



# LAPHOUND NEWS

VICTORIA LAPIDARY & MINERAL SOCIETY

P.O. Box 5114, Station B

Victoria, B.C. V8R 6N3



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**Website :: [www.vlms.ca](http://www.vlms.ca)**

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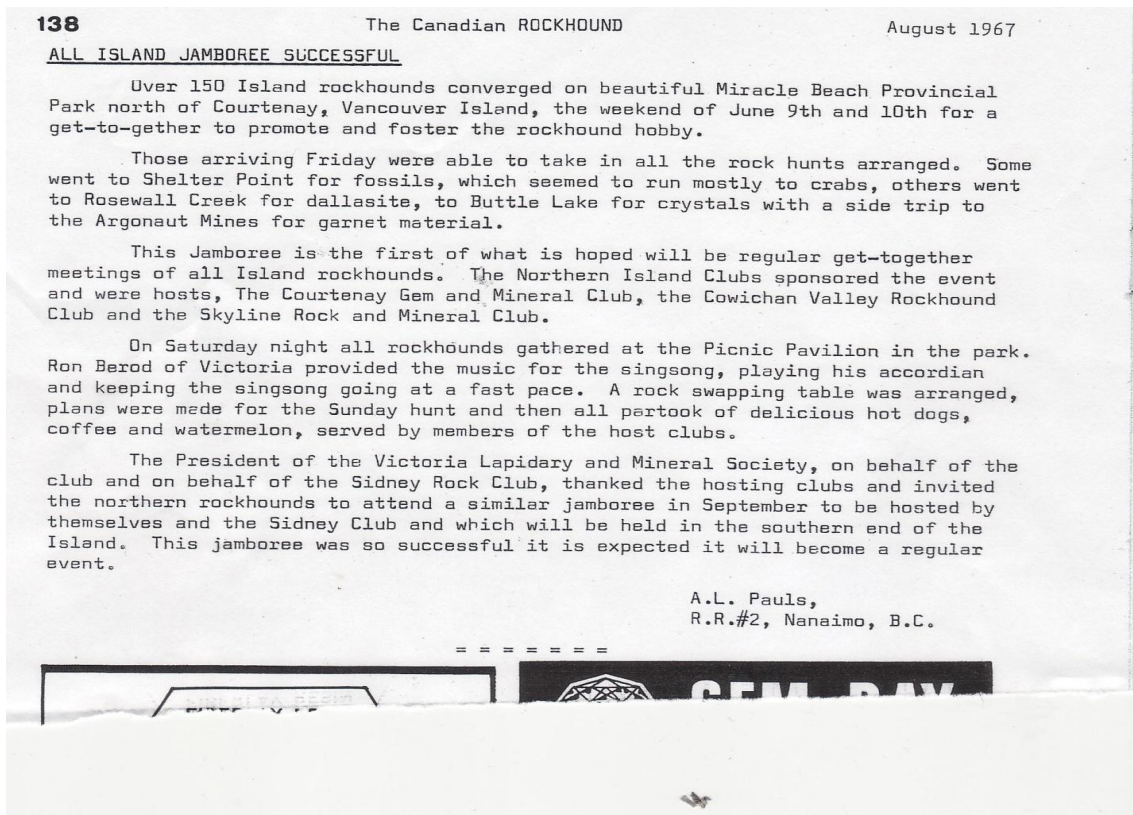
# The Newsroom

## Announcements

### Club Events

#### ***Gemboree (follow up)***

Allana provided the following: Angela Bailey forwarded this article in a 1967 Canadian Rockhounder magazine that she and her husband Grant had come across. This article, scanned below, was of particle interest as it was the pivotal event that started all Vancouver Island "Gemborees". By all accounts, 2018 was the 51<sup>st</sup> year of the V.I. Gemboree!



***Parksville Rock and Gem Show – 9:30am – 4:30pm on September 29-30, 2018***

Parksville and District Rock and Gem Club in conjunction with the Courtenay Gem and Mineral Club will co-host a rock and gem show at the Parksville Community and Conference Centre, 132 Jensen Ave E, Parksville.

