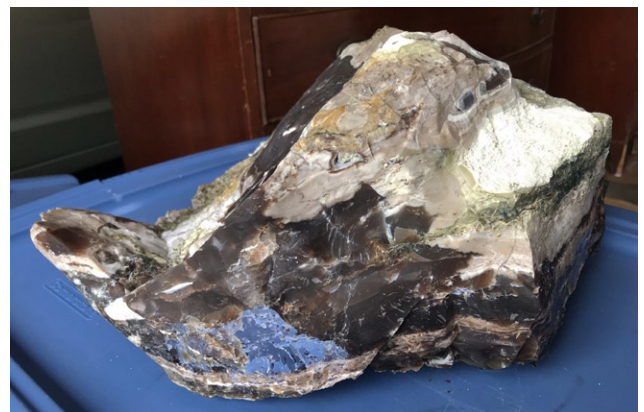
They followed the likely path the petrified wood took by going up the slope. That is where they searched for large pieces. Several people found 10 - 12" specimens. Hunter said one of those pieces was one of the nicest he has ever seen from the area.



Opalized diatom

Opalized diatom

After three hours of digging the group convoyed to the site for opalized diatom. This was on private land where they mine the fossilized remains of



Opalized diatom

single-celled algae called diatoms. These fossils are ground to make diatomaceous earth. Ed had arranged with the owners for permission to collect this stone which is found with the fossilized diatom but is not wanted by the miners. We cannot collect from this site without first coordinating with Ed.

Do you sell rocks, gems, crystals, or minerals?

If you sell stone hearts, cabochons, spheres, slabs, crystals, gems, minerals, or related specimens, let me know about what you sell, so I can feature your shop here in the newsletter. With a little publicity and good fortune, perhaps our whole club membership will have hearts of stone - the good kind!

Nancy Samuels: mrgc@nancysamuels.com



Field trips

Questions? Email Ed Lehman at wsmced2@outlook.com or call him at (425) 334-6282 or (425) 760-2786.

June 19th at 9 am

Looking for: Rainbow chert
Meet at the Verlot Ranger Station.

August 21st and 22nd at 9 am

Meet at the Enumclaw Ranger Station: 450 Roosevelt Ave E, Enumclaw, WA 98022
Trip ends at Greenwater, WA

September 18 at 10 am

Meet on Hwy 410 and NF-19 (Little Naches Road):
46.989699, -121.096497
Looking for: Thunder eggs, lily pad jasper, and fossils

October 16th at 9 am

Meet at the Money Creek Campground
off Hwy 2 before Skykomish
Stevens Pass Hwy, Skykomish, WA 98288
Looking for: Picture jasper

November 13th at 9 am

Meet: Take I-5 exit #240 and go toward Blanchard Hill.
Meet at the Shell Gas Station by the exit.
Looking for: Dalmation stone

We are having a summer show!

August 14 - 15

Everyone seems eager to return to holding rock shows a few times a year, and the Board has decided it's time to begin.

Our show will be in mid-August, but deadlines start in June. Check out *Rock Shows* on the next page for important dates. If you can help with this event, contact Eric.

Rock shows

July 17th and 18th

Darrington Rock Show by the [Darrington Rock and Gem Club](#)

August 14th - 15th

Maplewood Rock and Gem Club

Request for space deadline is June 30.

Roster and space assignments will be made by July 10.

Payment is due by July 20.

August 13th through 15th from 10 am to 6 pm

Gem Show in the Trees by the [Puyallup Valley Gem and Mineral Club](#)

at Tacoma Sportsmen's Club: 16409 Canyon Rd E, Puyallup, WA

Free parking and admission. Come visit gem, mineral, and fossil venders, and see demonstrations.

Our club is 70!

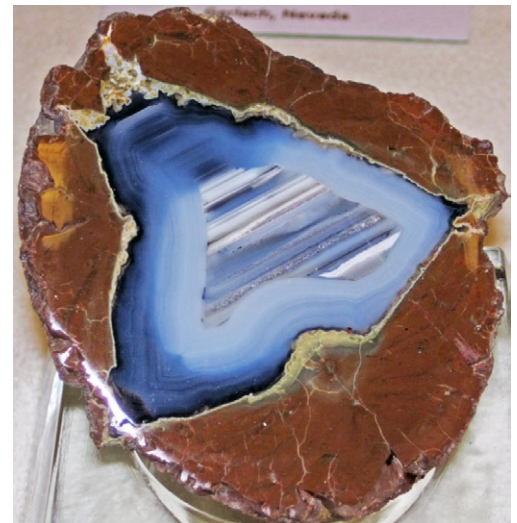
In 1951 members of the Maplewood Community Club a neighborhood social club realized that many of them shared an interest in rocks and minerals. They decided to start a new club, and the Maplewood Rock and Gem Club began. Learn more about the [history of the club](#).

