

Volume 62-3 :: Aug 2019 Website :: www.vlms.ca

VLMS Board

President:Alanna Shilitomrz p@hotmail.com (250-857-2153)Vice-President:Leni Gagnondapper51@shaw.ca (250-479-6214)

Registrar: Margaret Braithwaite <u>margaretbraithwaite@shaw.ca</u> (250-380-2076)

Past-President:Vanessa Steffensvsteffens@telus.net (250-385-8525)Secretary:Sarah Hamiltonsarahstarfish@gmail.com (250-974-7272)Treasurer:Dave Jacksondehavillanddave@yahoo.ca (778-676-1150)At Large:Debbie Frankgemfinders@telus.net (250-360-6434)

Yvan Gagnon dapper51@shaw.ca (250-479-6214)
Brian McMillan soniamac@telus.net (250-385-2700)
John Anderson johnsusannah@telus.net (250-812-9303)

VLMS Committees

Programs: vacant

Librarians :Kathryn Hawkinspug4@telus.net (250-652-4940)Show Chair:Alanna Shilitomrz p@hotmail.com (250-857-2153)

Field Trips: Gilles Lebrun (250- 382- 6119)

Refreshments: Barb MacKenzie <u>barb.mackenzie@shaw.ca</u> (250-727-0954)

Workshop: Brian McMillan <u>soniamac@telus.net</u> (250-385-2700)

Doug McLeod <u>wesmac12@gmail.com</u> (250-888-8440)

Editor: Gary Brooke <u>gab.bns@gmail.com</u> (250-475-3440)

Sunshine Corner: Susannah Andersen <u>johnsusannah@telus.net</u> (250-812-9303)



The Newsroom

Announcements

Club Events

Cobble Hill Fair

Cowichan Valley Rockhounders club is participating in the Cobble Hill Fair on August 24th. The club will have several tables and sell rocks, slabs, basic jewelry, etc. They also have a spin & win and a panning area for treasures. It is a rural type of fair with 4H and agriculture prominent with displays/contests flowers/baking/preserves as well as the rides. It's fairly close, parking can be a hassle but there is a shuttle. Additional information is available on the webpage: https://www.cobblehillfair.ca/

4th **Annual VLMS Club Member's "Rough-to-Ready" Show and Sale – October 12-13, 2019**As this event (Leonardo Da Vinci Centre) is fast approaching, a meeting of minds for planning purposes is tentatively scheduled for Tuesday, September 10th with more information available at our next club meeting on Monday, September 9th.

2019 VLMS Rock and Gem Show – Leonardo Da Vinci Centre – March, 2020

It is never too early to start getting ready for our Annual Show. Mark it in your calendars and stay tuned as to how you can help make our annual, hosted event to continue to be a show-stopping success. Actual date in March TBD.

VLMS Positions

The VLMS board is looking for volunteers to fill three positions:

- (i) Programs,
- (ii) Field Trip Coordinator, and
- (iii) Show Chairperson.

Meetings

The next members meeting will be held as follows:

Date: September 9, 2019

Place: Les Passmore Centre, 286 Hampton Road, Victoria BC

Time: 7:30 pm

Members are invited to bring any interesting rock and gem-related discoveries from their summer activities for display on the Showcase Table at the meeting.

Field Trip

The August field trip is planned for a visit to Meade Creek along the north side of Cowichan Lake on the way to Youbou. The Gold, Gemstone and Mineral Field Guide book indicates that there is gold in Meade Creek in this area. However, at this time of year the water should be quite low; despite this fact, participants are free to try. The Guide also says there are upstream lenses of Rhodonite and manganiferous Garnet in red cherry tuffs that have washed downstream —this should provide interesting material. It has also been noted that Laurel stone has been found in this area by some of our members. There is easy access right off the main road and a road following the creek upstream. Margaret has also suggested Shaw creek, which is a little past Youbou, is also a good alternative since there is a possibility of Rhodonite in the area somewhat below Hill 60.