***3<sup>rd</sup> Annual VLMS Club Member's "Rough-to-Ready" Show and Sale – October 13-14, 2018***

As this event (Leonardo Da Vinci Centre) is fast approaching, a meeting of minds for planning purposes is tentatively scheduled for Tuesday, September 11<sup>th</sup> with more information available at our next club meeting on Monday September 10<sup>th</sup>.

***2019 VLMS Rock and Gem Show – Leonardo Da Vinci Centre – March 15-17, 2019***

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.

**VLMS Positions**

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

- (i) Programs (currently vacant) - applicants are responsible for securing Presenters for select monthly meetings, and
- (ii) Field Trip Coordinator – the legendary Gilles LeBrun (25 yrs in the position) wants to take a step back at the end of the year and the club needs a replacement for this important position.

**Meetings**

The next members meeting will be held as follows:

**Date:** September 10, 2018

**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 Trips (Gilles)**

The fall series of field trips is planned according to the following schedule:

- a) Sept 23, 2018 – a back-trail scouting trip (for new rockhound sites) from Port Renfrew through to Lake Cowichan,
- b) Oct, 2018 - the Members Event at the Leonardo Da Vinci Centre, Oct 13-14, 2018, and
- c) Nov 18, 2018 – a gold-panning and rockhounding trip to Loss Creek.

**Courses (Vanessa)**

I am working my hardest to arrange and schedule courses for new members and for those who have been on the course list for some time. If you have not yet been contacted, please make sure you contact the vlmsworkshop@gmail.com to confirm your learning requests. The first courses planned for the fall season are scheduled for September.

## Reports

### President (Vanessa)

As another awesome summer winds down and we again prepare to reconvene our monthly meetings, I look forward to hear of the many rockhounding adventures (and of the treasures found) that our members have had over the course of this beautiful summer.

Our turn at hosting this year's Island Gemboree was well received by the many Island and VLMS members that were lucky enough to attend. The Gemboree field trips were well attended with no injuries reported (not even by me!) and many treasures and laughs were shared. I highly recommend this annual event to all club members that have not yet taken advantage of this collaboration of Island rock clubs. It provides an excellent opportunity to network with other club's members and share in the fellowship of our shared rock interests.

Thank you so much to Allana for organizing, to our own Bruzz Bethal for his very informative flint-knapping demonstration, to Sean Maier for his rock identification and demonstration, to our Wagon Masters, Bill and Gilles, and to Bill for pulling double duty as auctioneer - excellent work all. Your skills and commitment is very much appreciated.

### Island Gemboree - July 26-29, 2018 (Allana)

Well, after one and a half years of planning, the VLMS pulled off a darn good Gemboree. We had approximately 60 adults and 9 children attend the 3-day affair at the Sooke River Campgrounds.

#### Friday

The morning was hot and filled with anticipation as our newly-appointed wagon master Bill Needoba led us to the K2 Ocean Pearl Quarry on Mosquito Creek near Port Renfrew. There we learned that K2 has 3 different kinds of slate at their quarry: (i) black, oily slate - good for construction and aggregate material, (ii) a light blue-gray, and (iii) a dark gray. Both the latter two types are desirable for stone products. Matt Girard was our guide and explained all the processes needed to take the stone out of the ground and then to market. Any excess or unwanted material is used in conjunction with concrete and other aggregate, so nothing is wasted. Our afternoon was spent gold-panning in more temperate climes at Loss Creek. The water was definitely welcomed in comparison to our dry hot morning quarry run. Several participants found "colour" in their pans and some were able to do rock hounding in the creek as well. The Friday agenda was ended with a steak BBQ put on by the Sooke Lions and with an arrow-knapping demonstration by our very own Bruzz Bethel.

#### Saturday

Saturday morning was spent at a rock quarry in Jordon River. Giles LeBrun had known for some time that there were fossils at this quarry. What is extraordinary about this spot is that it represents where the plutonic (volcanic) portion of the lower Island meets with the ocean sediments. As a consequence, we were able to find fossils that had been mineralized. Vugs (volcanic air pockets), with their calcite crystallization, and other assorted and unusual types of crystallization were typical "finds" at this intersection of rock formations. The afternoon was spent at a local Sooke location called Ella Beach. This beach is one of the "pebbliest" beaches around and kept most of us with our heads down looking for that special discovery. Saturday evening was highlighted by an impromptu potluck meal and an informative session on how to use the rock and mineral identification materials

provided in the goody-bags that we each received at registration. Sean Maier did a great job helping those interested in using the information provided to identify their treasures found during the day.

