

THE ROCKET

June 2023

deadline for next issue
September 8, 2023

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

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

Next Meeting: Friday – June 23 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.

This is our last meeting before the summer break

There will be no formal speaker for June. It is our annual **Wine and snacks** evening with a **Bottle draw after the general meeting**. Sounds like a party.

Please bring

- finger food to share as the “snack” part of our party.
- Please do NOT bring wine as the club must look after the wine as part of our liquor license requirements.
- **Please bring a** donation to the **bottle** draw and some money to participate in the bottle draw.

A bottle draw explained: Anything that can fit in a bottle or jar is welcomed. The club sells tickets on the bottles and someone will win your donation. Rock related items are popular, but one year I brought jam. Someone teased asking which machine it could be used on. (I still might bring jam.)

Program from last Meeting (May 26)

Jennifer Getzinger was the speaker at our last meeting. Jennifer is a club member and taught about rocks and Geology at Capilano University and other places. She brought many samples to show us and we learned a lot of different facts about rocks including their chemistry, specific gravity and likely locations. We are lucky to have a club member with this vast knowledge she is willing to share.



*Last meeting pictures
Roz*



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	Crystal and Robert

Lots of workshop photos coming in September

Ways to Help Our Club

All Hastings Centre Rockhounds are members of Hastings Community Centre Association and our workshop is at the Centre. This summer the Association is hosting **Hastings Summer Fun on Sunday July 9 from 11am-2pm** in the park beside the Centre. We would like to have a presence there to represent our club and show support for the Association. We will be looking for volunteers.

The IndiGem **Kitsilano Gem & Mineral Show will be August 18-20**. We would like to have a table to demonstrate what we do and let people know about our club and hobby. Let Crystal know if you are interested.

Help Our Club and Earn Vouchers for Workshops

From Linda Foy: Hey, we have started a new way to help your club... at the May 2023 meeting it was decided (and agreed upon) to start a voucher program for those who help. The way we are starting this is by making 'windows' in rocks- and these rocks will be used for the grab bags and at our shows.

So, have you ever gone out for a walk and found an interesting rock?
When you picked it up did you have a desire to know what was inside? (You may be a rockhound)
Did you have an overwhelming desire to lick it? (You are probably a rockhound)
If no one was around- did you lick it? (You are absolutely/definitely a rockhound)
A window is like a "perpetual lick" on the rock.

There will be a container in the workshop with rocks in water. When you polish a window in three stones you can hand them into the instructor running the session. You will receive a voucher for those completed rocks. That voucher allows you to have a free workshop in the future (by handing the voucher in).

If you polish more - you can get more vouchers... but- if you do such a good job that you keep the rock; that does not count towards the voucher!

You can also donate rocks towards the task, that helps the club too... and should earn you a voucher. But those three rocks donated may not count – unless they are good enough to polish!
Most quartzites and silicates will polish, and porphyries as well. The typical river rock that is used in landscaping is mainly Fraser River rock and it is mostly quartzites. Thanks in advance, and have fun!

More Club News:

IndiGem is a business presenting Gem and Jewellery shows in Western Canada. We participate to help promote our club to the wider community. Many of our club members demonstrate our hobby and they do get free admission to the show. IndiGem has 3 shows this year...The PNE show in March, the Richmond Show in June and the Kitsilano Show in August.

Hastings Centre Rockhounds had a Table at the **Richmond Gem and Mineral Show** by IndiGem at the Richmond Curling Club June 9 to 11. We had some great club representatives and demonstrations.



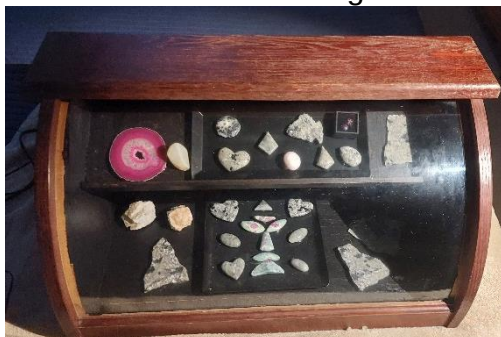
Richard, Renee, Jo, Bob



Bob brought his stereo microscope



Allison had her heart of Madagascar Ocean Stone and more... Tim with his lapidary work



Richard brought his UV Box



Bob had a collection of jewellery showing the source rocks.



