

MAPLEWOOD ROCK AND GEM CLUB

2020
MAY



Inside this issue

Birthstone - emerald	5
Board meeting	2
Calendar	3
Connect with us	2
Emerald Trivia	6
Emerald Trivia Answers	10
Explore the world — Virtually	4
Field trips - All trips are cancelled for now	7
General meeting on Zoom	1
Looking for a party venue?	9
Rock of the Month	9
Show and Tell	3
Sister club in Australia	11
Suggestions for future articles	2
Washington State Mineral Council	1

General meeting on Zoom

We hope you will join us at our May meeting which will be Monday, May 18 at 7 pm on Zoom. Members received a Zoom link in an email.

If you have never used Zoom, you might find [this video introduction](#) helpful.

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 and for beneficial land use policies compiling and sharing maps and other information publicizing shows and field trips so members learn about events at other clubs.

The Council has a new website address:
<https://mineralcouncil.wordpress.com>

Their email address has also changed. You can contact them at mineralcouncil@zoho.com.

Connect with us

Visit our web site:

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

Connect with us on Facebook:

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

Our address is

8802 196th St SW, Edmonds, Washington 98026



Board meeting

Members are always invited to attend board meetings. Please join the board at their next meeting which will be held on Zoom on June 4. Watch your email for a link to this meeting.

Suggestions for future articles

Is there a topic you would like the newsletter to cover? For instance, would you like to see an introduction to crystal shapes? Do you have a favorite rock hounding term that we could use as the Word of the Month? Nancy, the news editor enjoys learning about rocks and minerals, and she would have fun digging just a bit into a topic to provide a brief write-up.

Word of the Month

Mafic or Ferromagnesian

These are adjectives which are used to describe a dark igneous rock that is rich in magnesium and iron. Common types are pyroxene and olivine.

Igneous rocks are classified into mafic and felsic, which are light colored and comprised of feldspar, leucite, and silica. Examples are granite, rhyolite, and dacite.

Calendar

Date	Event - all events are cancelled for now
May 18 at 7 pm	Meeting Rock of the Month presentation: open
June 15 at 7 pm	Meeting Rock of the Month presentation: open
July 20 at 7 pm	Meeting Rock of the Month presentation: open
Aug. 8 - 9	14th Annual Rock and Mineral Sale
Aug. 17 at 6:30 pm	Meeting: BBQ Potluck and Meet and Greet
Sept. 21 at 7 pm	Meeting Rock of the Month presentation: open
Oct. 19 at 7 pm	Meeting Rock of the Month presentation: open
Nov. 14 - 15	Annual Fall Show
Nov. 16 at 7 pm	Meeting: Rock of the Month presentation: open
Dec. 5 - 6	Annual Winter Bazaar
Dec. 14 at 6:30	Meeting: Holiday Party

Show and Tell

Do you have a couple rocks or minerals you'd like to share with us? They might be interesting rocks you found on a rock hounding trip or specimens you saved long ago because they were beautiful or interesting.

Until we resume our monthly meetings, please share your Show and Tell stories here in the newsletter. Send a photo and a short blurb about what makes these rocks interesting to newsletter editor, Nancy Samuels at mrgc@nancysamuels.com.

Rock Shows

All are cancelled until further notice

Check out the [January news](#) for a long list of rock and gem shows around our region in 2020.

Explore the world — Virtually

Settle into your sofa and tour a museum or get out rockhunting on you phone or tablet.

Museums

- [Smithsonian National Museum of Natural History](#)
- [American Museum of Natural History](#)
- [British Museum, Mexico gallery](#)
- [British Museum, Egyptian Sculpture](#)

Ancient stone structure

- [Machu Picchu](#)
- [Prague Castle](#)
- [Great Wall of China](#)
- [Pyramids of Giza](#)
- [Roman Colosseum](#)
- [Stonehenge](#)

Parks and Nature

- [Carlsbad Caverns](#)
- [Bryce Canyon](#)
- [Hawai'i Volcanoes](#)
- [Kenai Fjords](#)

Rockhounding

- [Rockhounding with kids](#)
- [Little Naches Thundereggs](#)
- [Kettle Falls Columbia River](#)
- [Anderson Point, Olalla WA](#)
- [Saddle Mountain Petrified Wood](#)
- [Ellensburg Blues](#)
- [Carnilien Agate and Petrified Wood](#)

Get inspired for a rockhounding adventure

The Washington State Department of Natural Resources offers a plethora of [rockhounding](#) information. If you are curious where gems, fossils, and petrified wood can be found, check out their [map](#).

Many of the sites on the map are not places you can collect specimens. Their site warns us:

"Before you set out, determine land ownership of your area of interest, learn the permissible collection activities and that owner's rules governing where you can collect, what you can and cannot collect, and how it may legally be collected."

Still, the map is fun to explore while searching for your favorite rocks, gems, or fossils.