### **Sunday**

Sunday began with the Sooke Lions Club putting on a great pancake breakfast with sausages, blueberries and fruit salad. Following breakfast, the Island Zone meeting took place under the shade of conifers at the campsite. Finally, after the zone meeting, a tail-gate sale and auction concluded the Gemboree for this year.

I would sincerely like to thank all those who attended the Gemboree. In particular I would like to express my appreciation to: (i) Georgia at the Sooke River Campsite for hosting, (ii) Vanessa for accompanying me on the first foray looking into campsites (a damp day of driving in October during which she kept me between the ditches), and (iii) the hardy crew comprised of Bill Needoba, Grant Bailey, Rob deLange, Bill and Karen Randall, Steve and Arlene Modderman and John and Susannah Andersen for a day of exploring for the elusive quartz dyke (it was special at it was my first day rock hounding without Greg); the day was a bit erratic with Bill N and Rob deLange having to pull extra duty in returning to the Renfrew highway for more tidbits. In terms of the Gemboree, Bill N, you saved the whole weekend by volunteering to be a wagon master – huge thanks. Also, huge thanks to David Jackson for writing the cheques and keeping things real. Sean Maier – thank you for taking on the teacher role I so wanted to do but got called out elsewhere. A special note of thanks is to be given to the other Island Zone member groups - your excellent Gemborees in years past have provided insight, inspiration and perspiration in making this event possible. May our continued work together strengthen our passion and interest for the next generation of rockhounds. Finally, to the VLMS Board of Directors - thank you for giving me lots of room to work. It was a tough year without Greg and I needed something to get me up in the morning and keep me focused when all seemed blurred and lost. I appreciate the support you gave me to organize this. Cheers, Allana.

### **Membership (Margaret)**

I am pleased to report that our club membership has reached 200 individuals (169 adults and 31 juniors) with a demographic breakdown as follows:

- a) 81 singles,
- b) 30 couples,
- c) 2 single-parent families, and
- d) 13 two-parent families.

There has been an increase in number of junior members and we should thank Gilles for his field trips – they are of special interest to youngsters and help start them on the way to being rockhounds.

With September just around the corner it's time to remind everyone that next year's dues must be in the BC Lapidary Society's hands by December 31<sup>st</sup> each year. It is very important to meet this deadline because it allows the bulk listing of paid up members to be easily rolled over by the volunteers at BCLS to provide continuous membership in BCLS and insurance coverage by GFC. For emphasis:

***“The payments received after the year-end (i.e., that DON'T MEET THE DEADLINE) must be handled individually, at the expense of BCLS volunteers”.***

Last year, less than half of our membership paid before the deadline!

Locally, it is also important for my own record keeping, that dues (cash or preferably cheque) be accompanied by an up-to-date membership form - filled out to reflect changes or additions to address, phone number or privacy conditions. Please note that the membership dues go straight to the Treasurer immediately. If the payment is not accompanied by a "form" then I am left with only a receipt (which is sometimes in my book, but may be in my valuable helper Arlene's or another board member's book). The point is, without an up-to-date form it is difficult to maintain my records and, in turn, makes it difficult to have correct information available for our club website, the workshop or any club meeting.

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

### **Field Trips (Gilles)**

Field trips for the fall season have been announced. As a reminder, on the day, participants typically meet at 9 am at the Juan de Fuca Rec Center. Always confirm with Gilles if you are attending.

### **Sunshine Corner (Susannah)**

Good news – nothing to report.

### **Library (Kathryn)**

We have had the addition of the following three books to our library collection:

- (i) "Decorative Wirework" by Jane Davis,
- (ii) "The Golden Stamp Book of Rocks and Minerals" by Paul Shaffer, and
- (iii) "Making Bead and Wire Jewelry" (Easy-Does-It Series) by Dawn Cusick.

