

THE ROCKET

March 2023

deadline for next issue
April 14, 2023

Club email: secretary.hrc@gmail.com
Newsletter email: Edrocket18@gmail.com
Roz MacLean – editor

Next month we have a **guest editor**, member **Jayne Wellygan**. Newsletter items and pictures for the April issue can be sent to the above editor e-mail.

Future Meetings: Our monthly meetings are on the fourth Friday of the month.

Next Meeting: Friday – March 24 at 7PM
at Hastings Community Center Hall

This meeting will be a “hybrid meeting.” For those unable to attend in person, please contact our secretary, Crystal, for a zoom link for the meeting.

Program from last Meeting:

At our last meeting we had a lively auction of items from the collection of the late Ray Buchanan. Ray was a creative and active member of our club. There were rock pieces, slabs and finished cabs. There were also some small tools and even jewellery. Congratulations to the successful bidders.





*Photo and
cabochons:
Richard
Kotecki*

We are preparing for our show

As mentioned at the last meeting, funds raised at the show support our club activities and especially the workshop. It is also a lot of good club fun. It takes everyone pitching in to make a successful show. See there!

Recently members showed up for a grab bag stuffing session in our workshop.



Photo: Rose Marie



Workshop Hours

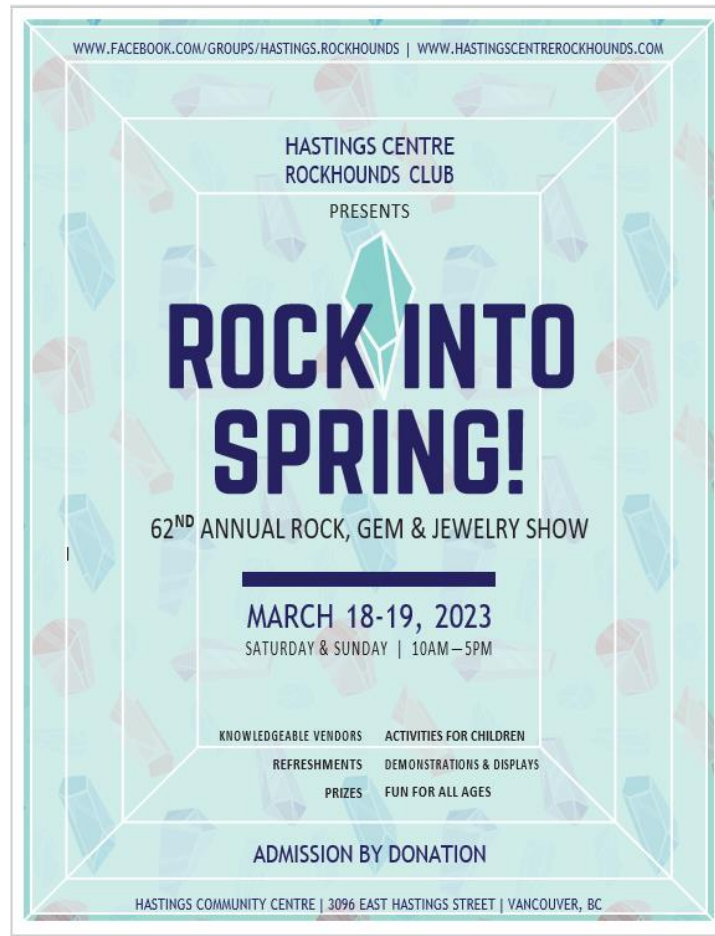
If you are a member in good standing, have taken the required lapidary workshop training course, you can drop in at the workshops and use the equipment on a first come, first served (shared) basis. Be prepared to work on another project if you need to wait to use a particular piece of equipment,

Lapidary:	Monday	6:30 pm - 9:30 pm	Richard
	Wednesday	1:00 pm - 4:00 pm	David
	Thursday	6:30 pm - 9:30 pm	Tim
	Saturday	1:00 pm – 4:00 pm	Robert
Silversmithing	Wednesday	9:00am – 12:00 noon	Robert
	Saturday	9:00am – 12:00 noon	Robert