Birthstone – emerald

Happy Birthday, to those born with May birthdays!
Your birthstone is the beautiful green emerald.

Four C's of Connoisseurship

Colored gemstones are valued based on the 4 C's:
Color, Clarity, Cut, and Carat.

Color

The color rating is based on three factors: hue, saturation, and tone (brightness). For emeralds light toned stones are not considered emeralds; they are called green beryl. The hues range from a yellow-green to a blue-green with shades in the middle (green) preferred.

Clarity

It's easy to guess that the fewer the fissures and inclusions in a gem, the higher its value. However, for emeralds the examination for clarity is done without magnification. So, if you can't see impurities with normal vision, the gem is deemed perfect. Diamonds, on the other hand, require the loupe standard which uses a 10x magnification.



Cut

Because emeralds tend to have many fissures and inclusions, they usually do not have a uniform appearance. This makes them especially beautiful as cabochons. When they are cut creating facets, the emerald cut (having a large rectangular or oval face on top) is the most common.



Carat

Of course, the larger the stone, the higher its value. One carat is 200 milligrams.

Treatments

With emeralds, treatments are often applied to enhance the appearance. Oils and polymers with refractive indexes similar to emeralds, such as cedar oil and Opticon, are used to fill fissures. The fewer the treatments, the higher the value.

Emerald Trivia

1. Where is the *Emerald City*?
 - a. Ireland
 - b. Seattle, WA
 - c. Oz
 - d. two of the above
2. The four precious gemstones are emerald and
 - a. diamond, sapphire, opal
 - b. diamond, sapphire, ruby
 - c. heliodor, aquamarine, green beryl
 - d. none of the above
3. An emerald's color can be from
 - a. Chromium
 - b. Vanadium
 - c. Iron
 - d. all of the above
4. The Mohs scale of hardness is
 - a. 3.6 – 4.2
 - b. 5 – 6.3
 - c. 7.5 – 8
 - d. 9.3 - 10
5. Challenges for jewelry making:
 - a. too hard or soft for polishing
 - b. color fading
 - c. chipping and cracking
 - d. two of the above
6. Each year more than half of world's production comes from
 - a. Colombia
 - b. Louisiana and Mississippi
 - c. Brazil
 - d. Russia
7. The oldest emeralds are how many years old?
 - a. 2350
 - b. 54,100
 - c. 229 million
 - d. 2.97 billion
8. According to ancient folklore, putting an emerald under your tongue would help you
 - a. see into the future
 - b. plant crops that will be strong and healthy
 - c. overcome a speech impairment
 - d. become wealthy
9. Gem dealers refer to the fractures and inclusions as a
 - a. jardin ("garden" in French)
 - b. matrix
 - c. web of beauty
 - d. map
10. Highest quality emeralds are more valuable than
 - a. diamonds
 - b. sapphires
 - c. both
 - d. neither
11. Emerald is a variety of beryl. When pure, beryl is
 - a. pale green
 - b. pale peach
 - c. pale amber
 - d. colorless
12. Yellow beryl is called
 - a. yellow emerald
 - b. heliodor
 - c. ankh stone
 - d. buttercup beryl
13. Emeralds are found in
 - a. silt and sand in rivers where they washed down from mountains
 - b. mines
 - c. igneous, metamorphic, and sedimentary rocks
 - d. two of the above

[Answers are on the second to the last page.](#)

Field trips – All trips are cancelled for now

The Washington State Mineral Council lists many field trips for this year. At this time all trips have been cancelled. However, some may be rescheduled when the travel and gathering restrictions for the pandemic have been lifted. For updated information about field trips check out the website for the [Washington State Mineral Council](#).

Contact the host a week before the trip

At least a week before the trip, please contact the host and ask about

- New or updated details about the scheduled trip
- Whether you will need a Discover Pass, Trailhead Pass, or Forest Pass
- Fees
- Maps and directions

Club contact information

Marysville Rock Club and Darrington Rock Club

Ed Lehman wsmced@hotmail.com
home: 425-334-6282
cell: 425-760-2786

NOA club: Tony Johnson 253-863-9238

Puyallup Valley Gem and Mineral Club: Dennis Bachchelor 360-870-8741

All Rockhounds Pow Wow

Larry Vess vessel3755@gmail.com
253-473-3908

Bring with you on the trip

Arrive at the meeting place 30 minutes before the start time, and bring

- Food and drinks for the day
- Appropriate clothing for any possible weather
- Cash if there are fees
- Tools
- Map and directions
- First aid kit

Carat, Karat, Caret

Is that spelled with a “c”?

These homonyms are spelled so similarly, it’s hard to remember which is which.

Carat

A carat is a measurement of weight (200 milligrams) used for gemstones.

Karat

A karat is a measurement of the purity of gold with 24 karats being 100% or pure gold.