Along with all the books in our collection, we also have many issues of the "Rock and Gem" magazine and the "Lapidary Journal" available for loan.

### **Island Zone (Vanessa)**

A brief meeting of Island Zone representatives was held on the morning of Sunday, July 29 immediately following the pancake breakfast at the Gemboree. In addition to Zone reps, the meeting was also attended by several club members interested in finding out more about what the Zone is about as well as what is going on with the other clubs on the island. Reports were submitted by each club in attendance to the Zone secretary and will be posted as soon on our VLMS website as soon as they are made available.

VLMS members who are interested in becoming a representative of our club for the Island Zone - please contact Vanessa at our next meeting, or by email.

### **Workshop (Vanessa)**

New blades have been recently added to the 10" and 6" trim saws as the past blades were both a year old or more. Thanks go to Mel for the contribution of the 10" blade. The slab saw blade still has its original blade in use and is not expected to need replacement in the very near future, as cutting with oil greatly reduces the blade wear.

The Genies are all in active use with most sporting new or reconditioned spitters - these have noticeably improved the water amounts to the wheels.

Brian will be looking into getting some grit for the vibrating flat lap (donated by new club member, Doug Smith) and Alana has offered to check out wheel replacements for the small 6" flat lap.

The longer course session format, newly implemented on Sundays, has shown to have some instruction advantages for the Basic Lapidary course, held recently. We are hopeful that future courses will follow the same format so as to not interfere with Saturday workshop activities for members.

### **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 gold  
....but it might be opal!!!!*



### ***Foxye the Foxhound***

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



## **An Evening at Foxye's**

The warmth of the day was receding, a cool breeze off the Inner Harbour streamed through the open balcony door at Foxye's downtown condo. That was a good thing since Foxye and Lappy were hosting a bit of an evening social. On the guest list were Pippa the Poodle, Dotty the Doberman, Inspector Roddy the Rottweiler and his wife Bonnie the Beagle, and the special guest, Chief Inspector Bailey-Cooper the Border-Collie (who had not yet arrived). Dotty had arrived first (and early) in the hopes that the Chief Inspector was likewise inclined – these days, she was having trouble thinking about anything or anyone else, except the Chief Inspector. Roddy and his wife had arrived right on time. Throughout the course of Lappy's short involvement with the K-9 unit, he had formed a close bond with (and a much better appreciation for) Insp. Roddy. His wife, Bonnie, was very sweet but quiet – this was the couple's first night out in some time as they had finally got up the courage to leave their newborn, Roddy Jr., with his Grandma. There was much conversation about Roddy Jr. (his dad was very proud) and about the events of the day. Pippa had just arrived (a bit late and flustered), she had almost been run over as she crossed the street coming up to Foxye's flat so she heart was pounding but all for the wrong reasons.

**Pippa:** "With all this money being spent on bike lanes in this city, I'd vote for someone that recommended a network of 'dog lanes' ".

**Foxye (laughing):** "Pippa, we know Mayor Helps has a bike. I guess you have to hope she also has a dog!"

Roddy immediately launched into a gruesome story about a “canine” casualty at the hands of a large moving van – Pippa’s impression of Insp. Roddy was not improving since observing him in action at the Da Vinci center on that day last fall when Foxy’s topaz<sup>1</sup> necklace was “stolen”!

**Dotty (impatiently):** “Where is the Chief Inspector?”

**Roddy (completely oblivious):** “The Chief Inspector does not drive or ride a bike...perhaps, he has been run...”

**Lappy (sensing Dotty’s dismay and realizing what Roddy was about to say – jumped in to complete the sentence):** “.. run off his feet with all his administrative duties – he will be here soon.”

**Bonnie:** “Roddy, dear, it has been at least 20 minutes, do you think I should phone and see how Roddy Jr. Is doing?”

**Roddy:** “No, I don’t think so, my Mother is perfectly capable of handling the situation.” Bonnie, looked at Foxy and rolled her eyes in trepidation and exasperation.

