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# The Newsroom

# **Announcements**

## **Club Events**

#### **Celestial Rock Show**

In case you missed it, Sean attended and sends this picture.

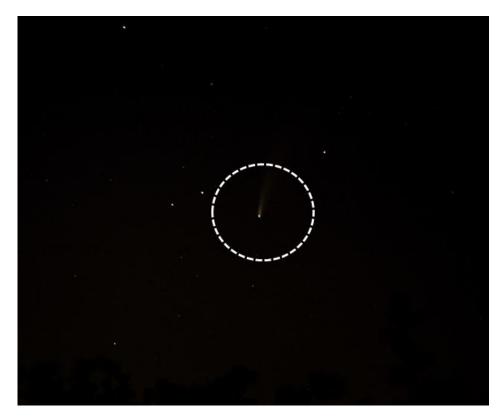


Figure 1. Comet (August, 2020) in Victoria night sky.

#### **Agate Beach**

Cam Bremner would like to share this photo of a small agate found on a local beach (south end)



Figure 2. Agate from Agate Beach in Cordova Bay (May 2020).

### Picnic (tentative)

See Doug's President's report below

#### September Show (tentative)

See Doug's President's report below.

# 5<sup>th</sup> Annual VLMS Club Member's "Rough-to-Ready" Show and Sale

This event, nominally scheduled for the third week in October at the Leonardo Da Vinci Centre has been cancelled this year due to Covid restrictions on gatherings of large groups of people.

#### 2020 VLMS Rock and Gem Show – Leonardo Da Vinci Centre – March, 2021

The BCLS printed calendar includes the 2021 show dates for each of the member clubs including ours. The calendar states that individual shows may be cancelled if Covid 19 still persists.

#### **Meetings**

Due to Covid 19, the next member's meeting has not been scheduled at this time.

## Field Trip

Due to Member's understandable concerns about Covid 19, no formal club-sanctioned field trips are planned at this time. Normally, there are no field trips in the summer months anyway (summer

camps aside)...and with all the paranoia about our current "plague" most of the members don't want to meet in groups.

#### Courses

Courses are dependent upon the availability of the workshop (see Workshop report below) and consequently, no new courses are scheduled until further notice. There is one Lapidary course in progress which will resume when the shop reopens. Also, there are two paid dates at the Les Passmore center for metalsmithing course work awaiting word on rescheduling.

# Reports

# **President (Doug)**

**Club picnic**: The CRD will not be taking any reservations for picnics for the rest of this season. If anyone has any ideas where we could meet whereby we can abide by Covid 19 regulations (which include meetings be less than 50 people) please let me know.

**Shows**: I have found from the Health authorities that we can hold a show outdoors as long as we adhere to Covid 19 regulations. In part this means, like any store, that we allow a maximum 50 people in our area not including the vendors. I have been in communication with the Tillicum Mall manager and they will rent an area of their parking lot to us in order for us to have a show in September. We will need to have a Board of directors meeting quickly to form a Show Committee. A survey will come out soon to find if there are enough people wanting to first be a vendor and second those who will help volunteering.

I hope that this finds everyone well and are not getting too bored staying home too much.

#### Workshop (Doug)

There is nothing more from Silver Threads other than they will look at when we can return to the shop sometime in the fall.

#### **Island Gemboree**

There has been no activity in the Island Zone due to Covid.

#### Membership (Becci)

Despite Covid we've had a total of three new members join recently. Please join me in welcoming:

- 1. Chloe Thonney who is interested in field trips and mineral discussion groups, and
- 2. Sarah and Rahaf Albalkhi who are interested in field trips and lapidary courses.

They have been added to the mailing list, so if you wish you may welcome them by means of a post to the list.

## Field Trips (Sean)

To date, it has been a bad year for field trips — Covid 19 has impacted us in a lot of ways. The last field trip with Member participation (besides me) was in May. We did have a July field trip scheduled to an old copper mine in the area above the Group Campsite (Goldstream just past Sooke Lake Rd) but only one member showed up and, unfortunately, did not hang around at the meeting point. Consequently, we did not connect. However, I did manage to shoot a few photos of some more interesting rocks from the active quarry next-door to the site (in future, it could be a sneak and peek trip idea) - these photos are included below:



Figure 2. Actinolite fans.