Because Gilles is unable to make this excursion, Doug will lead and unless anyone coming has been there before to help guide us this will be a good exploration adventure. We will meet at the Silver Threads workshop at 9am Sunday Aug 25th. Anyone living out west and interested in participating, please contact Doug so that a suitable "hook-up" location on the way out of town can be arranged.

Doug can be reached at vlmslap19@gmail.com or by phone at 250-888-8440.

Courses (Vanessa)

To date in this calendar year, our club has completed 6 Basic Lapidary courses and 1 Basic Silversmithing course. Announcements will be made at the September meeting with regard to what is planned for the following months in terms of course offerings.

Reports

Island Gemboree - July 19-22, 2019 (Becci)

Gemboree 2019 was hosted by the Courtenay club. We all camped at the Puntledge River RV Park. There was a pleasantly-packed schedule including an evening wire wrapping workshop, a BBQ, several field trips, a pot-luck dinner, an auction, many tall-tales around the campfire and a tailgate sale. A photo demonstrating that the VLMS was represented is shown below in Fig. 1.



Figure 1. Gemboree 2019

The first evening of Gemboree consisted of an open-air wire wrapping workshop under the big central canopy - it was a blast as illustrated in Figs 2, 3 and 4 below. More than half the Gemboree attendees participated in the workshop with the rest forming a relaxed cheerleading team. The workshop was led by Suzanne Rivard, whose work can be seen at www.suzannart.com. Suzanne was patient and encouraging with a slightly rowdy crowd whose abilities ranged from beginner to beendoing-this-for-ages. The results were beautiful - each piece of jewelry produced was worth wearing. Some of us continued redesigning our pieces for the rest of the weekend.



Figure 2. Wire wrapping participants.



Figure 3. Wire wrapping participants.

One of the field trips on offer at the 2019 Gemboree was to the Calco Copper mine north of Campbell River. In 1955 five tonnes of ore were removed and sent to Tacoma for processing. It yielded 1011 kg of copper and 250g of silver. The mine is on private property and requires permission to access. A couple of pics are shown below in Figs. 4 and 5.



Figure 4. Calco Mine field trip.



Figure 5. Calco Mine field trip finding.

On the way back to Courtney we stopped at the viewpoint for the historic Ripple Rock explosion, a short documentary can be viewed at "https://www.youtube.com/watch?v=6W9PV_s_zF4a". It was the biggest manmade explosion of the time and it took them several failed attempts before they could pull it off. There were two other field trips on the same day, one for fossil hunting and one to the Qualicum River.

Island Gemboree (John and Susannah)

Here are some photos of the types of materials that we found as part of the Gemboree 2019 excursion to the Calco mine.



Figure 6.



Figure 7.



Figure 8.



Figure 9.



Figure 10.



Figure 11.

Membership (Margaret)

The membership tally stands at 126 and consists of 170 adults and 22 juniors.

As September approaches and meetings resume it is time to remind everyone that our club dues are based on the calendar year and early renewal simplifies the rollover for everyone. Dues must be received by BCLS prior to December 31st each year to maintain the insurance which protects us while participating in club activities. A new membership form must accompany your dues and our website has them ready to print.

A note we have learned since last year – if you specify no disclosure you will not receive the BCLS bulletins which come by email. If you only want to protect your address and phone you can specify that so you will receive the bulletins.

Thanks for your help and I am looking forward to seeing everyone in September.

Field Trips (Doug)

For some time, Gilles has expressed a desire to step back from Field Trip organization. Anyone interested in taking over this important club function please let a member of the Executive know and come to our first meeting on Sept 9th.

Sunshine Corner (Susannah)

The months of May and June were not kind to some of our members:

- a) two get-well cards were given out at the Strawberry Social (June 3rd)
 - to Rose Marie Spicher who had been in and out of hospital, and
 - to David Jackson who had been ill; and
- b) two get-well cards were mailed June 27th and 28th
 - to Robert Belz who had spent some time in the hospital, and
 - to Gilles Lebrun who had also been in and out of hospital.