The Chief Inspector was indeed running a bit late. He was not, particularly, a “social” animal by nature and had some difficulty in deciding what was appropriate to wear – “to tie or not to tie?” that was the question. For him, formal occasions (and he had designated this as such) always demanded a tie – it was a no-brainer - he decided on a nice lime green one. He also had to stop and pick up some wine and four roses – one for each of the ladies. The Chief Inspector took a deep breath and rang the doorbell.

**Dotty (almost bowling Pippa over):** “I will get it!” Dotty was looking particularly attractive on this evening as she had made a special appointment to have her nails done (painted pink), she was wearing her collar adorned with pink-tinged tourmaline<sup>2</sup> (in perfect unison with her toe nails and in contrast to her jade<sup>3</sup> charm bracelets around her ankles). She made her way down the hallway and opened the door full of anticipation.

**Dotty (gushing):** “Chief Inspector, you are just in time.”

**Chief Inspector (smiling and quite relieved):** “I am? I thought I was late.” The Chief Inspector couldn’t help but notice how attractive Dotty looked – he wasn’t very good in these situations and didn’t quite know what to say – he remembered his Father’s advice: “when in doubt, compliment the lady on her looks”.

**Chief Inspector:** “Goodness, Dotty, you look especially smashing tonite.”

**Dotty (struggled to maintain her composure):** “Why .. thank you, Chief Inspector – you look pretty handsome yourself in that green tie.” She wondered, she hoped, that the color synergy between his green tie and her jade charms was some sort of omen.

**Dotty (somewhat hesitantly):** “Chief Inspector, can I ask - what is your first name? ... no one here knows it and “Chief Inspector” is so formal.” The Chief Inspector thought to himself for a few seconds (seemed an eternity to Dotty) – “she is right, apart from my immediate family, very few know my first name”. Truth be known, he was a bit embarrassed by it.

**Chief Inspector:** “Fingal – it is Scottish.”



**Dotty (sympathetically, since she sensed a level of discomfort):** “Wow – that is quite unique....can we call you Fin?”

**Chief Inspector (not sure but intent on being polite):** “Yes, of course, that is what my Mother called me.” They made their way down the hall and entered the living room.

**Dotty (proudly):** “Everyone, Fin has arrived”

**Roddy (totally confused):** “Fin? I thought the Chief Inspector was coming.”

**Bonnie (helping out):** “Roddy, Fin is clearly the Chief Inspector’s first name.”

**Roddy (beaming):** “I get it...welcome, Chief Inspector Fin.”

**Foxy (laughing):** “Welcome, Fin ....I am glad you could make it.”

**Pippa (still angry over her close call):** “Hey Fin!....Foxy, can we eat?”

**Lappy (not yet prepared to call his boss by his first name):** “Chief Inspector.” Then he went on to say: “Yes, we can eat. I have prepared a dish popular in my homeland ...called Lihapullat ... it is traditional Finnish meatballs in gravy.”

**Roddy (eagerly):** “I love meatballs.”

**Bonnie (aghast – whispering in Roddy’s ear):** “Just remember your table manners.” She knew first-hand how much of a slob, Roddy could be at the supper table.

Fin handed out the roses to the ladies (Dotty thought hers was the biggest and most special) and he gave the wine to Lappy – it was a Pinot Noir – just right, thought Lappy. They sat down to their meal. The food was delicious, the wine flowed, the conversation was light, Pippa fumed, and Roddy (despite long odds to the contrary) exhibited remarkable restraint and etiquette at the supper table. Of course, Dotty couldn’t take her eyes off Fin – he sensed it but was not uncomfortable with it. They all pitched in and cleared the table at which point Foxy proclaimed: “Let’s play a game of BoulderDash.”

**Fin (his interest piqued):** “That is a game I have never played, what are the rules?”

**Foxy:** “It is modeled after a similar game called Balderdash. It is a game in which we attempt to convince each other that we know the meaning of obscure terminology - tonite, the terminology is derived from all things related to rocks, minerals, and gems. Basically, a “term” is revealed to all players who in turn write down a “definition” of what the term refers to....all of the answers are read to the group and then a vote is taken as to which answer is perceived to be the correct one. The person who receives the most votes, wins the “hand” and receives a point – if, by chance, someone actually supplies the correct answer (even if they don’t win the vote), they get 2 bonus points”

**Roddy (sheepish but honest):** “I am not good at games. What if you don’t know the answer?”

**Bonnie (protectively):** “Roddy, this is perfect for you since you don’t have to know the answer, you just have to convince the other players that you do.”