David's sessions at workshop. Sorry I can't name all members.
Photos: Richard Kotecki

Upcoming Events of Interest:



Hastings Rockhounds Gem and Mineral Show 2023 March 18 & 19, 2023 at Hastings Community Centre

These items (and more) will be for sale by the club



Photos: Richard Kotecki

The Vancouver Gem & Mineral Show at the PNE Forum is March 23 (for set up) to 26 and it's one week after our own show. We need some help from the members for demonstration (lapidary, gem tree, beading, soapstone carving, silversmith, etc) and people to help promote our club to the wider community (with the side benefit of getting free admission to the show)!

You don't need to come for a full day but minimum of 3 hour commitment would be preferred Contact our club secretary Crystal to volunteer. Secretary.HCR@gmail.com

Shows

The following clubs are having shows and sales. For more information visit the BC Lapidary Society website or the club websites.

April 14, 15 & 16, 2023, **Courtenay Gem & Mineral Club** Legion Hall (Upstairs)
April 29 & 30, 2023 **Parksville & District Rock & Gem Club** Qualicum Beach Civic Centre
June 3 & 4, 2023, **Selkirk Rock & Mineral Club** Castlegar Recreation Complex
June 9-11, 2023, **Quesnel Tumbling Rivers Rock Club** Barlow Creek Hall, Quesnel
July 15, 2023, **Abbotsford Rock & Gem Tailgate (July)** Central Heights Church Parking Lot
August 20, 2023, **Fraser Valley Tailgate (August)** Royal Canadian Legion Branch 265 Parking Lot
September 9, 2023, **Abbotsford Rock & Gem Tailgate** Central Heights Church Parking Lot
September 16 & 17, 2023, **Fraser Valley Rock & Gem Show** Old Age Pensioners Hall, Aldergrove

BC Lapidary Society News

July 1, 2023 – Anticipated deadline for 2024 calendar submissions

<https://bclapidary.com/rock-minerall-calendar.php>

August 15, 2023 – anticipated deadline for scholarships <https://bclapidary.com/earth-sciences-scholarships.php>

BC Gem Show, May 12, 13 & 14 at the Chilliwack Heritage Park

The BC Gem Show is the largest show in the province, featuring displays, dealers, demonstrations, and activities for the kids. Adults \$6, students (6-17) \$2, 3 day Pass \$12. Tickets available at the door. Free Parking.

There will be **Demonstrations of activities like** Stone carving, cabochon making, wire wrapping, bead making, flint knapping and many more! Kid's Crafts, Spin & Win, Lots of displays of finds and work by clubs throughout the province. Vendors of slabs, beads, specimens etc. They are talking of a return of the tailgate too. We'll keep you posted.

Rendezvous

Rendezvous Quesnel, BC, June 9 — 11, 2023, Barlow Creek Hall, Quesnel, BC. Rendezvous is the British Columbia Lapidary Society's annual gathering and features field trips, displays, auctions, workshops and demonstrations, and our annual general meeting. Organized by the Quesnel Tumbling Rivers Rock Club and the Prince George Club with the assistance of the British Columbia Lapidary Society, it will be held at Barlow Creek Hall and Campground. The Quesnel Club will have a mini show and tailgate sale on the Sunday. Registration is now available on the BCLS website.

<https://www.bclapidary.com/rock-hunting-rendezvous.php>

Clippings: People see rock related items all the time. This is our chance to share it. If you see something that might be of interest or give some members a chuckle, please share.

Thanks to Nickell for the latest find: <https://www.rd.com/article/rock-puns/>

My favourites were:

6. Beach rocks are so cheap because they're always on shale.
9. My rock collection has so much sedimental value.
10. Power to the pebble!