Richard had his rock butterflies and another display of his other work there

Shows

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

July 14,15,16, 2023, **1120 Rock Club**, Rutland Centennial Hall, Kelowna
September 16 & 17, 2023, **Fraser Valley Rock & Gem Show** Old Age Pensioners Hall, Aldergrove
October 14 & 15, 2023, **Port Moody Rock & Gem Club Show**, Kyle Centre, Port Moody
October 14 & 15, 2023, **Surrey Rockhound Club**, Sullivan Hall, Surrey,
November 4 & 5, 2023, **Delta Rockhound Gem & Mineral**, South Delta Rec. Centre, Tsawwassen
November 17,18, 19, 2023, **Abbotsford Rock & Gem Show**, Matsqui Community Hall, Abbotsford
November 18 & 19, 2023, **Parksville & District Rock & Gem Clubs**, Qualicum Beach Civic Centre

Tailgate Sales

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

BC Lapidary Society News

The BCLS publishes a **calendar** each year, featuring 13 photographs of rocks and minerals from British Columbia and the dates of rock shows across the province. The photographs included are determined by way of contest.

The contest is open to all BCLS members. Enter for a chance to win one of 13 spots on our 2024 calendar. The prize for each photo chosen is a copy of the calendar and a lapidary item valued at not less than \$20. **Contest closes Canada Day July 1st 2023.** See full contest rules on the BC Lapidary Society website - see address below. Remember, our calendar lists all the BCLS club shows. Help make our calendar great!

<http://www.bclapidary.com/rock-mineral-calendar.php>



In 2023 our club member, Nick Tsougrianis had his picture chosen for January.

Field Trip News

If you are out **Rockhounding or on a Field Trip** over the summer, please let us hear about it. You don't have to share your secret site but we'd like to know about your finds. If you do have a place you can tell us about, we could have some great club sharing. Thanks, Roz (Editor)

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, We had a good contingent of club members attend again this year. It looks like they had a lot of fun. Sorry, I don't have all the names, but definitely need to get to know this fun bunch better.



Thanks Dawn Dutriz-Larose for pictures

Clippings

People see rock related items all the time this is our chance to share it. Send in what you find.

According to Rock and Gem Magazine these Rock shows are coming up over summer and into September in the US.

September 23-24: 65th Thunderegg Rock & Mineral Show, Willamalane Center, Springfield, Oregon

www.springfieldthundereggrockclub.org

Do good while rockin' out to dozens of vendors, as all proceeds go toward a \$1,000 scholarship for a local student, plus free admission and rock shop tours.

September 8-17: Denver Mineral, Fossil, Gem & Jewelry Show, National Western Complex, Colorado

www.denver.show

They don't call this free parking/admission 10-day event "gigantic" for nuthin'. Among the largest mineral, fossil, gem & jewelry shows in America (11 miles of tables), when they say, "We're bigger than five Walmarts and heckuva lot more fun!" they mean it.

QUOTED IN Rock and Gem "Fill Your Bucket"

There's a piece of advice in the **The Bucket List** that Carter (Morgan Freeman) shares with his buddy and fellow adventurer, Edward (Jack Nicholson):

Carter: "Forty-five years goes by pretty fast."

Edward: "Like smoke through a keyhole."

Time, like smoke, drifts away. Rocks and gems, minerals and fossils, have extraordinary longevity. Start filling that bucket."

Personally- a bucket!? - I'm thinking of Rockhounding...
and I've used a Metal Detector sometimes.

As seen on Facebook:



Man digs 12ft deep hole without realising his metal detector was picking up his steel toe safety boots.

Also from Rock and Gem Magazine

There are some special days coming up for those interested in Rocks.

International Drop a Rock Day - July 3

This a day for having a bit of fun while inspiring kindness toward others. Across the world, individuals, families, and groups of all types get creative and paint rocks with pictures, themed messages, or even advertising and hide them. Anyone can try to find them. When they are found, the lucky holder of that rock can keep it, hide it again, or if it is part of a local promotion, contact the sponsoring group. This highly popular activity is not restricted to International Drop a Rock Day; many groups do this throughout the year and hold rock-painting parties before going out and hiding them.

International Rock Day - July 13

Sometimes referred to as World Rock Day, this day is intended to celebrate and to contemplate the importance of rocks to humankind. It is to honor the rock as one of the most fundamental aspects of human survival. If there is one day per year to give rocks their due, this is it!