**Roddy (surprised):** “You mean I can lie?”

**Lappy (giggling):** “May the best liar win!”

**Fin (he couldn’t help himself):** “This game must be popular with a certain political figure to the south”

## The Game

Foxy 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, read the term off a card drawn from the top of a deck placed centrally between players. It was felt that Fin was best able to maintain his composure (not laugh) when reading the answers, so 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 Foxy was to record the votes.

### Round 1

**Lappy (eager to get started, drew the first card):** “Everyone listen carefully, the first term is: *femic*”

All of the players submitted their answers – the winner was supplied by Foxy as she actually knew the correct answer (much to everyone’s astonishment) and won on votes as well. The funniest answer was supplied by Roddy (not surprisingly):

**Foxy’s answer:** “A term used to describe volcanic rock rich in magnesium”. Foxy received 3 votes and 3 points in total.

**Roddy’s answer:** “Femic is a term used to describe stones that are fashioned into jewelry worn by a female.” Strangely, no player voted for Roddy’s answer (not even himself).

**The correct answer** - Femic is a term used interchangeably with “mafic” and is an adjective describing a silicate mineral or igneous rock that is rich in magnesium and iron. Most femic minerals are dark in color, and common rock-forming femic minerals include olivine<sup>4</sup>, pyroxene<sup>5</sup>, amphibole<sup>6</sup>, and biotite<sup>7</sup>.

### Round 2

**Lappy:** “The next term is: *epiclastic*”

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

**Fin’s answer:** “Epiclastic is the opposite of epicentric – it refers to volcanic material distributed far from the point of origin by wind action.” Fin received 3 votes and 1 point.

**Pippa's answer:** "Epiclastic minerals are thought to have restorative powers and are often used as part of a religious ceremony." Pippa received two votes, but sadly, no points.

**The correct answer** - a geologic term describing rocks formed at the surface of the earth by consolidation of fragments of preexisting rocks i.e. by weathering. Breccia<sup>8</sup> is an example of an epiclastic rock.

### **Round 3**

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

The winner of this round was Lappy despite the fact that Bonnie provided the correct answer – she had worked as a nutritionist and guessed correctly. The funniest answer was provided by Dotty (who was much more interested in Fin as opposed to playing the game).

**Lappy's answer:** "Saccharoidal refers to a particular crystal structure in which tetrahedrons are arranged with cyclic offsets providing for a distinct glimmer effect when viewed in direct sunlight." Lappy's answer was so technical (and Fin read it perfectly) that the majority of players thought it simply must be true. Lappy received 3 votes and 1 point.

**Bonnie's answer:** "Saccharoidal describes mineral and rock surfaces that have a sugary texture." Bonnie received 2 points for being correct.

**Dotty's answer:** "Saccharoidal is a term used to describe petrified wrist bones." Pippa and Roddy actually voted for Dotty's answer because they couldn't quite remember (nor could Dotty) the word "scaphoid" but recognized the "oid" sound.

**The correct answer** – a term used to describe rocks and minerals having a texture similar to that of granulated sugar. Certain types of marble<sup>9</sup> can exhibit saccharoidal surfaces.

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

**alluvion** – Foxey knew the correct definition for this term but Pippa's definition as "rock material contained in comets and meteorites" won 2 votes.

**The correct answer** – an alternative term for alluvium and is used to describe loose, unconsolidated deposits formed by the flow of water. An example of an alluvion deposit<sup>10</sup> can be found in the Gamtoos Valley in South Africa.

**aventurescence** – no one knew the correct answer here but Roddy unwittingly dropped a "d" and gave it the old college try with "a quality exhibited by most rock hounds."

