

THE ROCKET

HAPPY NEW YEAR!!!

January 2019

deadline for next issue
February 8, 2019

Club email: secretary.hrc@gmail.com
Newsletter email: Edrocket18@gmail.com

Next Meeting: Friday – January 25 at 7PM
at Hastings Community Center Hall

Programs:

Our speaker for the meeting is **Jim Haggart**, is a Research Scientist at the Vancouver office of the Geological Survey of Canada, among other positions. The topic will be **"BC's Fabulous Fossils"**.

Before the break, Paul will do a "shortie" on **Wulfenite**. Please bring any Wulfenite they may have to the meeting to show its beauty and diversity.

Workshop Hours

Lapidary: Monday 6:30pm – 9:30pm
Wednesday 1:00pm – 4:00pm
Thursday 6:30pm – 9:30pm
Saturday 1:00pm – 4:00pm

Metalwork: Monday 9am – 2 pm
Sunday 10:30am – 1:45 pm

Silversmithing: Wednesday 9:00am – 12:00 noon
Saturday 9:00am – 12:00 noon

Soapstone Carving: Tuesday 6:45 pm – 9:30 pm
There is room for 10 people. Please contact Linda Foy before showing up for the first time.

Members are reminded to bring their membership cards to meetings and the workshop as there is an attendance requirement at meetings in order to attend the workshop. Any concerns, please contact the Executive.

WE FINISHED 2018 IN GRAND STYLE

41 Members attended our Annual General Meeting.

We elected our Executive for the next year:

(Sorry, I do not have everyone's last name, but you know them...)

President:	Verne Brooks
Vice President:	Marilyn Sztankovics
Secretary:	Crystal Chow
Treasurer:	Elaine Kwong
Junior Delegate to BCLS:	Paul Pinsker
Appointed:	Intermediate Delegate becomes Marilyn Sztankovics
Appointed:	Senior Delegate becomes John P
Field Trips:	Brian Lunny
Library:	Manda Mok and Crystal Chow
Membership:	Olivier Wong
Programs:	Paul Pinsker
Publications:	Roz MacLean
Publicity:	Arlene
Show Chair:	Sante
Social Chair:	Elly Brok and Vera
Ways and Means:	Vivian Rickey
Delegate to Hastings Centre:	Linda Foy
Director at Large:	Sante
Historian:	Vera
Sunshine:	Debbie Cleveland
Workshop Chair:	Thomas Hui

Amongst other activities we had a Rock Auction.

Thanks Allison Ku for the photos.



HERE'S LOOKING TO ANOTHER GREAT YEAR IN 2019

In early December many of our club members participated as demonstrators in the Gem and Mineral Show at the PNE Forum. It is great exposure for our club and attracted a lot of attention.

Thanks Richard Kotecki for this photo



Thanks Mike Ma for the following photos



PROJECTS -- WHAT OUR MEMBERS ARE WORKING ON

Metalworks had a demo of fusion welding using
“Sparkie II”



Elly Brok is working on “painting” on some of her lapidary work. This is a project still in progress. Ask her about it. There is something different in that technique.

Editor's note: I hope to have a member's project in each edition. This is our newsletter and I would like it to be about our club. Are you tackling an interesting project or do you know someone working on one? Please let me know so we can feature their work in our newsletter.

Upcoming Events of Interest: SHOWS

February 23 & 24, 2019 **Maple Ridge Lapidary Club** Pitt Meadows, BC

March 9 & 10, 2019, **Alberni Valley Rock & Gem Club** Port Alberni, BC

March 15, 16 & 17, 2019, **Victoria Lapidary & Mineral Society** Victoria, BC

April 12, 13 & 14, **BC Gem Show**, Abbotsford, BC

Our Club Show

*****March 16 & 17, 2019, **Hastings Centre Rockhounds**,
Vancouver, BC *****

Theme: Crystals and their friends

Some interesting reading:

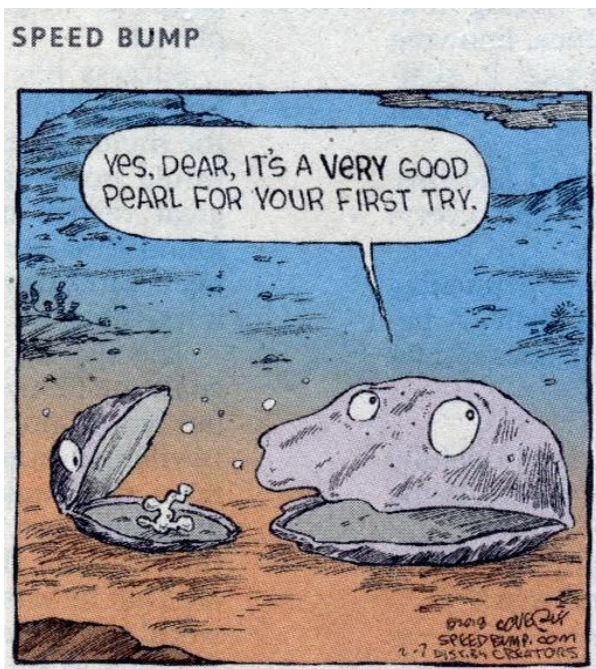
New rules on fossil hunting in British Columbia.

<https://thenarwhal.ca/b-c-launches-first-ever-rules-to-regulate-fossils/>

CLIPPINGS: People see rock related items all the time this is our chance to share it.