We wish each of you (and all members) good health in the future.

Library (Kathryn)

We have acquired 24 books to add to our library inventory; they all fall within the following topics:

- (i) Minerals (Fluorescent, Illustrated Encyclopedia, and Encyclopedia of Names);
- (ii) Rocks (and Minerals, general, Arizona, and Fossils);
- (iii) B.C. Gem Trails, Jade, Gold, Dinosaurs (including a children's book), and Meteorites;
- (iv) Geology (Dictionary, general, B.C., Alberta, and Saskatchewan).

For more specifics, members should contact Kathryn.

Workshop (Doug)

The Lapidary workshop attendance has kept up quite well this summer with mostly 8 -12 attendees. There has only been four times when we have had just 5-6 participants. A suggested starting schedule for the fall is Tuesdays Noon – 3pm, Thursdays 7pm – 9pm. and Saturdays 11am -3pm.

Please let me know how often and which days you would like to use the Lapidary shop. Scheduling will be discussed at both the Directors and the General meetings.

I am going to try refurbishing our Genie wheels. There is a good tutorial online stating it is not hard and is working well. The cost is very low. Also we would like to acquire an 8" Diamond Pacific flat lap. This will enable us to polish the back of Cabs quicker, better and will free up time on the Genies for shaping and polishing. We can also use felt discs to enable us to use polishing compounds to produce a better finish. I have touched on this before and will bring it up again at our next meetings.

A new workshop email has been established which I will monitor; it is workshop@vlms.ca. Note, it is possible to establish a similar email address dedicated to silversmithing - I will bring this up at the next meeting for discussion. These email addresses will allow direct communication to those in charge of each shop.

I will be organizing the Basic Lapidary courses. If you know of anyone interested email me at workshop@vlms.ca or phone me at 250-888-8440.

Editor (Gary)

Most of the information presented in these newsletters is solicited. Unsolicited contributions are welcome – contact gab.bns@gmail.com.

Fun Facts

Lappy the Lapphound

"All that glitters isn't goldbut it might be opal!!!!



Foxey the Foxhound

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



An Evening with the Chief Inspector

Chief Inspector, Fingal Bailey-Cooper (the Border-Collie) was not one to panic but on this day he was dangerously close to doing so. In a moment of weakness he had agreed to host an evening social for Lappy, Foxey, Dotty the Doberman, Pippa the Poodle and, of course, Roddy the Rottweiler and his wife Bonnie the Beagle. Fin was not allergic to housework (at least he didn't think he was) but he had certainly perfected the role of procrastinator – "no problemo" he had always rationalized to himself as he rarely let anyone see the inside of his rather spacious and upscale condo (Bear Mountain complex). Well, the problem at hand was that Dotty had volunteered to come over at 4 pm to help him "clean up" and get supper started; it was now 3:10 pm and Fin suddenly realized he hadn't even started the clean up – he had been absorbed in a new "case" assigned to his K-9, Detective Services Unit of the Esquimalt Police detachment. One of Fin's talents was he could compartmentalize problems quickly. His condo consisted of kitchen, dining room, front room, bathroom, main bedroom and a guest bedroom (which he had transformed into his "home" office). He reckoned that no one would need to venture into his bedroom or his office – he closed the respective doors and muttered to himself "Done!" as he mentally crossed those two rooms off the list. Since Dotty was coming over he thought it would be best to clean

up the bathroom first and then do a quick once over in the kitchen – he had a week's worth of dirty dishes in the dishwasher (it was a science he convinced himself – having just enough clean dishes to last a week). Fin focused on the bathroom; he cleaned around the toilet, pulled the shower curtain, put out fresh towels, tidied up his counter space, opened the window just a crack and, finally, sprayed a bit of Febreze air freshener about. "Perfect", he thought to himself as he moved his attention to the kitchen. His counter space was a mess – Dotty wouldn't be impressed. Fin started the dishwasher and quickly rearranged items on the counter... it was just starting to look respectable when the doorbell rang. "Goodness, what time is it?" Fin asked himself as he made his way to the intercom.