**The correct answer** – a term used in gemology to describe an optical reflectance effect (think Moonstone) seen in certain gems. The effect amounts to a metallic glitter, arising from minute, preferentially oriented mineral platelets within the material. Sunstone<sup>11</sup> can exhibit this quality.

**fissility** – again, no one knew the correct answer. Dottie came up with “a property of granite describing the reaction of the stone when acid is poured on its surface” but could not garner a vote for her troubles.

**The correct answer** - In geology, fissility is the ability or tendency of a rock to split along flat planes of weakness. Fissility is the result of sedimentary processes and as such, the planes of weakness are oriented parallel to stratification in sedimentary rocks e.g., in slate<sup>12</sup>.

**oolitic** – once again, Foxy knew the correct answer. However, the most popular answer belonged to Lappy who came up with “a term used to describe a type of soapstone, found on the shores of Baffin Island and used by Inuit carvers to produce beautiful sculptures”.

**The correct answer** – oolitic is the adjective form describing a sedimentary rock formation consisting of oolites<sup>13</sup> (egg stones).

**pallasite** – no one knew the correct answer, however, Pippa recognized that “pallas” had Greek origins and so she went with “a colorful type of marble found only in Greek quarries and used to adorn statues and other architectural objects in ancient Greece” – she won 3 votes for her efforts (if only she had used her answer for alluvion!!).

**The correct answer** - a pallasite is a class of stony-iron meteorites. It consists of centimeter-sized olivine crystals (of peridot<sup>14</sup> quality) in an iron-nickel matrix.

**trapiche** – again, no one knew the correct answer. Fin (who considered himself a bit of wine connoisseur) knew his answer was unrelated to the subject at hand but couldn’t resist as he wrote down: “trapiche is an Argentinian wine”. Much to everyone’s amazement, Roddy gave him a vote.

**The correct answer** - trapiche is a term used to describe rare varieties of certain gemstones (i.e., the trapiche emerald<sup>15</sup>) that are characterized by a six-pointed radial pattern of ray-like spokes of dark impurities. Note that “trapiche” is technically a mill made of wooden rollers and used to grind fruit – the geometric configuration of the rollers inspires the use in gemology.

**wolframates** – Fin knew the correct answer only because it had come up in one of the cases he worked on in years past. Foxy thought she knew the correct answer but confused titanium with tungsten and offered “a mineral salt associated with titanium” – alas, she received no votes.

**The correct answer** – wolframates is an alternative term for tungstates. Tungstate is a salt containing a mixture of tungsten and oxygen. An example of a “wolframate” or “tungstate” material is wolframite<sup>16</sup>.

At the conclusion of the game, Dotty was the only player not receiving a single point in any of the hands, nor had she known any of the correct answers – she didn’t care. Roddy won the “rookie” award for his definitions of pallasite as “a bug that lives in a rock” and trapiche as “any flat stone used to

serve a breakfast egg dish” – he later claimed that they were the two answers he was pretty confident were correct. A good time was had by all and the evening ended with each vowing they would get together soon for a “rematch”. Fin offered to walk Dotty home (much to Pippa’s consternation – given her trials getting to the condo, she thought it might be a nice gesture if Fin volunteered to walk her home). Fortunately, it was not late as Roddy and Bonnie had to get home to relieve Grandma – they dropped Pippa off on their way. After everyone had left, Lappy and Foxy lounged on the balcony, sipped an espresso and watched the evening lights twinkle in the Inner Harbour – it was quite romantic.

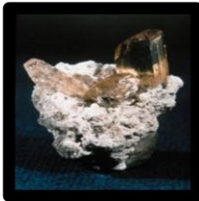
## Acknowledgements

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!!)

1.



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.

2.



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 pyroelectric properties that enable it to attract and then repel hot ashes. This unique property led the mineral to be known as the Ceylonese Magnet. It is an established semi-precious gemstone.

3.



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.

4.



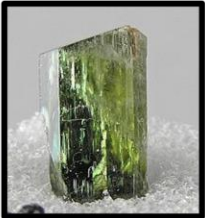
Olivine is a magnesium iron silicate that is a common mineral in Earth's subsurface but weathers quickly on the surface. Olivine gemstones are called peridot and chrysolite. Olivine rock is usually harder than surrounding rock and stands out as distinct ridges in the terrain.