Caret

A caret is the special character that looks like this: ^

Carrot

An orange vegetable that is delicious when [roasted with rosemary](#).

Date	Rock or Mineral	Location	Details
5/23	Rainbow chert, concretions	Red Bridge Verlot	Host: Darrington Rock Club 9 am Verlot Ranger Station Tools: light hardrock
6/23 – 6/28	Agate, jasper, thunder eggs, petrified wood	Madras, OR	Host: All Rockhounds Pow Wow 8 am Jefferson Fair Ground Tools: dig and hard rock
6/27	Petrified wood, maybe opal	Saddle Mt	Host: Marysville Rock Club 9 am Mattawa W Mattawa Lep Re Kon Market (Harvest Foods) Tools: dig and hard rock
7/20	Travertine, Sauk R bars	Sweetwater	Host: Darrington Rock Club 11 am Darrington Rock Show Tools: dig and hard rock
8/15 – 8/16	Agate, jasper, opal, and petrified wood	Greenwater	Host: Dennis Bachchelor 360-870-8741 BBQ on Saturday 9 am Enumclaw Ranger Station Tools: dig and light hard rock
9/12 – 9/13	Geodes, agate, jasper, and jade	Red Top/ Teanaway	Host: All Rockhounds Pow Wow 8 am Teanaway at Middle Fork Campground Tools: dig and hard rock
9/19	Thunder eggs, WA Lilypad, and fossils	Little Naches	Host: Tony Johnson 253-863-9238 10 am Hwy 410 and Forest Road 19 Tools: dig and light hard rock

Date	Rock or Mineral	Location	Details
10/24	Picture jasper	Money Creek Skykomish	Host: Marysville Rock Club 9 am Money Creek Campground Tools: dig and river bar pick
11/21	WA dalmatian stone, chert	Blanchard Hill	Host: Darrington Rock Club 9 am I-5 exit 240, Gas Mart Tools: hard rock



Beryl

Beryl has a chemical composition of $\text{Be}_3\text{Al}_2(\text{SiO}_3)_6$

The element Be is beryllium which occurs in very small amounts in the Earth's crust.

To form emeralds, enough beryllium needs to be present in a location along with traces of chromium or vanadium.

Pure beryl is called "goshenite".

Looking for a party venue?

The Maplewood Clubhouse is a great venue for gatherings. If you are planning a family reunion or a party that would overflow your home, consider renting the Clubhouse for a day. Members get 50% off the daily rate of \$350. For more information or to schedule a date, contact Mary Ann Collins at 650-383-7625.

Rock of the Month

Now is a good time to think about giving a Rock of the Month presentation later this year when our meetings resume. Do you have expertise in geology, rock hounding, or some other topic that would interest our members? It might be fun to take some time now and plan a presentation. Contact a Board member to propose your idea.

Emerald Trivia Answers

Quick Scoring

1. d	3. d	5. c	7. d	9. a	11. d
2. b	4. c	6. a	8. a	10. c	12. b
					13. d

Trivial Details

1. Seattle and the largest city in Oz are both called the "Emerald City."
2. The four precious gemstones are emerald, ruby, diamond, and sapphire.
3. Emerald's green coloring is from trace amounts of chromium and/or vanadium. Trace amounts of iron will tint emerald a bluish green or a yellowish green depending upon its oxidation state.
4. Mohs scale: 7.5 – 8
5. Challenges: chipping and cracking
6. Over half of the production is from Columbia.
7. The oldest emeralds are 2.97 billion years old. The first emerald mine opened in Egypt in 330 BCE. Cleopatra had a passion for emeralds.
8. According to ancient folklore, putting an emerald under your tongue would help one see into the future.
9. Most emeralds have some type of inclusion or imperfection, and emeralds without any very rare. Instead of the term imperfection, dealers like to reference emerald inclusions as an internal jardin ("garden" in French).
10. The highest quality emeralds are more valuable than diamonds and sapphires.
11. Beryl, the mineral of which emerald is a variety, has a chemical composition of $\text{Be}_3\text{Al}_2(\text{SiO}_3)_6$. When pure, beryl is colorless and known as "goshenite."
12. Richly green beryl is called an emerald. Pale green beryl is called green beryl. Pale bluish green beryl is called aquamarine. Yellow beryl is called heliodor (which means gift from the sun in Greek).
13. Where to find emeralds: not in alluvial soil. Emeralds are too fragile to be carried down a river. Also, their specific gravity is very close to quartz and feldspar making them hard to separate by placer mining. Instead they are mined from where granitic magma (source of beryllium) is near carbonaceous schist or gneiss (sources of chromium or vanadium). Sources of chromium or vanadium: schist, gneiss, shale, and mafic (ferromagnesian) minerals like olivine. Sources of beryllium: granitic magma, water flowing through rocks. Emeralds are found in igneous, metamorphic, and sedimentary rocks.

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

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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.