Fin (in a very deep low voice): "Heellllooo.... ".

Dotty (giggling): "Hi Fin, it's me!"

Fin (glad to hear Dotty's voice): "Come on up – I am in 401".

With that he pushed the button to open the front door. As it turns out, at this time of day and standing next to the front entrance, Fin could see a reflection of himself in the big bay windows looking out over the golf course. He was in his robe. Of course, he didn't have to wear a robe but he liked the look – Sherlock Holmes wore a robe around the house, at least, according to the movie he had seen. Fin cinched up the belt on his robe when the front door bell buzzed... he opened the door.

Fin (a bit flushed): "Dotty....thanks for coming over early... I am a bit behind schedule".

Dottie (excited): "I am happy to help".

Dottie was looking very ravishing...she had done her nails pink (to match the tourmaline¹ in her collar) and in contrast to her jade² charm bracelets she wore around her ankles. She was also wearing a pinkish eye shadow that accentuated her sleek black fur. The Chief Inspector couldn't help but notice how attractive she looked.

Fin (finding it hard to contain his excitement): "Dotty, I am not going to lie, you look absolutely smashing".

Dottie (not having seen a Sherlock Holmes movie): "Why thank you, Fin. Are you trying to emulate Hugh Hefner?"

Fin (quizzically): "Hugh ??? ".

Then it dawned on him he could feel a wave of embarrassment wash over him – his robe!

Dottie (sensing that she had caught him off guard): "I am just teasing".

They had a good laugh but she did notice that shortly after asking her to stack the newspapers and the books scattered about the living room, Fin disappeared. A short time later he reappeared wearing a tie with shades of pink and pale green ... again, Dotty wondered ... hoped was there some sort of synergy there? They finished the vacuuming and pressed on with the meal preparations.

On this night, "haggis" was on the menu – Fin had started boiling the haggis in the morning (it took 3 hrs or so) and now all that was required was to reheat in the oven. Fin washed and scrubbed some potatoes

– he was going to boil them up to make mashed potatoes. Meanwhile, Dotty washed and cut the asparagus shoots tabbed for the "green" component of the meal. While she was doing that task, Fin opened a bottle of Scottish ginger wine – best to let it breathe for a bit before serving.

Fin (in a thick Scottish accent): "Fair fa' your honest, sonsie face, Great chieftain o the puddin'-race! Aboon them a' ye tak your place, Painch, tripe, or thairm: Weel are ye worthy o' a grace As lang's my arm."

Dotty (her turn to be quizzical): "I didn't understand a word you said"

Fin (matter of factly): "Part of a poem by Robbie Burns – Address to a Haggis"

Dotty (relieved): "Oh, how nice!"

It was now 5:30 pm and the rest of the guests began to arrive. First, it was Lappy (sporting his man bag) and Foxey (wearing her blue topaz³ necklace). They had recently exchanged "friendship bracelets" – they were simple gold bands with inlaid turquoise⁴ (Foxey) and opal⁵ (Lappy) that they wore around their left ankles ... the perfect couple. Shortly thereafter, Inspector Roddy and wife Bonnie graced the doorway. Roddy was in casual mode (his idea of casual – a bolo tie sporting a colorful agate⁶) and Bonnie sported an elegant citrine⁶ necklace. Roddy had inquired about the possibility of bringing Roddy Jr but the Chief Inspector (aghast at the idea of having a 1 yr old running around his place) made up a suitable excuse – so once again Roddy's mom was tasked with looking after Roddy Jr – Bonnie had come to be at peace with leaving Roddy Jr. with Grandma.

Dotty was beginning to wonder if Pippa had "chickened out" when the front door buzzer rang once more. She knew Pippa was bringing a surprise but no one else did. Fin clicked the intercom.