5.



Pyroxene is a collective term referring to a group of important rock-forming silicate-related minerals found in many igneous and metamorphic rocks. Pyroxenes were so named because of their presence in volcanic lavas, where they are sometimes seen as crystals embedded in volcanic glass – diopside, shown to the left, is an example of a pyroxene.

6.



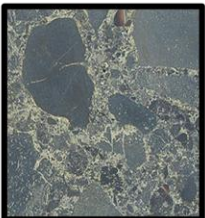
Amphibole is another important group of silicate-related minerals, forming prism or needlelike crystals, composed of double chain  $\text{SiO}_4$  tetrahedra, linked at the vertices and generally containing ions of iron and/or magnesium in their structures. Amphiboles can be green, black, colorless, white, yellow, blue, or brown. Tremolite (shown to the left) is an example of an amphibole.

7.



Biotite is a common silicate-related mineral within the mica group and often referred to as the dark mica series. Biotite is a sheet silicate sometimes called "iron mica" or "black mica". It is found in a wide variety of igneous and metamorphic rocks and appears greenish to brown or black, and even yellow when weathered.

8.



Breccia is a rock composed of broken fragments of minerals or rock cemented together by a fine-grained matrix that can be similar to or different from the composition of the fragments. A breccia may have a variety of different origins, as indicated by the named types including sedimentary breccia, tectonic breccia, igneous breccia, impact breccia, and hydrothermal breccia.

9.



Marble is a metamorphic rock composed of recrystallized carbonate minerals, most commonly calcite or dolomite. Marble may be foliated. In geology, the term "marble" refers to metamorphosed limestone, but its use in stonemasonry more broadly encompasses unmetamorphosed limestone. Marble is commonly used for sculpture and as a building material.

10.



The term "alluvium" is not typically used in situations where the formation of the sediment can clearly be attributed to another geologic process that is well described. For example, lake sediments (lacustrine), river sediments (fluvial), or glacially-derived sediments (glacial till) are not typically referred to as alluvial.

11.



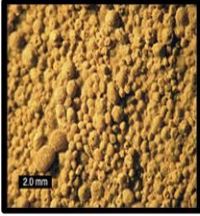
Sunstone is a feldspar, which when viewed from certain directions exhibits a spangled appearance. The optical effect appears to be due to reflections from inclusions of red copper. These inclusions give the stone an appearance something like that of aventurine, hence sunstone is known also as "aventurine-feldspar".

12.



Slate is the finest-grained, foliated (layered), homogeneous metamorphic rock derived from an original shale-type sedimentary rock i.e., composed of clay or volcanic ash. Foliation typically occurs in planes perpendicular to the direction of metamorphic compression – this is call "slaty cleavage". It is caused by strong compression causing fine grained clay flakes to regrow in planes perpendicular to the compression.

13.



Oolite (*egg stone*) is a sedimentary rock formed from “ooids” or spherical grains (< 2mm in diameter) composed of concentric layers. Ooids are most commonly composed of calcium carbonate, but can be composed of phosphate, clays, chert, dolomite or iron minerals, including hematite. Individual ooids are “seeded” and formed in warm, highly agitated marine water intertidal environments.

14.



Peridot is gem-quality olivine, which is a femic (mafic) silicate mineral. Peridot is the magnesium-rich variety of olivine – another name for peridot is forsterite.

15.



Trapiche emerald is a rare variety of the gemstone emerald, characterized by a six-pointed radial pattern of ray-like spokes of dark impurities. It is one of several types of trapiche or trapiche-like minerals, which also include trapiche ruby, sapphire, garnet, chiastolite and tourmaline. The name comes from the Spanish term trapiche, a sugar mill, because of the resemblance of the pattern to the spokes of a grinding wheel.

16.



Wolframite is an iron manganese tungstate mineral that is the intermediate between ferberite (iron rich) and hübnerite (manganese rich). Along with scheelite, the wolframite series are the most important tungsten ore minerals. Wolframite is found in quartz veins and pegmatites (igneous rock with inclusions) associated with granitic intrusives.