Figure 3. Stilbite mixed with Quartz crystals.



Figure 4. Minor Bornite.

## **Social Committee (Susannah)**

The club has made inquiries about staging a picnic at one of the local provincial parks, but, because of Covid-19, the parks will not allow large gatherings for the foreseeable future. However, some of our members of the Lapidary group have stated that they are going camping and rockhounding on the north island, so we look forward to hearing great rock stories from them.

The club extends congratulations and best wishes to Melissa (Mel) and Kellan on their marriage. The wedding was held Sunday, August 16<sup>th</sup>, and though we are sorry that they could not have the wedding they had planned (due to these strange times), we are all so HAPPY for you both and that you went ahead and made it happen.

The club would also like to send out our best wishes to Leni who has had a medical issue - we are happy that you are on the mend, Leni, and hope you are out and about (and going to Dino Lab) soon!

## Library (Kathryn)

I hope this report finds everyone doing well, and managing in these strange times. Eventually we will be able to get together again, and hold our Rock Shows as well, There is not much new with the library right now, but I do hope to start phoning those with library books still out on loan, just as a reminder. As usual, we are always looking for donations of books and magazines, either to add to our library, or to sell at our Shows. Now might be a good time to go through our collections for duplicates, or old issues you may be willing to donate. Enjoy the rest of the summer and take care!

# **Editor (Gary)**

Most of the information presented in these newsletters is solicited. Unsolicited contributions are

## **Fun Facts**

# Lappy the Lapphound

"All that glitters isn't gold .....but it might be opal!!!!



# Foxey the Foxhound

"Diamonds are a girls' best friend ....cubic zirconia... not so much !!!!



# The Covid Challenge

As you may recall, Foxey and the gang had been battling Covid fatigue by playing Charlie's Gemstone Game on Google Meet. The game consisted of Charlie providing to the group a picture and several descriptive clues regarding a particular gemstone – it was then incumbent on the group to make their best guess as to the name of the gemstone. One over-riding requirement was that the gemstones had to be native to BC i.e., found in their natural state somewhere in the province. As promised, the answers to the first two candidates<sup>1,2</sup> are provided below. The game rules stipulate that the gemstones be found in BC; of course, they may not appear in the exact form shown in the pictures.



Charlie's clues for this sample are:

- 1. Named after a famous landmark
- 2. Tetragonal crystal system
- 3. Mohs hardness scale of 6-7, white streak
- 4. Found west of Lytton in the Stein Valley

**ANSWER: Vesuvianite** 



Charlie's clues for this sample are:

- Typically imbedded in large-crystal, igneous rock structures (veins), formed underground
- 2. Found in several locations in BC including the Kootenays, Cassiar (northern BC) and near Tete Jaune Cache (central BC).
- 3. Hexagonal crystal system, Mohs hardness 7.5-8, white streak ANSWER : Beryl

Over the course of the last two months, Charlie has issued many such pictures and the group has spent many enjoyable hours scanning the web for information that might reveal the identity of the various stones. For the purposes of the game, Charlie defined a gemstone as any natural material that is cut and polished for ornamental purposes. For completeness, the gemstones posted (and qualifying information) include: nephrite<sup>3</sup>, prehnite<sup>4</sup>, sodalite<sup>5</sup>, olivine<sup>6</sup>, natrolite<sup>7</sup>, tournamline<sup>8</sup>, barite<sup>9</sup>,

obsidian<sup>10</sup>, argillite<sup>11</sup>, andalusite<sup>12</sup>, amber<sup>13</sup>, corundum<sup>14</sup>, jasper<sup>15</sup>, diamond<sup>16</sup>, agate<sup>17</sup>, fluorite<sup>18</sup>, garnets<sup>19</sup>, opal<sup>20</sup>, quartz<sup>21</sup>, rhodonite<sup>22</sup>, dallasite<sup>23</sup>, and feldspar<sup>24</sup>.

# Acknowledgements

Once again I would like to thank all those members who contributed to this Newsletter – it continues to be only as useful and complete as the information you provide.

# **Appendix**

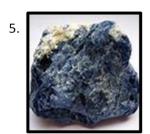
## 1. Fun Facts - Rocks and Gems (all material obtained from the web!!)