Fin: "Pippa?"

Pippa (apologetically): "Sorry, WE are a bit late!"

Dotty smiled as Fin did a double take. "Did she say, we?" Fin asked. Lappy and Foxey, similarly confused, nodded affirmatively.

Roddy (getting philosophical): "I once read a story in Readers' Digest while I was sitting on the canapparently it is not uncommon for someone to refer to themselves as "we" ".

There was a knock on the apartment door and Fin opened it – there was Pippa and her new friend Charlie the Chihuahua.

Pippa (nervous but quite excited): "Everyone, I want you to meet Charlie – she is a UVic graduate student and was my mentor for the on-line mineralogy course, which I passed by the way, vea!!!"

Everyone clapped and cheered as she prepared to introduce Charlie around the room.

Charlie (seemingly quite relaxed): "Hello everyone, I have heard a lot about you. Thank you for allowing me to join your social".

Fin was impressed by how composed she was ... he and Dotty exchanged glances – each with a slight twinkle in their eyes. Lappy and Foxey observed Pippa and Charlie as they chatted with Roddy and Bonnie; they had never seen Pippa so radiant (her poodle puffs were immaculate as usual and her azurite⁸ bobbles seemed to dance on those puffs as she moved). They also were taken by how relaxed Charlie was – she had small, black, triangular-shaped earring drops attached to each ear (Foxey guessed that they were hematite⁹). As Pippa and Charlie made their way to Lappy and Foxey, Roddy seemed quite confused by it all as he turned to Bonnie.

Roddy (under his breath): "I don't understand it - the Readers' Digest is usually spot-on".

Bonnie (somewhat scolding): "Perhaps you should try reading something a bit more challenging than the Reader's Digest". The furrow on Roddy's brow deepened.

Despite Roddy's ongoing confusion, the group sat down to partake in Fin's (and Dotty's) ethnic meal. No one (except Fin) had ever tried haggis and, despite Roddy's flippant remarks about "eating guts", they all agreed that it tasted a lot better than it looked. The ginger wine was perfect. Conversation was light with much of the discourse focusing on Charlie – Pippa (nor Charlie) seemed to be uncomfortable with it. In fact, Pippa and Charlie gave the impression they had been friends for a long time as they took turns finishing each other's sentences. Not to be denied, Roddy gave a lengthy account of Roddy Jr's latest exploits - by all accounts, he was a "chip off the old block". After the meal, everyone pitched in to clear the table ... it was game time.

The Rematch

With the exception of Charlie, everyone remembered the fun that they had playing Boulderdash at Foxey's a few months prior. They proceeded to explain to Charlie, the rules of the game – it was game centered on rock and gem terminology in which players try to convince each other that they know the correct definition of select "terms". As was the case back then, Foxey volunteered to keep score while Lappy was designated as the one declaring the "mystery" term for each hand. Thus, in each hand or round, Lappy, was to read the "term" or word off a card drawn from the top of a deck placed centrally between players – the players, in turn, would write down their definition of the term on a piece of paper. Since Fin demonstrated an uncanny ability to maintain his composure (not laugh) when reading the definitions, he was once again given that responsibility - everyone was asked to pass their answers (on note paper turned face down) to Fin – he would mix the papers together with his own answer (without looking at the other answers) and read them out loud in random order. Each player was given a pen and a pad of paper on which to write down his/her definition. Voting was done by a show of "paws" and Foxey was to record the votes. Players who provided the correct answer were given 2 points, players whose answer was voted as the correct one (even though it may not be) by the most players was declared the winner of the hand and received 1 point.

Roddy (somewhat exasperated): "Wait a minute ... given that Pippa has taken that course and Charlie is already an expert, Lappy and Foxey are rock connoisseurs, it seems a bit unfair for the rest of us".

Bonnie (giggling): "Roddy dear, remember that you don't have to know the correct definition, you just have to convince everyone that you do".