Walker Valley thundereggs and geodes

The access road to the Walker Valley geode site is now gated. The Washington State Mineral Council has a valid mineral lease for rockhounding in this area by members of its clubs.

If you are not a member, please join our club before collecting rocks at Walker Valley. Here are some tips about looking for geodes or thundereggs at this site.

- [Download a map and directions](#)
- [Get a Discover Pass](#) for each vehicle.
- If the gate is locked, park completely off the road and walk around the gate. The collecting is less than 250 feet past the gate.
- After your trip fill out a [Walker Valley Questionnaire](#) about the conditions during your trip.



Thunderegg with agate
Friday Blue Bed, John Day Formation
by [James St. John](#)
[CC BY 2.0](#)



Banquet of Cleopatra by Giambattista Tiepolo, 1744 National Gallery of Victoria, oil on canvas

How to impress your beau

Egypt's Queen Cleopatra had been treated to numerous lavish dinners by Marc Antony, and Cleopatra tired of his attempts to impress her. Being a confident and extremely wealthy ruler, she decided to wager with him that she could entertain him at a feast costing 10 million sesterces (about \$3 million today). Antony took the bet.

Cleopatra served a dinner nearly identical to the ones Antony had hosted, and at the end he asked how this meal could cost so much. Happy that he took the bait, Cleopatra ordered the next course which was merely a couple glasses of vinegar.

Cleopatra was wearing earrings of the largest pearls known at that time. She took off the earrings, and dropped one in a glass of vinegar. In Tiepolo's painting you see Cleopatra dangling her pearl earring above the vinegar. After the pearl dissolved, she drank it. Then, she offered the other earring and glass to Antony for him to drink a pearl. Antony declined both pearl and glass and conceded the wager.

Years later Antony and Cleopatra warred against Octavian's army in the Battle of Actium. The pair lost, and the remaining earring was taken by Octavian. Back in Rome, the enormous earring was cut in half to make two earrings for the statue of Venus in the Pantheon.

History of the club



HEY! LET'S GO TO
MAPLEWOOD.
IT'S A ROCK CLUB!



HISTORY OF THE MAPLEWOOD CLUB

This is the story of the Maplewood Rock, Gem and Community Club
as remembered by Billie Butterworth, one of the charter members.
(As written in a 1971 edition of the Maplewood News)

In 1951 the Maplewood Community Club gave Mr. Scheifelbein permission to help form a rock club as an auxiliary to the Community Club. They knew that some members and others in the community were interested in the hobby. They were also hoping to interest some as new members to the Community Club, which it did.

At the first meeting of the new club, about half of the people present were members of the Community Club. Fred Shaw asked for help in organizing the new club, from some of the Everett Rock Club members, and Mr. George Frost, Scotty Robinson and Mr. Cowan answered the call.

History of the Club part 2

As far as I can remember (with the help of Fred and Florence Shaw) those present at the very first meeting were Mr. and Mrs. Schefelbein, Mr. and Mrs. Anerich, Mr. and Mrs. Brogau, Mr. and Mrs. Everett Wilson, Mr. and Mrs. Cushman, Mr. and Mrs. Fred Shaw, Walter Butterworth and myself. Another lady, I believe by the name of Helen King, was also there. If any others were present, I'm sorry, I do not recall them.

At the first meeting Fred Shaw was asked to be the chairman until the election of officers and the by-laws were written, as he was then a member of the Everett Club. Jean Wilson acted as Secretary-Treasurer. It was agreed that each one present pay 25 cents a meeting to get some working funds in the treasury. As time progressed new faces appeared. The by-laws were passed following along the lines of the ones from the Everett Club, and the name of "Maplewood Rock Club" was made official. Dues were set at \$2.00 a year.

Next came the election of officers; Fred Shaw was elected president. Francis Anerich vice president and Ruth Ferguson as secretary-treasurer for the rest of 1952. During the rest of the year, membership was open for charter members and I believe there were 38 (?). Also the club made Mr. Frost, Mr. Cowan and Mr. Robinson honorary members and they proved to be a big help in the first few years.