Pet Rock Day - September 3

This tongue-in-cheek holiday is dedicated to the 1975 marketing scheme that led to the sale of over one million pet rocks. On this day, many people "adopt" a pet rock at functions planned to celebrate this phenomenon.

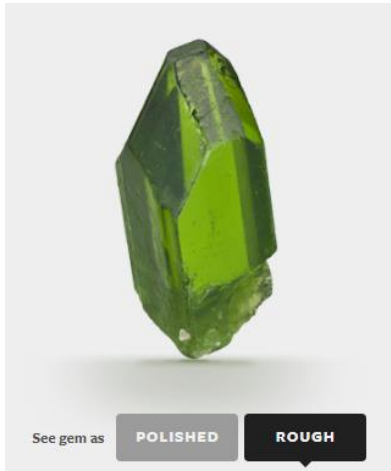
Collect Rocks Day - September 16

Held since 2015, Collect Rocks Day celebrates all of the diverse types of rocks and all of the different places they can be collected, no matter where in the world you live. It is a celebration of Earth and geology for everyone.

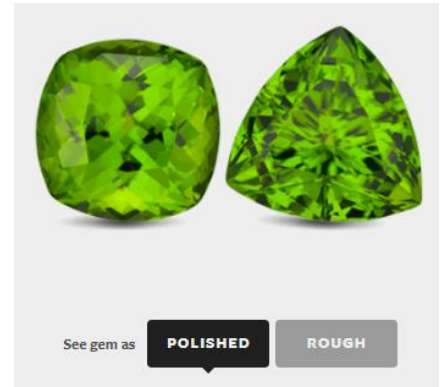
Peridot

by Roz MacLean

updated from June 2018



The Modern Birthstone for August is Peridot. We are headed into summer so it seemed like a good gemstone to cover. From the 15th to 20th century there were many birthstones for August: sardonyx, carnelian, moonstone and topaz. For Libra (23 September-23 October) the birthstone is Chrysolite (probably peridot) which is discussed below with the name and history of peridot. Peridot is the gem to celebrate a 16th anniversary and is considered an alternate to celebrate a 1st anniversary.



<https://www.gia.edu/gem-encyclopedia>

Peridot comes from the Middle English *peridot*. Some say it came from a similar French word meaning *gold* because the mineral can tend toward the colour. Some say it came out of the Arabic word *Faridat* which means *gem*. And others say it came from a Latin word *Paederot* meaning a kind of *opal*.

Peridot is the gem variety of the mineral olivine. Its chemical composition includes iron and magnesium ($\text{MgFe}_2\text{SiO}_4$). In peridot, ferrous iron (Fe^{2+}) creates green, while ferric iron (Fe^{3+}) creates yellow. Traces of chromium (Cr) in peridot doesn't cause hue but may make the green color brighter. The ideal colour of Peridot is grass green but the shades can range from yellowish green through greenish yellow to brownish green. An iron content of just 12 to 15% in olivine creates the ideal peridot color. Higher levels create a "muddier" brown color.

Peridot has often had a confused identity and been called other names through history. Since ancient Egyptian times, the Isle of St John or Zabargad, in the Red Sea, has produced peridots. The ancient Greeks called this island Topazios and knew it produced a yellow-green gem. The Greek name for the island led to the name topaz for yellowish gems, but the Topaz of modern gemology does not occur on that island! Gems from this island were also called chrysolite meaning "golden stone" in Greek. By the 19th century chrysoberyl, prehnite and peridot were all called chrysolite but their only similarity was being green to yellow-green gems. At that time people did not have the modern methods of identifying stones. Gemologists today do not use the term chrysolite. Topaz, chrysoberyl, prehnite and peridot are distinct gems.

Peridot has also been called "an Evening Emerald". Some peridot is a darker green but that type is rare in modern times. Some ancient stones referred to as emeralds are believed to have been peridot, including Cleopatra's famous emerald collection. Some gems, such as the "emeralds" adorning the Shrine of the Three Kings in the Cologne Cathedral, in are being identified as peridot with modern techniques.