Nephrite (Jade) - Large commercial quantities of good quality nephrite occur in BC. The nephrite occurs as small to very large boulders. The best quality (in terms of colour, and solidity) comes from the central to northern part of the province e.g., Atlin Lake, McDame, Dease Lake, Wheaton Cr.- Turnagain River, Mt. Ogden- Fort St. James areas. Nephrite from the Fraser River area is highly variable with predominant colours being dark green, grayish-green, olive, and yellow-green.



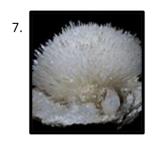
Prehnite - Fine material suitable for cabochons are found in the Le Roi Mine near Rossland. Prehnite is brittle with an uneven fracture and a vitreous to pearly luster. Its hardness is 6-6.5, its specific gravity is 2.80-2.90 and its color varies from light green to yellow, but also colorless, blue, pink or white. Very rarely will it form distinct, well-individualized crystals showing a square-like cross-section.



Sodalite - Massive blue cutting grade sodalite from the Ice River area near the Kicking Horse Pass provides material for carvings, cabochons and decorative objects. A light, relatively hard yet fragile mineral, sodalite is named after its sodium content. Well known for its blue color, sodalite may also be grey, yellow, green, or pink and is often mottled with white veins or patches.



Olivine – (also known as peridot). In BC it is found near Timothy Mt., east-northeast of Lac La Hache. This area produces bombs from which excellent dark green stones weighing as much as 10 carats have been obtained. Lightning Peak in the Monashee Mountains also produces peridot grains large enough to cut small gems from.



Natrolite - This solid-solution of the Zeolite group forms as slender or acicular prismatic crystals. Except for its rarity, Natrolite is usually an uninteresting white colour (sometime colourless, gray, yellowish, reddish). It has only been reported occurring in the Ice River area southeast of Golden.



Tourmaline - Although tourmaline crystals are abundant worldwide, only a few occurrences are reported in B.C. Pegmatites at the headwaters of Skookumchuck Cr. and St. Mary Lake north of Cranbrook, the Slocan Valley north of Castlegar, and Midge Cr. west of Kootenay Lake have reported some tourmaline crystals. Pegmatite dykes on Mica Mt. south of Tete Jaune Cache and Mount Begbie south of Revelstoke contain black, green and red tourmaline.



Barite - Facetable yellow crystals up to 11.5cm. long have been found in veins of fluorite at the Rock Candy mine Kennedy Creek near Grand Forks. Barite occurs in many depositional environments, and is deposited through many processes including biogenic, hydrothermal, and evaporation, among others. Barite commonly occurs in lead-zinc veins in limestones, in hot spring deposits, and with hematite ore.



Obsidian - Black obsidian occurs in varying sizes north of Anahim Lake, on Anahim Peak and Ilgachuz Mountains. it is a naturally occurring volcanic glass formed as an extrusive igneous rock. Obsidian is mineral-like, but not a true mineral because as a glass it is not crystalline; in addition, its composition is too variable to be classified as a mineral. It is sometimes classified as a mineraloid.

11.



Argillite - A metamorphic rock formed from petilic sediments. This decorative material became renown because of the imaginative and skillful carvings of the Haida Indians of Skidegate and Massett, of the Queen Charlottes. Another source for Argillite is north of Horseshoe Bay. It is fine-grained and composed predominantly of indurated clay particles.

12.



Andusalite – a variety of this mineral is Chiastolite and is commonly found in the black schist of the hills of Armstrong. Andalusite is a common metamorphic mineral which forms under low pressure and low to high temperatures. Kyanite and sillimanite are polymorphs of andalusite,

13.



Amber - specimens up to 2.5cm in length are found with yellow colour with a greenish tinge and occasional plant inclusions near Quesnel. Nodules are found in shaly sandstone along the Peace River Canyon, and sizable nodules off the Pacific coast on Graham Island of the Queen Charlottes. Of course, amber is fossilized tree resin.

1 1



Corundum - is found in metamorphosed rocks such as gneiss and schist. Gneiss and Schist formations in B.C. are known to exist at Kinbasket Lake, Kootenay Lake, Vernon, and Prince Rupert areas. Gem quality sapphire pebbles of light green colour have been found in the Pend Oreille River. Rubies of minute grains have been found in some of the tributary creeks of the Tulameen River.