The Community charged us no rent for the building, but we worked with them in repair and cleaning of the clubhouse.

Once a year to raise money, we had what we called a game night, open to the public. Fred Shaw was able to borrow the American Legion bingo game and we charged 10 cents a card or 3 for 25 cents. Members donated prizes they had made of the polished stones and sets, besides a few special ones we found we could afford. Everyone looked forward to that night and had lots of fun.

Through Ed Cushman, who knew where and how to buy rock, the Club would purchase 100 lbs. of different materials and sell it to members, a little above cost, to finance the Club. This way some members were able to have nice material, especially those who couldn't go on field trips. From this money and dues of course, the Club was able to buy some fluorescent rock now and then, and a black light. To display them George McLeod donated a case.

The library was established in 1954 with 23 books for a start. To raise money to purchase more, a rent of 25 cents a month was charged and then members pay fines of 10 cents went towards this.

History of the club part 3

When the Regional Committee was formed, they asked us to join and as we were the only one outside of King County, we thought we really had come of age. Then we found we needed an insignia to let everyone know who we were, in our show cases. Mr. O'Celler finally came up with the maple leaf design and a lead cut was made. From this, cards were printed and each member could use them -- no charge.

As the club grew in membership, a movie projector was bought to use for some programs, also a short wave fluorescent light. To print notices of meetings and banquet programs, a printing machine was purchased.

It was in 1959 when the Community Club was slowly losing members that they decided to discontinue. A decision had to be made then by the few active members of the Community Club, what to do about the clubhouse and grounds. Since they had sponsored the Rock Club and it looked like a very active growing club, they voted to turn it over to the Rock Club with certain hopes and restrictions for a matter of 6 years. The hope was that the Rock Club would incorporate and amalgamate the two clubs into one, adding the name Community in their title. Mr. H.O. Hutt worked for two years to finally get the name as it is now. Also that anytime the Community so required the use of it, it would be available. The restriction was that a board of both Rock Club members and Community Club would take care of the finances of the building for six years. Those elected were Walter Butterworth as chairman, Bill Davis secretary and Mina Hutt treasurer. Fred Shaw and Mr. McLeod were also members of the board.

In 1966 this board was dissolved and since then the Rock Club has the complete control of the building and grounds. Shortly after the Rock Club took control of the property, the Public Utilities District approached the Club about the possibility of purchasing the property to the west of the building for a substation. The pros and cons of this sale were weighed and the final decision of the Club was to sell the property and fix up the building and add to the parking area around the building. This was done, and that pretty well brings us up to date on the story of the Club.

Billie Butterworth

In checking some old copies of the Maplewood News we found this history of the Maplewood Club. We have heard the question asked "Does anyone know the history of this Club?" We hope this will answer some of the questions and give new members a bit of the working history of the Maplewood Rock, Gem & Community Club.

Bud & Emma Lischke

Natural and cultured pearls

Natural pearls

When people talk about pearls, they nearly always mean pearls made out of nacre. These are the only ones that are iridescent. However non-nacreous pearls that are considered gems come from other mollusks including Melo melo, giant clam, scallop, pen shells, queen conch, pink conch, and the Florida horse conch.

Cultured saltwater pearls

Most pearls are cultivated from the Pinctada genus of saltwater oysters. Pinctada oysters are not true oysters; they are not closely related to the Ostreidae family of oysters which you would find on restaurant menus. Nor are they closely related to the freshwater mussels that produce mother of pearl.

Cultured freshwater pearls

Freshwater cultured pearls for commercial markets are only produced in China. The tetragon shell mussel (*Hyriopsis cumingii*) is the primary choice for Chinese freshwater pearl cultivators. A historic pearl farm in Tennessee is the only farm outside of Asia, and they currently exist as a tourist attraction.

Nacre strength

Natural pearls are almost completely comprised of calcium carbonate and [conchiolin](#), which together comprise nacre. The illustration at the right shows how concentric layers of nacre are built around the irritant. Because the nacre enables the pearl to flex a bit rather than break under pressure, we can see how a natural pearl would be resilient and strong.