According to rockngem.com (<https://www.rockngem.com/2023-rockhound-holidays/>) **April 2 is Geologists Day.** "This day is dedicated to those folks who make it their life's work to explore, research and disseminate their knowledge of rocks and Earth's history. It is also the time to appreciate all of those things in our lives that we have or know because of geologists. This includes such daily used items as toothpaste and even cell phones...."

April 22 is Earth Day and according to rockngem.com "You can't get any "Earthier" than rocks, gems and minerals. This is a day for rockhounds to explore and to appreciate Earth's treasures."

Also, according to rockngem.com in their January article: **A 2023 Rock Show Bucket List**, there are a few shows in the US if you are planning a trip. These shows are all US, so consider supporting our show and other BC Shows first. If you have a Canadian list, I can include those shows too. (editor)

April 21-23: 60th Parade of Gems, Central WA State Fair Park in Yakima, Washington. www.yakimarockclub.com ... this is the show for volcano lovers, plus demos on volcanic explosions, gold panning and flintknapping, plus Mount St. Helens memorabilia by local artisans to rock your world.

Projects by club members

Richard Kotecki has found an old display case and converted it into a black light cabinet.



Tim has been working on some gold sheen obsidian and made a beautiful and unusual cabochon.





Sugilite, etc.

Wessels Mine, Hotazel, Kalahari manganese field,
Northern Cape, South Africa

From Mindat.org 3822.html

Sugilite

By Roz MacLean



from geology.com

Sugilite is a rare purple colored mineral. Purple and yellow are Easter/spring colours (think crocuses) and we used to have a club member that dealt in a lot of sugilite. It seems like time to explore this mineral.

Sugilite was discovered in 1944 on Iwagi Islet, Southwest **Japan** by Japanese geologists Ken-ichi Sugi and M. Kutsuna. It was only named and published later in April 1976. The authors of the study called this new mineral 'sugilite' in honour of its discoverer. This is a mineral which is typically mis-pronounced: the 'g' should be pronounced like the g in geese, not like the g in ginger due to the Japanese origin of the name. See <https://www.mindat.org/min-3822.html> to hear the correct pronunciation.

There are alternate names for the material based on where it is mined or fanciful thoughts on the colour. See more on that later.

According to geology.com, "Sugilite is a sodium potassium lithium silicate mineral. Small amounts of **manganese** produce the pink to purple color displayed by some specimens of sugilite. Its chemical composition is as follows: $\text{KNa}_2(\text{Fe,Mn,Al})_2\text{Li}_3\text{Si}_{12}\text{O}_{30}$

It is part of the cyclosilicate group. According to the Gemmological Association of Great Britain (Gem-A) "Cyclosilicate is a compound of silicate tetrahedra, consisting of a central silicon atom surrounded by four oxygen atoms. These silicate tetrahedra are arranged in rings (hence the prefix cyclo, meaning circle in ancient Greek). Other gem cyclosilicates include beryl, tourmaline, as well as benitoite and axinite.

The composition of sugilite varies because iron, manganese, and aluminum can substitute for one another. This makes the color and other properties of sugilite variable."

The first material found in Japan had yellowish-white to colourless small crystals and was not very suitable for jewellery or other lapidary uses.

According to the International Gem Society (IGS), "in 1955, some dark pink prismatic crystals were found in central India. However, this material wasn't cuttable."

In 1979, a bright, saturated violet-to-magenta material was found in large quantities at the Wessels mine in Kuruman district, part of the Northern Cape province of South Africa. According to Gem-A The Wessels mine is a manganese mine that began operating in May 1973. Gem quality sugilite was found by accident when the roof of a shaft caved in during the development of the mine."

The find was published in 1980, and described as having a vitreous lustre and granular texture, with a chemical composition identical to the occurrence in Japan. "The only difference – the bold purple colour – was caused by manganese impurities in its chemical structure," according to Gem-A and repeated by many other sources.



Sugilite, etc.