Roddy (appeased): "Oh yeah, now I remember why I love this game so much!!"

Round 1

Lappy (drew the first card): "Everyone listen carefully, the first term is: acicular"

All of the players submitted their answers – the correct answer was supplied by Pippa (she was quite proud of herself - the term had come up in her mineralogy course). Charlie also knew the answer but was confident that Pippa would submit it – she didn't want to steal the limelight from her new pal so she supplied a plausible substitute. Roddy's answer highlighted his penchant for subconsciously "adding or subtracting" letters from the mystery term.

Pippa's answer: "A term used to describe rocks with long slender crystals". Pippa received 2 points.

Charlie's answer: "Acicular is a term used to describe minerals with visible crystal content e.g. a geode¹⁰". Charlie's definition received 4 votes – she was awarded 1 point.

Roddy's answer: "Acicular is a term used to describe rocks that are not round." Roddy did not receive a vote.

The correct answer - Acicular, in mineralogy, refers to a crystal habit composed of slender, needle-like crystals. Crystals with this habit tend to be fragile. Complete, undamaged acicular specimens are uncommon. The term "acicular" derives from the Late Latin "acicula" meaning "little needle". Strictly speaking, the word refers to a growth habit that is slender and tapering to a point.

Round 2

Lappy: "The next term is: *coprolite*"

The winner of this round was Lappy. The funniest answer was provided by Dottie. There were no correct answers.

Lappy's answer: "Coprolite is a rare mineral sometimes found in areas associated with copper deposits." Lappy received 3 votes and 1 point.

Dottie's answer: "Coprolite is a mineral derived from coprolitic processes involving repetitive application of heat and stress". She had no idea where that came from – Fin thought it was a marvelous answer and gave it his vote – sadly, for Dottie, he was the only one so inclined.

The correct answer – coprolite is a term used to describe fossilized animal excrement embedded in a rock.

Round 3

Lappy: "The next term is: massive"

Not surprisingly, Foxey, Pippa, and Charlie all knew the correct definition since this term is basic to elementary geology. Each of them decided to try and provide a "winning" incorrect answer – Foxey was successful. Roddy had the simplest and most straightforward answer.

- **Foxey's answer:** "Massive is a term often used to describe the large rock fragments resulting from systematic blasting procedures in quarries." Foxey's answer was convincing (particularly the way that Fin read it out) that two players thought it sounded plausible. Foxey received 2 votes but no points.
- **Pippa's answer:** "The term massive is used in the context of Catholicism to describe a variety of stone structures e.g. an altar." No players went for Pippa's religious take.
- Charlie's answer: "Massivity is a measure of weight in geology a massive stone is a heavy stone."

 Not having taken Physics in high school, Bonnie and Pippa both voted for Charlie's definition despite the fact that "massivity" is not even a word alas, she did not receive any points.
- **Roddy's answer:** "A term used to describe large boulders." Roddy received 4 votes for his simple answer (1 vote was his own) and 1 point his chest puffed out a bit as he thought to himself "4 votes".
 - **The correct answer** a term used to describe rocks that have no definable shape or form as any crystal or aggregate structure is hidden from the naked eye.

Over the course of the evening there were many rounds played with the players left to ponder over terms like:

- monotropic Foxey, Charlie and Pippa all new the correct definition for this term (it was involved in a question on Pippa's final exam). They each received two points because they each supplied the correct answer. Roddy's drew a ton of laughter for his answer involving "stones found near the equator that are sometimes used in the treatment of blood disorders"
 - **The correct answer** a term used to describe a mineral that once transformed (under suitable conditions of temperature and pressure) cannot change back to its original state without the crystal structure being completely destroyed.
- detritus no one knew the correct definition here but Fin provided a very lucid definition that tricked most players. His answer was "Detritus was a Roman scholar and nobleperson known for marble¹¹ sculptures with distinctive black markings; the term today is used to describe the "black content" of marble. Fin received 5 votes and 1 point.
 - **The correct answer** a term used to describe mineral or rock fragments that eroded and were deposited in a different location than where they formed, i.e., via downstream currents in a river.
- **vesicle** again, no one knew the correct definition. Bonnie came close with her definition: "a term used to describe crack-filled lava paths that break the earth's crust during a volcanic