Peridot has a long history. Mined since 1500 BC, several experts believe that the second gemstone in Aaron's breastplate (from the book of Exodus in the Bible) was a peridot. In the Middle Ages, Europeans brought peridot stones back from the Crusades to decorate church plates and robes. The earliest mention of Peridot in English is in the register of the St Albans Abbey. In Latin, (and in its translation in 1705) it records that on his death in 1245, Bishop John bequeathed various items including peridot to the Abbey. It is believed that the treasures of European cathedrals included some fine, large Peridots, but wars and pillage have dispersed many of them and they've probably been cut down to a smaller size and set into jewellery.

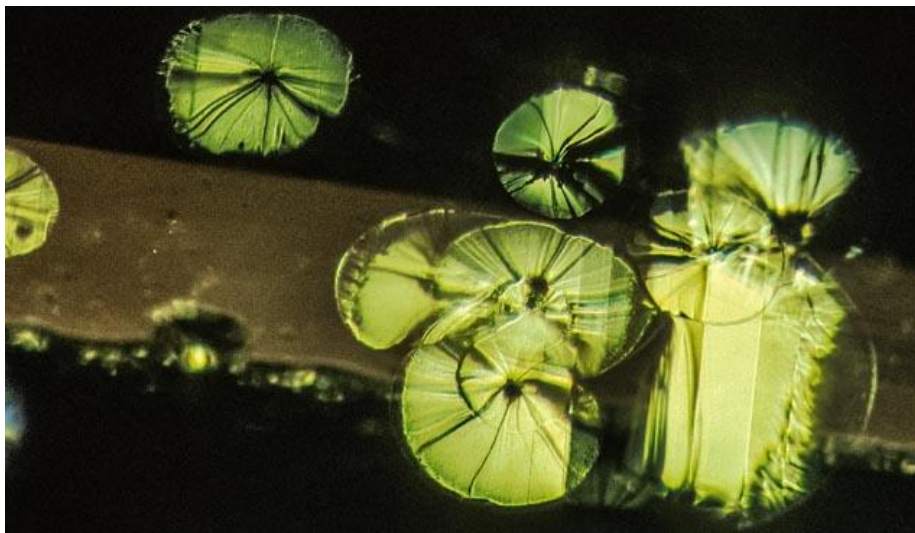
A stone with this long a history will have many many beliefs and superstitions about the stone. Holy men of ancient Egypt embedded peridots into their goblets, as it was thought peridots held the power of nature.

Peridot has always been associated with light. In fact, the Egyptians called it the “gem of the sun.” Some believed that it protected its owner from “terrors of the night.” Legend says that if the gem is set in gold, it will develop its full potential as a talisman. Some people strung the gems on donkey hair and tied them around their left arms to ward off evil spirits. However, according to Pliny The Elder of ancient Rome, for peridots to work their strongest magic, they must be worn on the right arm.

Peridots were also believed to harness healing properties and ward off negative emotions—bringing peace and calm happiness to all those who wear it. In ancient Roman times rings of peridot were worn to relieve depression. Peridot has been long considered to be an aid to friendship and supposedly frees the mind of envious thoughts. It is also supposed to protect the wearer from the evil eye. Other legends credit peridot with bringing happiness and good cheer, attracting lovers, and strengthening the eyes. Several sources say that in ancient times, cups or other vessels made of peridot were used in healing because medicinal liquids drunk from them were more effective.

As with other gemstones, the color of the peridot stone is directly related to parts of the body that it is believed to aid. Because of its yellowish green color, peridot was believed to cure diseases of the liver and difficulties with digestion aiding in physical detoxification and helping problems with the kidneys, bladder, gall bladder, and the stomach.

This is all very well, but as rockhounds and lapidaries we are interested in other aspects of the stone. Most of the peridot mined today comes from China, Pakistan, and Arizona and the gems are mostly under 3 carats. Gemstones over five carats are rare but Peridot in 10 to 15 carats can be found. A clean crystal from Norway larger than 100 carats is the largest crystal known and is in a European collection. The Smithsonian Institution in Washington DC has a cut peridot stone of 310 carats.



Under 10X magnification, peridots will often reveal a distinctive, disk-like liquid and gas inclusion. Known as “lily pad” inclusions (or sometimes “lotus leaves”). Those distinctive lily pad inclusions can make peridots difficult to cut. They can be hard to spot when faceting and can act like cleavage planes.