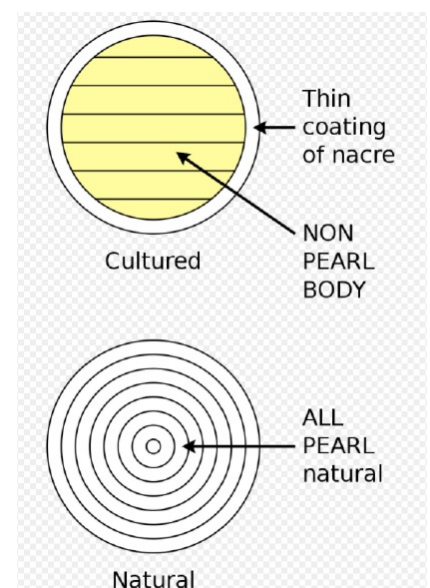
Cultured pearls are built around an implanted irritant and are harvested after a lovely shell of nacre develops. We can see in the illustration that the strength would not be as robust.



Blister pearl - a pearl that developed as a half-sphere nestled against the interior of the abalone shell



*Melo melo and its pearls by [Liné1](#)
license: [CC BY-SA 4.0](#)*



Each letter in the cryptogram needs to be replaced with a different letter. To help you get started we have given you 3 of the correct replacement letters. For example, every *Q* in the puzzle should be replaced with an *L*.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

A Q G

QOJL OW CMYL NV TJ M
JLE CTCLDBW MQQ WBGNDI
BTILBALG QOUL VLMGQW. LMSA
CTCLDB OW M VLMGQ. MDY
OB OW NV BT NW BT VOSU
BAL TDLW EOBA BAL AOIALWB
QNWBLG.

BAL ALMGB TJ CMD OW KLGF CNSA
 QOUL BAL WLM. OB AMW BAL
 WBTGCW. OB AMW BAL BOYLW.
 MDY, OD OBW YLVBW OB AMW
 OBW VLMGOW.

Videos for kids and adults

The internet offers myriad videos about rocks, minerals, gems, and related topics. Here are some links to videos you might enjoy.

[Where do Pearls Come From?](#) by SciShow Kids

In this video, she says pearls come from oysters, but you know they actually come from a lot of other mollusks too. Most of the pearls we see in jewelry are from oysters, so she is probably trying to keep her message simple.

Kids: [How to Draw a Clam with Pearl](#) by A Sva

Adults: [How to Draw a Pearl](#) by Wooa Kim

[Formation of a Pearl | Secret Life of Pearls](#) by National Geo Wild

[How and Why do Oysters make Pearls?](#) by Today I Found Out

Cryptogram Puzzle answer

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
M		S	Y	L	J	I	A	O		U	Q	C	D	T	V		G	W	B	N	K	E		F	

Joyce Kilmer

Life is made up of a few moments all strung together like pearls. Each moment is a pearl. And it is up to us to pick the ones with the highest luster.

Vincent van Gogh

The heart of man is very much like the sea. It has the storms, it has the tides and in its depths, it has its pearls.



Beach at Scheveningen in Stormy Weather
Vincent van Gogh, 1882

Win-win for everyone

Until we can resume having rock shows, our building upkeep and other costs need to be covered by other means. You can help the club while getting a win-win outcome.



Selenite desert rose

Bid in the silent auction

Bidding on items in the silent auction is a way to give back to the club. You get a gorgeous specimen of rock or mineral and the club has a little more money for paying bills. All the items available in the silent auction were donated, so even before you bid, people have already generously supported our club.

When bidding, remember that this is a fundraiser where you might get a huge bargain; you might pay a fair price; or you might even bid generously. Don't be afraid to bid up on something you like. The previous bidder, might respond in kind to your bid.

Buy grit for your rock tumbler

Contact Sandra to buy grit: ask.sandra@yahoo.com

Donate to the club

Our club is a 501(c)(3) organization, so if you itemize deductions, you might receive a tax deduction. Ask your tax expert.

Checks can be made out to *MRGC* if you don't want your hand to cramp from writing the entire club name, *Maplewood Rock and Gem Club*. The club address is

8802 196th Street SW
Edmonds, WA 98026



Facebook

Our [facebook page](#) has up to date information about what is happening at our club. When we have online auctions, they happen on our page.

We also have a Facebook group — [MRGC Sales and Trades](#) — which is open to members of our club.



Board meeting

If you have questions for the board or if you'd like to attend a meeting, please email our Board President, Sandra: ask.sandra@yahoo.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 into the ocean the eastern section 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

Volume 6

Publication Year: 70

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.