- eruption". She received 4 votes and 1 point. Lappy's definition: "an ancient boat or raft carved from pumice¹²" received some laughs but no points.
- **The correct answer** a term used to describe rounded cavities within a rock formed by the trapping of gas bubble during the formative stages.
- tufa both Foxey and Charlie knew the correct definition. However, they once again tried to produce a "winning" incorrect definition. Charlie was successful with: "Tufa is the plural of tuff and thus represents a collection of "tuff¹³" outcroppings". Charlie received 4 votes and 1 point.
 - **The correct answer** a term used to describe a calcareous mound formed from mineral-rich water that deposits the calcium carbonate on the growing mound. Not to be confused with *tuff*.
- patina no one knew the correct definition as given on the card, however, Bonnie was very close with "a gloss or sheen on a stone surface resulting from age or polishing". She received 5 votes and 1 point.
 - The correct answer a term used to describe the green (or brown) tarnish formed from oxidation, over long periods, on copper or bronze¹⁴. The expression is usually used with an antique or historic connotation.
- **friable** again, no one knew the correct definition but Fin successfully convinced the majority to vote for "a term used to describe the arrangement of colors and circular shapes in picture Jasper¹⁵". Fin received 1 point.
 - **The correct answer** a term used to describe a mineral which easily crumbles. Minerals with an earthy fracture are friable.
- **gemmy** no one knew the correct answer. Foxey was pretty convincing with "a term used to describe the brightness and flash in a diamond¹⁶". She received 4 votes and 1 point. Dottie drew a laugh or two with her answer "a long slender pry bar used to extract fire agate¹⁷ from the host rock". She received no votes. Roddy said he could not vote for Dottie's definition since he knew that a "gemmy" was the nickname for the large trucks that haul ore away from the mine face.
 - **The correct answer** gemmy describes a mineral that is very transparent and particularly applies to a specimen from a group (or type) of minerals for which transparency is less common.

At the conclusion of the game, all participants had received votes for their answers – even Roddy. He was still beaming for his definition of "massive". The time had flown by as a good time was had by all and the evening ended with each vowing they would get together soon – Pippa suggested that she would host next time. Roddy and Bonnie had to rush off because they knew Grandma would be impatient for their return – she didn't like to be out late these days. Pippa and Charlie seemed to be in some sort of trance as they left – both Dottie and Foxey were ecstatic that their friend Pippa was finally so happy. Lappy and Foxey lingered for awhile (Fin made an expresso for each) and then were off. Dottie didn't want the night to end ... normally, Fin would spend the late evening poring over "work"

papers but not on this night – he too found himself not wanting Dottie to leave. They chatted for a long time

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!!)



Tourmaline (October birthstone) is a crystalline boron silicate mineral compounded with elements such as aluminium, iron, magnesium, sodium, lithium, or potassium. This brightly colored Sri Lankan gem is identical, minerally, to *shorl* and has special pyroelectic properties that enable it to attract and then repel hot ashes. This unique property led the mineral to be know as the Ceylonese Magnet. It is an established semi-precious gemstone.



Jade is an ornamental rock, mostly known for its green varieties, which feature prominently in ancient Asian art. The term *jade* is a general term applied to two different metamorphic rocks that are composed of different silicate minerals, namely (i) jadeite, and (ii) nephrite. Jade has been a favorite carving material for many centuries.



Topaz - is a silicate material of aluminum and fluorine. Pure topaz is colorless and transparent but impurities cause it to occur in a variety of colors. Topaz is commonly associated with silicic igneous rocks e.g., granite. Topaz can be found worldwide, including locations in Utah and Texas; Brazil is the world's leading producer.