<https://www.gia.edu/peridot-quality-factor>

Gem miners find Peridot as irregular nodules (rounded rocks with peridot crystals inside) in some lava flows in the United States, China, and Vietnam and,

very rarely, as large crystals lining veins or pockets in certain types of solidified molten rock. Sources for the latter include Finland, Pakistan, Myanmar, and the island of Zabargad. Geologists believe both types of deposits relate to the spreading of the sea floor that occurs when the earth’s crust splits, and rocks from its mantle are pushed up to the surface.

In his book *Field Guide to Gold, Gemstone & Mineral Sites of British Columbia*, Rick Hudson discusses Olivine (Peridot). “Timothy Mountain east of Lac La Hache produces bombs (blobs of lava ejected violently from a volcano, often cooling in flight), from which excellent dark green stones weighing as much as 10 carats have been obtained. Lightning Peak in the Monashee Mountains produces peridot grains large enough to cut into small gems.”

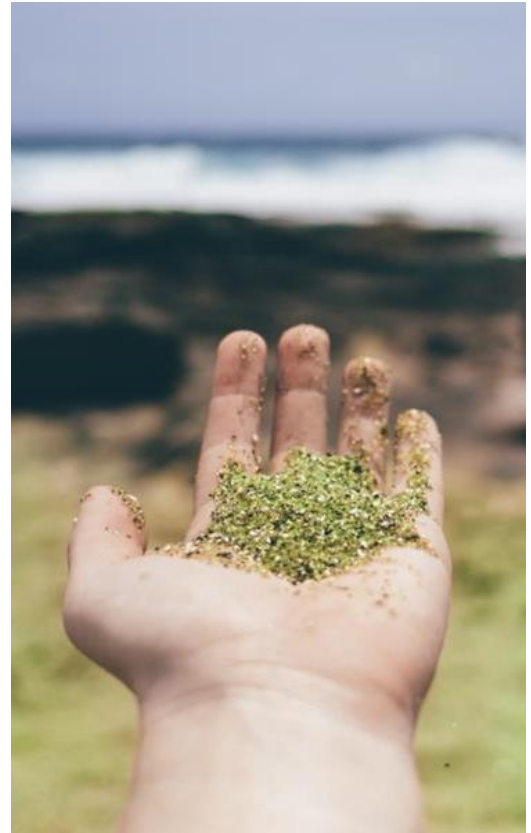
Rarely, peridot can have an extraterrestrial source. In 1749, a meteorite landed in a desolate area of Siberia. It was found to contain many pieces of peridot crystals large enough to be set into peridot jewelry. In 2005, peridot was found in comet dust brought back from the Stardust robotic space probe.

With a Mohs Hardness of 6.5 to 7 peridots are durable enough for frequent or everyday wear but they are still sensitive to scratching from household dust (which is mostly quartz). They have some susceptibility to stress fractures so avoid sudden increases in heat as in ultrasonic or steam cleaners. Clean them only with a soft brush, mild detergent, and warm water. Peridots also have some sensitivity to acids, even that in perspiration, and Peridot jewelry should be worn against the skin only occasionally.

Some recent news on Peridot (Olivine) comes from Hawaii. As the Kilauea volcano is erupting residents are finding little green gems that have fallen out of the sky. They are olivine crystals, a common mineral found in Hawaii's lava. At jewelry quality, the mineral is called peridot. As the volcano erupts, it blasts apart molten lava, allowing for green olivine minerals to be separated from the rest of the melt and fall as tiny gemstones.

Small olivine crystals on the Big Island of Hawaii.

<https://www.forbes.com/sites/trevornace/2018/06/13/hawaiis-volcano-is-literally-erupting-gems/#5edf9f7625da>



“Gemstones from the skies” sounds like a great gift for the summer.

See you in September.

A summer helper

The Mohs Scale is a tool to help identify minerals based on their hardness compared to 10 selected minerals. It is based on the observation that one mineral will scratch another mineral but not vice versa. The common objects are used to test the sample.

Hardness helps us determine how to use the mineral in jewellery etc.

Mohs Hardness Scale		
NAME	SCALE NUMBER	COMMON OBJECT
TALC	1	
GYPSUM	2	
CALCITE	3	FINGERNAIL 2.5
FLUORITE	4	COPPER PENNY 3.5
APATITE	5	
FELDSPAR	6	KNIFE 6.5
QUARTZ	7	
TOPAZ	8	STEEL NAIL 6.5
CORUNDUM (RUBY & SAPPHIRE)	9	
DIAMOND	10	DRILL BIT 8.5