Here is a club photo of some of our early equipment

from the Globe and Mail
Thanks Paul Pinsker





Sometimes I learn a lot when researching an article for this newsletter. This month I was searching for a January birthstone that we hadn't covered. We've looked at all of the recognized birthstones for January. One article suggested Red or Green was the colour for January and that people should consider other Red or Green Gemstones. Red Spinel was suggested. I was surprised. I always had the impression...based on not much it appears...that spinel was low grade, almost a fake stone. I had a lot to learn.



Spinel is a new birthstone for August named by The American Gem Trade Association and Jewelers of America in 2016. August has lots of choices so we'll still look at Spinel this month.

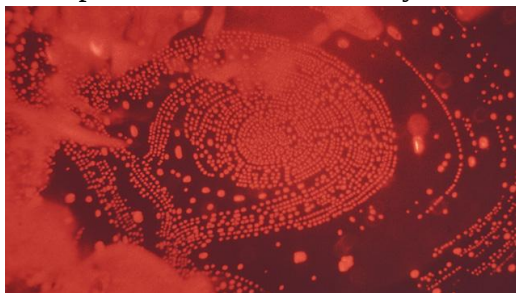
Spinel can be bright red or blue or can be white, colorless, green, yellow, orange, brown, pink, purple, or black. Fine colored Spinel above 5 carats are rare. Spinel, if black, is associated with Taurus. It doesn't seem to be associated with a day of the week or an hour of birth or any of those other things considered in previous articles. That might be because of the confusion in Spinel's past.

Until 1783 Spinel were known as rubies! Then mineralogist Jean Baptiste Louis Rome de l'Isle identified spinel as a different mineral than ruby. Red Corundum, aluminium oxide with trace amounts of chromium ($\text{Al}_2\text{O}_3:\text{Cr}$), is ruby. Red Spinel is magnesium aluminium oxide with trace amounts of chromium ($\text{MgAl}_2\text{O}_4:\text{Cr}$). In both cases chromium results in the red colour. The crystals are also different. Rubies are hexagonal (6 sided) but Spinel is octahedral (8 sided.) The Gemology Institute of America claims that "distinguishing spinel from ruby gave birth to the science of gemology." The gem was named Spinel from the from the latin word "spinnella" meaning little thorn, because of its sharp octahedral crystals. Some claim that gem traders in Myanmar were aware spinel was not ruby in the late 1500's, but in Europe spinel was identified as ruby until after Rome de l'Isle's work. Because Spinel can be red and is found in similar places to Rubies, most people didn't have a clue it was a different gem.

Typically Spinel is found in three types of geologic situations: as crystals in limestones and dolomites that have been subject to metamorphism from the nearby intrusion of magma, or as grains in igneous rocks, or as water worn pebbles in alluvial deposits. "Balas Rubies" are from Balaschia, the ancient name for Badakhshan, which is part of northeastern Afghanistan, southeast Tajikistan and a part of China. For many years this was the source of red and pink Spinel. Spinel are also found in the gemstone gravel of Sri Lanka and in Mogok, Myanmar. Recently gem quality spinels are being found in Vietnam, Tanzania, Kenya and Madagascar.

According to the International Gem Society (IGS) after some people "were told their treasured rubies and sapphires were actually spinels, the stone's reputation suffered." Then synthetic spinel was produced in 1847 by a French chemist and by 1930 many different colors were produced and sold as imitation, much less expensive, birthstones. For many people this was their first encounter with spinel and contributed to a poor reputation for Spinel.

New information has improved Spinel's reputation. Natural Spinel is a rare and beautiful gem. Most Spinel on the market today have only a bit of heat treatment. This compares favorably



when many available rubies and sapphires have had extensive enhancements done. Spinel are usually free of inclusions, but some are distinctive which can be good. The inclusions don't often make "silk" as those in ruby and sapphire. The inclusions in Spinel are often angular and known as "spangles."

This inclusion magnified many times looks a bit like a fingerprint.

With a Mohs hardness of 8, Spinel is suited to most types of jewelry. Due to their hardness and crystal structure they do not require special care, just the care given to any fine jewellery. For those interested in faceting, it is said that spinel's high refractive index gives excellent brilliance in a well cut and polished stone. No wonder people wanted them to be rubies!



Some famous Spinel, long considered to be rubies, exist in the crown jewels of many countries. The Black Prince's Ruby is a 170 carat bright red spinel shaped as an irregular cabochon. The first known owner was a 14th century Moorish Prince of Granada. It passed through several owners to the British Crown Jewels where it is now in the Imperial State Crown and mounted above the Cullinan II diamond. It was once pierced to be used as a pendant but now has the hole plugged with a small cabochon ruby in a gold slip mount. Another

stone, the "Timur Ruby" is a 352.5 carat red spinel in a necklace made for Queen Victoria in 1853. It is the third largest known spinel.

Catherine the Great's Ruby is a 398-carat red spinel on the top of the Imperial Crown of Russia commissioned her coronation in 1762. It has inscription on the back of its owners back to 1612. It is the second largest known Spinel.

The Samarian Spinel is the largest known spinel in the world, weighing 500 carats. It is part of the Iranian Crown Jewels. It was known in the



mid 1600's in India and was taken in the early 1700's. According to a diary entry of a court physician to the Shah (1848 – 1896) the Shah told him that the stone once hung around the golden calf of the Bible at the time Moses was receiving the Ten Commandments.



Some are saying "Rubies owe their fame to Spinel".