Iwagi Island, Ochi District, Ehime Prefecture, Japan

from mindat.org

Van Cleef & Arpels Owl with sugilite wings
(right). Image from [The Adventurine](#). Gem-A

New sources of the gem material have not been found and there are reports that the Wessels mine sugilite is depleted. Others say a large deposit has been found at Wessels, but it is just too deep to be mined. All of which leads to an expensive gemstone and worth knowing how to spot it.



It may have one of many names: for where the beautiful translucent material was found, sugilite may be called 'Wesselite'. Also, according to IGS, for a more lavender colour, names like "Royal Lavulite," and for the proximity of the Wessels mine to Hotazel, South Africa names like "Royal Azel" and "Royal Lazelle" might be used. Some sugilite material has even been called "Cybelene" in allusion to the myth of Cybele and Attis and its connection to the flower violet.

According to IGS, "the most important factor in grading sugilite is color. The deepest color receives the highest grade. A mottled appearance under close inspection doesn't affect the overall value, provided the overall color remains deep. However, lighter areas mixed with dark purple will lower the value."

The best quality is translucent and very rare. According to geology.com, Gem-quality specimens are pink to reddish purple to purple. Impure specimens are often yellow, brown, purplish brown, grayish purple, or black. Sugilite often occurs in rocks composed of many minerals, such as chalcedony. Cabochons from impure sugilite are attractive and should sell at a much lower price.



Also according to IGS, Sugilite is available in fairly large sizes. Gems over ten carats are common and receive no additional value per carat.

Impure specimen samples from geology.com

According to Gemdat.org, it was noted in 1984 that dark purple sugilite can be lightened by heating at about 450 degrees C and the product may have a banded appearance.

Because sugilite can be expensive, there are imitations(fakes). Gemmological techniques such as a spectrum analysis and refractive indexing and geological characteristics like MOHS are useful. Sugilite has a MOHS of 5.5-6.5. Some are similar appearing gem materials such as lavender jadeite (6.5-7MOHS), chalcedony (7 MOHS), charoite (5-6 MOHS) or amethyst (7 MOHS.) Charoite is fibrous and all the other materials have a different refractive index reading.

Some imitations may be dyed material like quartzite (7 MOHS), marble (3 MOHS), serpentine (2.5-3.5) or magnesite (3.5-4.5 MOHS). Dyed material often has darker colour crystal edges that shows on magnification.

Sometime sugilite powder is combined in a mold with resin. It can make a beautiful material, but the resin and blocky appearance of the rough may be the give-away.

Sugilite should be mounted in a protective setting to prevent scratches especially for uses like a ring. Otherwise it is a durable gemstone.

Most gem material is from South Africa, but Sugilite has been found in Japan, Liguria and Tuscany, Italy, New South Wales, Australia, and Madhya Pradesh, India. According to Wikipedia, the first Japanese find was in an aeirine syenite intrusive stock. Sugilite is found in a similar environment at Mont Saint-Hilaire, Quebec, Canada. Mindat.org had several pictures of samples from the site.

Sugilite from

Poudrette quarry (De-Mix quarry; Demix quarry; Uni-Mix quarry; Carrière Mont Saint-Hilaire; MSH), Mont Saint-Hilaire, La Vallée-du-Richelieu RCM, Montérégie, Québec, Canada



Sugilite

Poudrette quarry, Mont Saint-Hilaire, La Vallée-du-Richelieu RCM, Montérégie, Québec, Canada



Sugilite, etc.

Poudrette quarry, Mont Saint-Hilaire, La Vallée-du-Richelieu RCM, Montérégie, Québec, Canada



Sugilite, etc.

Poudrette quarry, Mont Saint-Hilaire, La Vallée-du-Richelieu RCM, Montérégie, Québec, Canada



Sugilite, etc.

Poudrette quarry, Mont Saint-Hilaire, La Vallée-du-Richelieu RCM, Montérégie, Québec, Canada