15.



Jasper ia an aggregate of microgranular quartz and/or chalcedony and other mineral phases. It is opaque, and usually red, yellow, brown or green in color; but it is rarely blue. The common red color is due to iron inclusions. It can be highly polished and is one of the traditional birthstones for March. Jasper is common throughout BC.

16.



Diamond - is comprised of carbon atoms are arranged in a face-centered cubic crystal structure that is very stable. Diamond is known for its hardness and has relatively high optical dispersion. Roughly 49% of diamonds originate from Africa, although significant sources of the mineral have been discovered in Canada, India, Russia, Brazil, and Australia. There are reports of microscopic crystals from chromite found on Olivine Mt. near Tulameen and also from Scottie Cr. and Bonaparte River near Ashcroft.

17.



Agate is a rock consisting primarily of cryptocrystalline silica, chiefly chalcedony, alternating with microgranular quartz. It is characterized by its fineness of grain and variety of color. Although agates may be found in various kinds of host rock, they are classically associated with volcanic rocks and can be common in certain metamorphic rocks. They are very common in BC.

18.



Flourite is comprised of very fine crystals and is found lining large cavities of openings as large as 3 to 4 feet across at the Rock Candy Mine near Grand Forks. Green is the most common colour, but purple and colourless varieties also occur. Other less noted areas are Whiteman Cr., Scuzzy Cr., Lumby, Hellroaring Cr., and Liard River Hot Springs. Fluorite is the mineral form of Calcium Fluoride.

19.



Garnet - onlytwo species are reported to exist in B.C.: Almandite and Andradite. Perfect, clear-red almandite crystals up to 3cm. in diameter occur in mica schist along the Stikine River. Andradite garnet in fair crystals, but not suitable for cutting, is found on Texada Isl. Garnets are also found in the Shuswap Lake-Vernon area, Revelstoke-Big Bend area, Canoe River-Mica Cr. area, Aiken Lake-Mesilinka River area, Hope-Lytton area, and Prince Rupert - Douglas Channel area. Most of this garnet is high-quality commercial grade, suitable for lapping and grinding.

20.



Common opal occurs in seams of rock outcroppings north of Princeton, and also in tertiary rocks at Savona Mt., Agate Mt., Horse Fly River, Slocan Lk. Fire opal has been found along the banks of Deadman Cr. Well-grained opalized wood in black, brown, white, and green hues have been found along Barnes Creek near Ashcroft. Precious opal occurs near Burns Lake and areas near Penticton and Vernon.

21.



Quartz is rich in silicon and is the second most abundant mineral in Earth's continental crust, second only to feldspar. There are many different varieties of quartz, several of which are semi-precious gemstones. Since antiquity, varieties of quartz have been the most commonly used minerals in the making of jewelry and hardstone carvings, especially in Eurasia.

22.



Rhodonite – most deposits in B.C. are in the form of lenses occurring with bedded chert or jasper. Very beautiful rose-pink material occurs on Saltspring Island and Vancouver Island, notably on Hill 60 and Cottonwood Cr. Other rhodonite bearing sedimentary rock formations are the Shoemaker formation near Keremeos; the Cache group from Tsitsutl Mt. (near Fort St. James) extending to Williams Lake; the Fennell formation (Clearwater to Barriere); the Cassiar area; Kaslo to Slocan area; and fine pink material with black patterns from Bella Coola area.

23.



Dallasite is a breccia made of quartz, epidote, altered basalt and pumpellyite. The stone is named after Dallas Road right here in our very own city, Victoria. It is considered the unofficial stone of British Columbia's capital city. Dallasite is found in Triassic volcanic rocks of Vancouver Island and is considered the third most important gem material in the province.

24.



Feldspar is a rock-forming silicate mineral that makes up about 41% of the Earth's continental crust by weight. Feldspars crystallize from magma as veins in both intrusive and extrusive igneous rocks and are also present in many types of metamorphic rock. Feldspars can contain either Potassium, Sodium, and Calcium. There are 100 million tones of feldspar reserves in 22 documented occurrences in B.C. All these deposits are commercial grade.