Turquoise - is an opaque, blue-to-green mineral that is a hydrated phosphate of copper Cu and aluminium. It is rare and valuable in finer grades and has been prized as a gem and ornamental stone throughout history owing to its unique hue. Turquoise is generally found in dry climates: USA, Mexico, Chile, Afghanistan, China, and Tibet.



Opal - is a hydrated (up to 10% water) amorphous form of silica. It is deposited at a relatively low temperature and may occur in the fissures of almost any kind of rock. Common opal occurs in a variety of colors (e.g., white, blue, green, pink, yellow, or grey). Common opal is found worldwide including right here in British Columbia.



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.



Citrine - is a yellow-to-golden member of the quartz mineral group. Citrine has been called the "stone of the mind" as ancient cultures believed that it was associated with psychic power. Natural Citrine can be found in Madagascar, France and Russia. However, much of the world's treated Citrine (from Amethyst) comes from Brazil.



Azurite is a soft, deep blue copper mineral produced by weathering of copper ore deposits. It is also known as Chessylite after a location in France. The mineral, a carbonate, has been known since ancient times, and its blue color is exceptionally deep and clear, and for that reason the mineral has tended to be associated since antiquity with the deep blue color of low-humidity desert and winter skies.

9.



Hematite is a common iron oxide that can be colored black to steel or silvergray, brown to reddish brown, or red. All forms of hematite have a rust-red streak. Hematite is harder than pure iron, but much more brittle. Huge deposits of hematite are found in banded iron formations. Gray hematite is typically found in places that can have still standing water or mineral hot springs. The mineral can precipitate out of water but it can also occur without water, however, usually as the result of volcanic activity.

10.



Geodes are structures which occur in certain sedimentary and volcanic rocks.¹ Geodes commonly have a chalcedony shell lined internally by various minerals, often as crystals. When cut in half, visible bands corresponding to varied stages of precipitation may at times show patterns that reveal points of fluid entry into the cavity and/or varied colors corresponding to changes in chemistry.

11.



Marble is a metamorphic rock composed of recrystallized carbonate minerals, most commonly calcite or dolomite. Pure white marble is the result of metamorphism of a very pure (silicate-poor) limestone or dolomite protolith. The characteristic swirls and veins of many colored marble varieties are usually due to various mineral impurities such as clay, silt, sand, iron oxides, or chert which were originally present as grains or layers in the limestone.

12.



Pumice (called pumicite in its powdered or dust form) is a volcanic rock that consists of highly vesicular rough textured volcanic glass. It is typically light colored and created when super-heated, highly pressurized rock is violently ejected from a volcano. The unusual foamy configuration of pumice happens because of simultaneous rapid cooling and rapid depressurization. Pumice has a porosity of 64–85% by volume and it floats on water.

13.



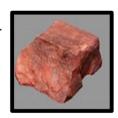
Tuff is a type of rock made of volcanic ash ejected from a vent during a volcanic eruption. Following ejection and deposition, the ash is compacted into a solid rock in a process called consolidation. Tuff is a relatively soft rock and can be classified as either sedimentary or igneous rock.

14.



Bronze is an alloy consisting primarily of copper and about 12–12.5% tin; it may contain other metals e.g., aluminium, manganese, nickel or zinc. Bronzes are more ductile and considerably less brittle than cast iron. Bronze only oxidizes superficially; once a copper oxide layer is formed, the underlying metal is protected from further corrosion. The melting point of bronze varies depending on the ratio of the alloy components and is about 950 °C (1,742 °F). Bronze is usually nonmagnetic, but certain alloys containing iron or nickel may have magnetic properties.

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.

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. [

17.



Fire Agate is a variety of Chalcedony (Quartz family). It has a translucent deep reddish-brown base, with flashes of orange, red, green and gold. The colors are caused by light interference on thin layers of iron oxide or limonite crystals within the Chalcedony. Fire agates are found in Mexico and southwestern US states e.g., near Safford AZ.